This program is produced for information and to provide assistance on site at the meeting. It contains the most up-to-date scientific program information through 25 May 2016. All changes received after the printing of the program will be updated on the conference website and will be included in the meeting mobile app. Additional information also can be found on the conference website.

WWW.SGMEET.COM/ICRS2016
We encourage you to use the meeting website and mobile app for all current information and to navigate the meeting.

LIKE US ON FACEBOOK!

FOLLOW US ON TWITTER!
@ICRS2016 (#ICRS2016)

SHARE YOUR PHOTOS ON INSTAGRAM!
#ICRS2016

Changes to the scientific program will also be published on an addendum that will be posted on message boards.
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13TH INTERNATIONAL CORAL REEF SYMPOSIUM - BRIDGING SCIENCE TO POLICY

The ICRS is sanctioned by the International Society for Reef Studies (ISRS) and held every four years. It is the primary international meeting focused on coral reef science and management. The Symposium will bring together an anticipated 2,500 coral reef scientists, policy makers and managers from 70 different nations in a forum to present the latest research findings, case histories and management activities, and to discuss the application of scientific knowledge to achieving coral reef sustainability.

Maps of the Hawai'i Convention Center are located on pages 30-33 of this program for your convenience.

CONVENER’S MESSAGE

On behalf of the Organizing Committee, I warmly welcome you to the 13th International Coral Reef Symposium and Hawai'i. Since the closing of the 12th ICRS four years ago, our knowledge about coral reefs has continued to grow at a rapid rate, yet the world’s coral reefs have continued to diminish overall from a combination of local and global stressors. The problems are very clear: overfishing of reef herbivores and top predators, land-based sources of pollution and sedimentation, and the continued and growing impacts of climate change responsible for the most severe and widespread mass bleaching events on record. Ocean acidification tied to rising atmospheric CO2 coupled with increased levels of bio erosion due to eutrophication and phase shifts from living coral cover to algal and boring community assemblages is undermining the very carbonate structures that provide essential habitat for fishes and other reef creatures.

While we understand the causes of reef decline, identification and implementation of practical solutions remains daunting. There is an urgent need for us, as a community of practitioners from a diversity of disciplines, to address the challenge of how to better and more quickly move from knowledge to action. This requires increased political will along with improved legislation, regulations, compliance and enforcement, and hence and expanded role for social science, economics, policy development, cultural integration and implementation efforts. The willingness of our community of coral reef scientists and managers to embrace the theme of bridging science to policy is an important step in addressing the trends of coral decline. Many efforts to reduce local stressors are working through community-based actions, which will be presented in a variety of sessions during the week. International efforts at reducing global greenhouse gas emissions are also progressing, at least on paper, with the hope that increased education and awareness can result in enhanced political will. While it would be wrong to sugar coat the present status and trajectory we see for coral reefs, it would be equally wrong to write off these magnificent ecosystems that provide an estimated $9.9 trillion in resources and benefits to over 500 million people worldwide. The depth and breadth of expertise, experience, and passion for preserving coral reefs represented at this ICRS should be a strong message of optimism that we can effectively respond to the challenge of leaving a legacy of vibrant coral reefs for future generations.

Bob Richmond
ICRS 2016 Convener

ISRS PRESIDENT’S STATEMENT

As President of the International Society for Reef Studies, I am delighted to welcome you to the Hawai'i Convention Center for the 13th International Coral Reef Symposium. We are all reeling from the global bleaching event that has profoundly undermined the health and integrity of many of the coral reefs that we study, manage, and conserve. I hope that in our time together, we will not only share knowledge and network, but also collaborate in planning and coordinating a global response to study and mitigate the multifaceted problems facing coral reefs today.

The International Society for Reef Studies can play an important role in forwarding this agenda and we are deeply committed to it. I hope you have a fantastic time while you are here with us in Honolulu, and thank you for coming.

Ruth Gates
ISRS President

STATEMENT ABOUT THE INTERNATIONAL SOCIETY FOR REEF STUDIES

The International Society for Reef Studies (ISRS) was founded in 1980. It is the principal learned society to which reef scientists and managers from across the world belong.

The principal objective of the Society is to promote the production and dissemination of scientific knowledge and understanding of coral reefs, both living and fossil.

To achieve its objectives the Society:

• Publishes the well-regarded scientific journal “Coral Reefs”
• Coordinates the International Coral Reef Symposium (ICRS), that are held every four years and typically attended by some 2000 delegates
• Promotes or supports smaller regional conferences or inter-congresses, in the years between successive ICRS
• Publishes Briefing Papers and Statements on emerging issues related to coral reefs
• Distributes twice yearly a news journal/magazine called “Reef Encounter”
• Maintains a website (www.coralreefs.org) and group Facebook page with over 600 members
• Acknowledges the scholarship and work of its members with Society awards and honors
• Pursues conservation and education objectives through its Education and Conservation sub-committees
ISRS membership is open to anyone interested in any aspect of the science of coral reefs. While the society’s membership consists principally of researchers, managers and students, others with a non-professional interest in coral reefs and their associated ecosystems are very welcome.

The benefits of membership include:

- Receipt of the Society’s scientific journal “Coral Reefs” (either on-line or hard copy)
- Receipt of the Society’s newsletter/magazine “Reef Encounter” (by email or on-line)
- Access to the Society’s on-line membership services, including the on-line Membership Directory
- Reduced registration fees for the International Coral Reef Symposium and other meetings sponsored by the Society.

FULL/INDIVIDUAL MEMBER
Membership includes all the benefits listed opposite, but rates vary depending on whether a hard-copy subscription or on-line access to the Society’s Journal “Coral Reefs” is preferred, and according to the mean income level of the member’s country.

STUDENT MEMBERSHIP
The benefits are the same as for a Full/Individual Member, and include hard copy or on-line access to “Coral Reefs” at a much reduced rate.

FAMILY MEMBERSHIP
Family memberships are available for partners who live at the same address. Each receives the same benefits as Full Individual Members, but only one hard copy of any journal is supplied.

SUSTAINING MEMBERSHIP
Sustaining Membership is for those Members who would like to contribute extra to support the work of the Society. They receive additional minor benefits and their support is acknowledged in Society publications.

HONORARY MEMBERSHIP
Honorary Membership has been conferred on a small number of members who have rendered special service to the society or otherwise distinguished themselves in the field of reef science.

The membership subscription varies considerably depending on the type of membership selected and the primary country of residence of the member. Very generous membership rates are available for students and residents of developing countries. For low to middle income countries, full membership costs as little as $40 (US) per year, and student membership only $20 (US) per year.

For details of current rates, to complete the on-line membership form, or download a hard copy please visit the society’s membership services page at www.sgmeet.com/isrs/membership/memberlogin.asp

ABOUT PAST ICRS MEETINGS
The world’s major coral reef science meeting, the International Coral Reef Symposium (ICRS) is held every four years. The sanctioning organization is the International Society for Reef Studies.

The quadrennial ICRS provide a unique opportunity to share research findings with scientists, government agencies, resource managers, and non-government organizations throughout the world.

PREVIOUS ICRS WERE:
2012 Cairns, Australia
2008 Fort Lauderdale, USA
2004 Okinawa, Japan
2000 Bali, Indonesia
1996 Panama City, Panama
1992 Mangilao, Guam
1988 Townsville, Australia
1985 Tahiti, French Polynesia
1981 Manila, Philippines
1977 Miami, USA
1974 MV Marco Polo, Australia
1969 Mandapam Camp, India

Proceedings from all of these ICRS are available from ReefBase at www.reefbase.org/resource_center/publications/icrs.aspx

13TH ICRS COMMITTEES

EXECUTIVE COMMITTEE
Bob Richmond (Chair)
Ruth Gates
Mark Hixon
Don Potts

PROGRAM COMMITTEE
Ruth Gates (Co-Chair)
Joanie Kleypas (Co-Chair)
Valerie Paul (Co-Chair)
Josh Cinner
Gerry Davis
Rob Dunbar
Yimnang Golbuu
Mark Hixon
Paul Jokiel
Peter Mumby
Rupert Ormond
Peter Sale
Celia Smith
Narrissa Spies
Makoto Tsuchiya
Michael Webster

LEADERS’ SUMMIT
Bob Richmond
Meg Caldwell
Larry Crowder
Rob Dunbar
Ashley Erickson Reineman
Yimnang Golbuu
Mike Hamnett
Terry Hughes
Noah Idechong
Jack Kittinger
Paulo Maurin

MOBILE APP & SOCIAL MEDIA
We encourage you to use the meeting website and mobile app for all current information and to navigate the meeting. Check the inside front cover for instructions.

Twitter: @ICRS2016 (#ICRS2016)
Instagram: #ICRS2016

RECORDING POLICY
Please! No recording of individual talks or sessions (oral or poster).
Audio taping, videotaping, or photographing of presentations is not allowed at the meeting.
Thank you for your cooperation.
Steve Palumbi
John Parks
Jason Philibotte
Eva Schemmel

OUTREACH AND EDUCATION
Lauren Wetzell (Chair)
Malia Chow
Judy Lemus
LorMona Meredith
Patty Miller
Narrissa Spies
Kaho Tishhammer
Carly Weiner

TRAVEL AWARDS, SPONSORSHIPS, AND VOLUNTEERS
Cindy Hunter (Chair)
Jonathan Martinez
Kaipo Perez

FIELD TRIPS
Lee-Ann Choy
Dave Gulko

PUBLICATIONS
Chuck Birkeland
Steve Coles

STUDENT PRESENTATION JUDGING
Jo-Ann Leong (Chair)

ABOUT THE 13TH ICRS LOGO

The future of coral reefs is in our hands – it all starts with us. The 13th ICRS logo was created by Native Hawaiian artist Glenn Freitas. It integrates a number of themes and concepts relevant to the symposium and the International Society for Reef Studies. The canoe represents traditional knowledge and the view that the oceans connect rather than divide us. It is also a metaphor for individuals with different but complimentary expertise working together to reach a destination or goal, in this case, vital coral reefs as a legacy for the future. The DNA represents both modern science and the common bond shared among all living creatures, from coral reef organisms to humans. The human forms represented as Hawaiian petroglyphs include the partners needed to both understand and protect coral reefs, counter-clockwise from the top-left:

- leaders/policymakers
- families, also representing intergenerational responsibility
- educators, those who collect and pass on knowledge
- researchers and scientists who lead in discovery
- stakeholders including fishers
- managers/navigators who chart the course for reef preservation.

The "kaulana mahina," or moon phases, bridge our past and present. Moon phases are traditionally used for navigating, fishing, and planting, and are used presently to track tides and the reproductive cycles of corals and fishes. The hands at the center represent those of all people and the importance of protecting our precious reefs and their inhabitants locally and globally. The blue shading transitions from the ocean to the atmosphere and represents the climate/atmospheric connection as a main driver of coral reef vitality and more recently, stress tied to global climate change: bleaching from elevated temperatures, and impacts of ocean acidification.

Narrissa Spies, a Native Hawaiian scientist, contributed to the ideas and elements presented in the logo. Glenn’s artwork will be on display at the ICRS and found on his websites: www.polyartstories.com/ and www.we-are-worthy.com/
collections/recover-brand-water-bottle-t-shirts

ICRS 2016 TRAVEL GRANTS

The 2016 ICRS organizing committee obtained funding from a number of sources to support the cost of delegates to attend this year’s symposium. While some grants were limited to a particular constituency, the majority of the generous support that was received was free of such restrictions. The funds were targeted to students, postgraduate students, and early career scientists, in particular, those from developing nations. In going to press for this program, we had over 44 people from 26 countries who were awarded grants to offset the costs of travel, accommodation, and/or registration to attend the 2016 ICRS. We sincerely thank the sponsors for their generosity in enabling these delegates to participate.

LEADERS’ SUMMIT

As a key theme of the 13th ICRS is bridging science to policy, a Leaders’ Summit is being held as part of the ICRS. The Summit will be chaired by the President of Palau, His Excellency Tommy E. Remengesau, Jr. and include other high ranking executive, judicial and legislative branch decision-makers including the Presidents of the Federated States of Micronesia and the Republic of the Marshall Islands. Facilitated discussions with invited biophysical and social scientists, legal experts, and managers will be held to help build the bridge from science to policy and knowledge to action. The leaders and decision makers have been asked to describe their policy and management needs and priorities, and the resource participants will provide updated summaries of the appropriate science, policy ideas, and regulatory challenges that must be addressed to support coral reef resource sustainability and associated livelihoods. Together, these Summit participants will discuss how best to move forward in a collaborative manner to improve policies and management practices that will address the drivers of coral reef decline locally and globally. Results of this Summit will be summarized during the Friday afternoon Report Out Session.

ENVIRONMENTAL RESPONSIBILITY

The organizers of the meeting realize the enormous footprint that meetings make on our environment. We continue to be mindful and work on efforts to reduce this footprint. The Hawai‘i Convention Center is committed to sustainability efforts and has many “green” initiatives in place. These include:
• Catering at the convention center uses plates made from renewable resources or from recycled content that are 100% compostable. Utensils are not compostable but are made from recycled materials.
• Badges and holders are made from recycled materials and if you turn yours in at the end of the meeting, they will be recycled. Badge “strings” are from 100% cotton.
• Printed materials are from recycled paper and environmentally friendly ink when possible.

These and more initiatives can be viewed at: www.meetHawaii.com/convention-center/about/green-initiatives

CONFERENCE REGISTRATION AND CHECK IN
Registration and check in for the meeting will be available all week in the lobby area on the first floor of the Hawai’i Convention Center. Please check in upon your arrival at the meeting in order to receive your name badge and other important materials and information.

Registration Hours:
Sunday, 19 June 2016 .............................................. 13:00 – 20:00
Monday, 20 June 2016 ............................................. 07:30 – 19:00
Tuesday, 21 June 2016 ............................................. 07:30 – 19:00
Wednesday, 22 June 2016 ....................................... 07:30 – 19:00
Thursday, 23 June 2016 .......................................... 07:30 – 19:00
Friday, 24 June 2016 ................................................ 07:30 – 18:00

In order to facilitate easier check in at the meeting, it is very important that you bring a copy of the email confirmation that you received when you registered. This will allow us to locate your name badge quickly and efficiently.

GENERAL INFORMATION
For more information on the 2016 International Coral Reef Symposium, address all correspondence and questions regarding registration, conference logistics, and hotel accommodations to:

2016 International Coral Reef Symposium
5400 Bosque Boulevard, Suite 680
Waco, Texas 76710-4446
Phone: 254-776-3550
Fax: 254-776-3767
E-mail: icrs2016@sgmeet.com

If you need information regarding content of a particular session, please contact the appropriate session organizer.

ATM MACHINES AT HCC
The official currency of the United States is the dollar, denoted by USD ($). There are three (3) Automatic Teller Machines (ATM) at the Hawai’i Convention Center. Two are located on the first floor in the lobby area, one under the escalators and one towards the bathrooms. The third ATM is located on the 3rd floor just to right of the escalators that comes up from the lobby.

CHECK CASHING
Money Mart #2601
435 Atkinson Dr., Suite B
Honolulu, HI 96814-4734
Phone 808-946-2435
They are open seven days a week and located within walking distance of the Conference Center and Ala Moana Hotel.

HCC BUSINESS CENTER
The Business Center is located on the 3rd level, across from Room 301. This is a full service business center offering the following services: computer usage, color, black and white copies, prints, faxing, scanning, office supplies, various paper supplies, postcards, and gifts. FedEx and UPS shipping are also available.

Sunday, 19 June 2016 ......................................................... 08:00 – 18:00
Monday, 20 June 2016 ....................................................... 07:30 – 19:00
Tuesday, 21 June 2016 ....................................................... 07:30 – 19:00
Wednesday, 22 June 2016 ................................................. 07:30 – 19:00
Thursday, 23 June 2016 ..................................................... 07:30 – 19:00
Friday, 24 June 2016 ......................................................... 07:30 – 19:00

WI-FI
Complimentary wireless Internet service will be available at the Hawai’i Convention Center for ICRS participants from Sunday, 19 June through Friday, 24 June 2016.

To access the Wi-Fi network users should “join” the Wireless Network:
SSID: ICW 2016
Password: meethawaii

CHARGING STATIONS/CHARGING LOCKERS
The convention center has charging lockers for you to use at no cost to charge devices. There also will be tables on the third floor with electrical outlets for you to use. Please respect the time spent at these tables to allow other conference attendees the opportunity to also charge their devices.

HAWAII’I CONVENTION CENTER PARKING
To access parking at the convention center, enter the Hawai’i Convention Center Parking Garage while driving east towards Waikiki Beach on Kalākaua Avenue. You exit via an automatic gate. The parking fee is $10 per entry. There are no in and out privileges. While there is no time limit on how long you can stay parked once you enter, overnight parking is not allowed.

CHILD CARE
We did not reach the minimum numbers required for on-site childcare at the convention center. Therefore, you will need to make other arrangements if you were planning to bring your children with you to the meeting. Please contact Kathy Hew at Kama’aina Kids directly to discuss individual arrangements for childcare in your hotel room. Arrangements must be made directly with Kama’aina Kids.
For more information, please contact:

Kathy Hew
Phone: 808-262-3626
Fax: 808-261-0268
Email: kathyhew@kamaainakids.com
Web: www.kamaainakids.com

Note: Neither the organizers of the 13th International Coral Reef Symposium, the ISRS, nor the conference management organization are responsible for childcare arrangements. All arrangements are the responsibility of Kama`aina Kids (an outside provider of these services) and the parents or guardians.

CHILD CARE SHARING
Some parents will be sharing childcare duties with each other. All arrangements are strictly between you and the parent(s). You would need to provide any portable cribs for sleeping, food for meals, toys and games, etc.

The meeting and its organizers are not responsible for any arrangements other than facilitating contact with others interested in sharing childcare during the meeting. If you have any questions, please feel free to contact Sue Rulla at suer@sgmeet.com.

FAMILY ROOM
There will be a family room in Room 321 B at the Hawai`i Convention Center. This is a room where you may go to relax with your children if you bring them to the convention center. Please keep in mind that this is not a room for childcare and no service is offered in this room. You may not leave children unattended. Cribs and high chairs will be available.

NURSING MOTHER’S ROOM
Mothers who need privacy should go to the First Aid room on the 3rd Floor between Room 318 and Room 319. They will be happy to accommodate you with a private room.

EMERGENCIES/HCC FIRST AID
First Aid will be available during the following dates and times for your comfort and resource.

There will be a registered nurse staffing the First Aid Room on the 3rd floor between Rooms 318 and Room 319. You may contact the nurse at any time by dialing “0” on any house phone in the convention center. The nurse carries a security radio and can respond anywhere within the facility. This would be your resource for comfort needs such as Band Aids or Tylenol while in the convention center as well as emergency assistance.

Monday, 20 June 2016 .................................................. 08:00 to 21:00
Tuesday, 21 June 2016 .................................................. 08:00 to 20:45
Wednesday, 22 June 2016 .............................................. 08:00 to 20:45
Thursday, 23 June 2016 .................................................. 08:00 to 21:00
Friday, 24 June 2016 .................................................... 08:00 to 18:15

CONCESSIONS
Concessions are available Monday through Friday, 20 June through 24 June 2016, 07:30 to 11:30 at the Hawai`i Convention Center in the 3rd floor concourse between rooms 313 and 316. Vendors offer coffee, continental breakfast items, snacks, espresso, and specialty coffee drinks. They specialize in Hawaiian coffees.

BREAKS AND REFRESHMENTS
Breaks with coffee service will be available:

Monday:
09:30 to 10:00 and 16:00 to 16:30 .......... Kamehameha Exhibit Hall 1

Tuesday through Friday morning:
09:00 to 09:30 and 15:45 to 16:15 .......... Kamehameha Exhibit Hall 1

Friday afternoon:
15:45 to 16:15 ................................. Ballroom Pre-Function (4th Floor)

FOOD ALLERGIES
Food will be labeled by the catering company. For those with dietary restrictions or allergies to foods, please contact Kristin Tait. She will work with you on what might be possible to accommodate your needs.

Contact information:
Kristin Tait
Levy Restaurants
ktait@Levyrestaurants.com
Phone: 808-943-3063

DIETARY RESTRICTIONS
All buffet-style food and beverage will be labeled with “vegetarian,” “vegan,” or “gluten free.” Special meals, such as kosher, will be available on request and will be available in limited quantities.

SPECIAL NEEDS
If you have a disability or limitation that may require special consideration in order to fully participate in the meeting, please contact the ISRS Business Office to see how we can accommodate your needs. Contact us via e-mail at icrs2016@sgmeet.com. You may also go to the conference registration desk at the Hawai`i Convention Center during the meeting as well.

LOCAL RESTAURANTS/BARS
Information about Honolulu is available at the kiosk in the lobby of the Hawai`i Convention Center.

LOST AND FOUND
Please come to the Registration Desk for inquiries concerning lost and found items.

MESSAGE BOARDS
Message boards will be located outside the Exhibit/Poster Hall. Feel free to post messages, CV’s, job opportunities, as well as to check these boards if you are expecting a message during the meeting.
RECEIPTS AND LETTERS OF PARTICIPATION
Your registration confirmation that was emailed to you when you registered for the meeting will serve as your receipt. In keeping with our conservation efforts, we will not provide printed receipts to attendees on site at the meeting. If you have misplaced your original receipt and need another copy, you may print your own receipt by going to www.sgmeet.com/icrs2016/userlogon.asp.

TRANSPORTATION
Most of the conference hotels are within walking distance of the Hawai‘i Convention Center. In order to continue to meet our environmental goals, no shuttle service is provided.

Taxi service is available on the center median fronting the terminal baggage claim areas. See the taxi dispatchers wearing yellow shirts with black lettering, and the wording “TAXI DISPATCHER” for service. A number of taxi services provide transportation to and from the convention center. Please inquire at your hotel.

Public transportation to the Hawaii Convention Center from the airport and all parts of Oahu is available on “TheBus.” For information on routes, times and fares, call 1-808-848-5555 or visit their website at http://www.thebus.org.

OUTSTANDING STUDENT PRESENTATION AWARDS
The International Society for Reef Studies is sponsoring awards for outstanding posters and oral presentations by students at the 2016 ICRS Symposium. Awards will be given for the most outstanding posters and talks presented by students. For details, contact Jo-Ann Leong at joannleo@hawaii.edu.

A special thank you to the Association for the Sciences of Limnology and Oceanography for their assistance with the student presentation awards.

ORAL PRESENTATIONS
Prior to the start of the meeting, speakers received an email from Projection, Inc., the AV technicians, with login instructions to submit their presentations online. Submissions will also be accepted on-site in the Presentation Room 304 A at the Hawai‘i Convention Center, and you also can upload to the website throughout the conference.

PRESENTATION ROOM
All oral presentations will need to be submitted in Room 304 A at the Hawaii Convention Center. This is the Presentation Room for the meeting. This room will be staffed and run by audiovisual technicians. Presenters may submit their presentations beginning at 12:00 on Sunday, 19 June 2016.

Speaker / Presentation Room Hours
Sunday, 19 June 2016 ........................................... 12:00 to 17:00
Monday, 20 June 2016 ......................................... 07:30 to 18:00
Tuesday, 21 June 2016 ......................................... 07:30 to 18:00
Wednesday, 22 June 2016 ................................. 07:30 to 18:00
Thursday, 23 June 2016 .................................... 07:30 to 18:00
Friday, 24 June 2016 ........................................... 07:30 to 16:00

All presenters are required to check in to the Presentation Room, Room 304 A on Level 3 of the Hawaii Convention Center, at least 24 hours before your assigned presentation day to submit your talk. An audio-visual technician will be available in the room to assist you.

If you are checking in on the day of your session, please come by at least four hours prior to the start of your session. AV technicians will assist with the upload of your files and provide the opportunity to preview and/or edit the presentation as necessary. If you are unavoidably delayed, you must still go directly to the Presentation Room. Do not bring a laptop or other media device to the session room.

Please note: If your presentation is on Monday, please plan to go to the presentation room on Sunday during the hours specified to submit your talk.

REVIEWING YOUR PRESENTATION
After you submit your talk in the presentation room, please make sure that all fonts, images, and animations appear as expected and that all audio or video clips are working properly. When you are finished submitting, reviewing, and/or making changes to your presentation, you must tell the A/V technician you have finalized your presentation file before you leave the Presentation Room. Be sure to bring a backup copy of your presentation with you to the meeting. USB/flash drives are preferred. Please make sure you have all power, video, and networking adapters with you.

DURING YOUR PRESENTATION
Each meeting room will have a projector, screen, laptop computer, audio, lectern, hardwired lectern microphone, timing device, and a laser pointer. Once the presentation is started, you can control the program from the lectern using a computer mouse or the up/down/right/left keys on a keyboard.

IMPORTANT:
• If the presentation does not play properly in the presentation room, it will not play properly in the meeting room.
• Personal laptops cannot be used in the session rooms.
• Dedicated internet access will not be available in the session rooms.

ADDITIONAL INFORMATION
Speakers are required to provide identification in order to submit their presentation as well as to access it in the Presentation Room. Recording devices such as cameras are not permitted in the Presentation Room. All presentation files are deleted at the end of the conference, unless permission has been granted to the conference association to retain the presentation files.

POSTER PRESENTATIONS
POSTER PRINTING IN HONOLULU
If you would like to print your poster in Honolulu, Hon Graphics is located approximately three miles from the Hawaii Convention Center. They can do large format printing of posters.

Continued on Page 12.
MEETING SCHEDULE

SATURDAY, 18 JUNE 2016

08:30 - 16:30 Coral Identification Capacity Building Program - Coral Identification Workshop at Waikiki Aquarium (Day 1)  Off-Site Location
12:00 - 17:00 Scientific Management Committee Meeting (By Invitation Only)  302 A/B

SUNDAY, 19 JUNE 2016

08:00 - 17:00 Caribbean Acropora Research, Monitoring, Management, and Population Enhancement Meeting  301 B
08:00 - 17:00 Developing a Reef Resilience Framework (By Invitation Only)  302 A/B
08:00 - 17:00 Raine Island Restoration Workshop (By Invitation Only)  303 A/B
08:00 - 17:00 Getting Published Workshop  307 A/B
08:00 - 17:00 Center of Excellence (CoE) for Coral Reef Studies - Student Workshops  313 C
08:00 - 17:00 Cyber Tools and Resources for Coral Reef Research and Analysis - CRESCYNT.org Workshop  314
08:00 - 17:00 Field Identification of Coral Disease Workshop  308 A/B
08:00 - 17:00 Combating IUU Fishing Nearshore: Opportunities of emerging technology and its limits  311
08:00 - 18:00 Coral Disease Investigations Workshop at Windward Community College  Off-Site Location
08:30 - 16:30 Coral Identification Capacity Building Program - Coral Identification Workshop at Waikiki Aquarium (Day 2)  Off-Site Location
09:30 - 16:30 Coral Triangle Strategy Consultation Workshop (By Invitation Only)  306 A/B
12:00 - 17:00 Presentation Room Open  304 A
13:00 - 17:00 Mesophotic Coral Ecosystems Meeting  305 A/B
13:00 - 17:00 Seagrass Futures in the Tropical Indo-Pacific Workshop  313 B
13:00 - 17:00 A Conversation on Ecosystem-Based Management of Hawaiian Reefs  313 A
13:00 - 17:00 Co-management Responses During Mass Coral Bleaching Events: What We've Learned  317 A/B
13:00 - 17:00 Coral Reef Conservation through Transformational Education  312
13:00 - 17:00 Exhibitor Set Up  Kamehameha Exhibit Hall 1
13:00 - 17:00 Poster Set Up  Kamehameha Exhibit Hall 1
15:00 - 17:00 ISRS Officers Meeting (By Invitation Only)  309
13:00 - 20:00 Registration Open  Main Lobby
17:00 - 20:00 Welcome Reception  Rooftop Garden Terrace

MONDAY, 20 JUNE 2016

07:30 - 18:00 Presentation Room Open  304 A
07:30 - 19:00 Registration Open  Main Lobby
08:00 - 09:30 Poster Set Up Continues  Kamehameha Exhibit Hall 1
<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:00 - 19:30</td>
<td>Exhibits Open</td>
<td>Kamehameha Exhibit Hall 1</td>
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<tr>
<td>08:00 - 09:30</td>
<td>Opening Plenary Session</td>
<td>Kalakaua Ballroom A/B/C</td>
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<td>09:30 - 10:00</td>
<td>Break</td>
<td>Kamehameha Exhibit Hall 1</td>
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<td>10:00 - 12:00</td>
<td>Concurrent Sessions</td>
<td>Various Rooms</td>
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<td>12:00 - 13:15</td>
<td>Lunch – Buffet</td>
<td>Kamehameha Exhibit Hall 2</td>
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<tr>
<td>12:00 - 13:15</td>
<td>ISRS Council Meeting (By Invitation Only)</td>
<td>309</td>
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<td>12:00 - 13:15</td>
<td>Mentor Lunch</td>
<td>Kamehameha Exhibit Hall 2</td>
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<td>12:00 - 13:15</td>
<td>Climate Change Outreach Video Competition Planning Meeting</td>
<td>302 A/B</td>
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<td>12:00 - 13:15</td>
<td>CoralCollab.net Beta: A collaborative and open source platform for managing and analyzing data</td>
<td>305 A/B</td>
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<td>12:00 - 13:15</td>
<td>Corals of the World</td>
<td>Kalakaua Ballroom A/B/C</td>
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<td>13:15 - 14:00</td>
<td>Afternoon Plenary Session</td>
<td>Kalakaua Ballroom A/B/C</td>
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<td>14:00 - 16:00</td>
<td>Concurrent Sessions</td>
<td>Various Rooms</td>
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<td>15:00 - 18:00</td>
<td>CRESCYNT Node Coordinators Meeting (By Invitation Only)</td>
<td>307 A/B</td>
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<td>16:00 - 16:30</td>
<td>Break</td>
<td>Kamehameha Exhibit Hall 1</td>
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<td>16:30 - 18:30</td>
<td>Concurrent Sessions</td>
<td>Various Rooms</td>
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<td>18:00 - 19:30</td>
<td>Poster Session and Reception</td>
<td>Kamehameha Exhibit Hall 1</td>
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<td>19:00 - 20:30</td>
<td>Public Session</td>
<td>Ala Moana Hotel, Hibiscus Room</td>
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<td>19:00 - 21:00</td>
<td>Coral Disease across the Indo-Pacific: Threats and Management</td>
<td>301 B</td>
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<td>19:00 - 21:00</td>
<td>Using Chlorophyll Fluorescence to Measure Coral Photophysiology Workshop</td>
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<td>19:00 - 21:00</td>
<td>Coral Reefs Editorial Meeting</td>
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<td>19:00 - 21:00</td>
<td>Science and Management of Water Quality on Coral Reefs Workshop</td>
<td>308 A/B</td>
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**TUESDAY, 21 JUNE 2016**

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<th>Time</th>
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<tr>
<td>07:30 - 18:00</td>
<td>Presentation Room Open</td>
<td>304 A</td>
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<td>07:30 - 19:00</td>
<td>Registration Open</td>
<td>Main Lobby</td>
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<td>08:00 - 19:45</td>
<td>Exhibits Open</td>
<td>Kamehameha Exhibit Hall 1</td>
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<td>08:00 - 09:00</td>
<td>Morning Plenary Session</td>
<td>Kalakaua Ballroom A/B/C</td>
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<td>09:00 - 09:30</td>
<td>Break</td>
<td>Kamehameha Exhibit Hall 1</td>
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<td>Concurrent Sessions</td>
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<td>11:30 - 12:45</td>
<td>Lunch - Buffet</td>
<td>Kamehameha Exhibit Hall 2</td>
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<td>11:30 - 12:45</td>
<td>Octocoral Lunch</td>
<td>301 B</td>
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<td>11:30 - 12:45</td>
<td>Using Genomics for Coral Reef Management – A Needs Assessment</td>
<td>302 A/B</td>
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<td>12:45 - 13:45</td>
<td>Afternoon Plenary Session</td>
<td>Kalakaua Ballroom A/B/C</td>
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<td>Concurrent Sessions</td>
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<td>15:45 - 16:15</td>
<td>Break</td>
<td>Kamehameha Exhibit Hall 1</td>
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<tr>
<td>16:15 - 18:15</td>
<td>Concurrent Sessions</td>
<td>Various Rooms</td>
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</table>
18:00 - 18:30 Reef Resilience Happy Hour 307 A/B
18:15 - 19:45 Poster Session and Reception Kamehameha Exhibit Hall 1
19:00 - 21:00 ISRS Town Hall Meeting; Climate Change & Coral Bleaching 310 Theater
19:00 - 20:30 Public Session Kalakaua Ballroom A/B/C
19:30 - 21:30 Action Network for Coral Health and Resilience Working Group (By Invitation Only) 306 A/B
19:30 - 21:30 Glenn Almary Memorial 301 B
19:30 - 21:30 Hawaii Marine Enforcement Conference II 303 A/B
19:30 - 21:30 Marine Habitat & Ecosystem Threats of Personal Care Products (By Invitation Only) 307 A/B
19:30 - 21:30 Informing Management Decisions for Coral Reefs in a World of Risk and Uncertainty (Panel Discussion) 305 A/B

WEDNESDAY, 22 JUNE 2016

07:30 - 18:00 Presentation Room Open 304 A
07:30 - 19:00 Registration Open Main Lobby
08:00 - 19:45 Exhibits Open Kamehameha Exhibit Hall 1
08:00 - 09:00 Morning Plenary Session Kalakaua Ballroom A/B/C
09:00 - 09:30 Break Kamehameha Exhibit Hall 1
09:30 - 11:30 Concurrent Sessions Various Rooms
11:30 - 12:45 Lunch - Buffet Kamehameha Exhibit Hall 2
11:30 - 12:45 Mentor Lunch Kamehameha Exhibit Hall 2
11:30 - 12:45 USGS Town Hall (By Invitation Only) 301 B
11:30 - 12:45 Pulley Ridge Science Meeting (By Invitation Only) 302 A/B
11:30 - 12:45 Experiences and Best Practices with Citizen Science Activities 305 A/B
11:30 - 12:45 A Sea of Glass (Film Showing) 306 A/B
11:30 - 12:45 CARICOMP-2 (By Invitation Only) 308 A/B
11:30 - 12:45 ISRS General Meeting Kalakaua Ballroom A/B/C
12:45 - 13:45 Afternoon Plenary Session Kalakaua Ballroom A/B/C
13:45 - 15:45 Concurrent Sessions Various Rooms
15:45 - 16:15 Break Kamehameha Exhibit Hall 1
16:15 - 18:15 Concurrent Sessions Various Rooms
18:15 - 19:45 Poster Session and Reception Kamehameha Exhibit Hall 1
19:00 - 20:30 Public Session Kalakaua Ballroom A/B/C
19:30 - 21:30 Global Reef Reporting – From Science to Policy: The roles of ICRS / ISRS, IUCN, GCRMN and others 301 B
19:30 - 21:30 Global Challenges and Perspectives in Mesophotic Biodiversity Research (By Invitation Only) 302 A/B
19:30 - 21:30 Latin-American Reef Encounter Meeting 305 A/B
THURSDAY, 23 JUNE 2016

07:30 - 18:00  Presentation Room Open  304 A
07:30 - 19:00  Registration Open  Main Lobby
08:00 - 16:30  Exhibits Open  Kamehameha Exhibit Hall 1
08:00 - 09:00  Morning Plenary Session  Kalakaua Ballroom A/B/C
09:00 - 09:30  Break  Kamehameha Exhibit Hall 1
09:30 - 11:30  Concurrent Sessions  Various Rooms
11:30 - 12:45  Lunch - Buffet  Kamehameha Exhibit Hall 2
11:30 - 12:45  Mentor Lunch  Kamehameha Exhibit Hall 2
11:30 - 12:45  Indo-Pacific Coral Collaboration: Partners Meeting (By Invitation Only)  301 B
11:30 - 12:45  Epigenetic Research in Coral Reefs Workshop  302 A/B
11:30 - 12:45  A Town Hall: Future Impacts of Personal Care Product Pollution to Coral Reefs  303 A/B
11:30 - 12:45  From Coral Reefs to Capitol Hill: Building bridges between scientists and policy makers for effective coral ecosystem management and conservation  306 A/B
13:45 - 15:45  Concurrent Sessions  Various Rooms
15:45 - 16:15  Break  Kamehameha Exhibit Hall 1
16:15 - 18:15  Concurrent Sessions  Various Rooms
18:15 - 19:00  Japanese Coral Reef Society (JCRS) Ceremony of Award: Winners of Financial Support for Graduate Students and Young Researchers  303 A/B
19:00 - 21:00  Evening Event - Pā‘ina  Kalakaua Ballroom A/B/C, Rooftop Garden Terrace

FRIDAY, 24 JUNE 2016

07:30 - 16:00  Presentation Room Open  304 A
07:30 - 18:00  Registration Open  Main Lobby
08:00 - 14:00  Exhibits Open  Kamehameha Exhibit Hall 1
08:00 - 09:00  Morning Plenary Session  Kalakaua Ballroom A/B/C
09:00 - 09:30  Break  Kamehameha Exhibit Hall 1
09:30 - 11:30  Concurrent Sessions  Various Rooms
11:30 - 12:45  Lunch - Buffet  Kamehameha Exhibit Hall 2
12:45 - 13:45  Closing Plenary Session / President’s Talk  Kalakaua Ballroom A/B/C
13:45 - 15:45  Concurrent Sessions  Various Rooms
14:00 - 19:00  Exhibitor Teardown  Kamehameha Exhibit Hall 1
14:00 - 19:00  Poster Teardown  Kamehameha Exhibit Hall 1
15:45 - 16:15  Break  Prefunction Area Ballroom A/B/C
16:15 - 18:00  Report Out Session  Kalakaua Ballroom A/B/C
The preferred format to send would be PDF. Contact the printer listed below directly if you are interested in finding out firm prices, file requirements, and more details.

Hon Graphics
832 Queen Street, Honolulu, HI 96813
(about three miles from Convention Center)

Contact: Kyle or Francis
hongraphics@gmail.com
Phone Number: (808) 589-0300

Hon Graphics will accept large file transfer via an upload to Dropbox. Please allow at least a 24-hour turnaround time per poster. Estimated prices are based on $5.75 per square foot for printing. For the lamination, allow $15.50 (24 x 48) to $41.40 (48 x 48). The price to deliver to the convention center is $23.00.

POSTER PRESENTATIONS AT THE MEETING
There will be four posters displayed per board (two per side), therefore posters must be no larger than 44.5 inches high x 45.5 inches wide. If your poster exceeds these specifications, it may be subject to removal. Posters will adhere to the boards using push pins that will be provided.

Each poster will be assigned a number. You will put your poster next to this number. There will be two posters per side of each panel-board. Therefore posters must be no larger than the maximum (44.5 inches high by 45.5 inches wide) or (113.03 cm high by 115.57 cm wide). If your poster exceeds these specifications, it may be subject to removal. Posters will be affixed to the panel-boards using pushpins. It is suggested that you apply at least one pushpin in each of the four corners of your poster. (Note: An adequate supply of pushpins will be available throughout the exhibit hall.)

Posters will be displayed in Kamehameha Exhibit Hall 1 at the Hawaii Convention Center. They will be organized in session groupings for the entire meeting to maximize opportunities for viewing. Posters can go up Sunday, 19 June, from 13:00 to 17:00 and will remain in place through 14:00 on Friday, 24 June. They should be removed by Friday, before 19:00 or they will be discarded.

There are three designated poster sessions:

Monday, 20 June 2016 ................................. 18:00 to 19:30
Tuesday, 21 June 2016 ................................. 18:15 to 19:45
Wednesday, 22 June 2016 ............................. 18:15 to 19:45

Refreshments and snacks will be available during the poster sessions. Poster presenters have been assigned a specific day for interaction with attendees, but they may be at their poster any time the exhibit hall is open. The poster session times do not conflict with concurrent oral presentations.

Important note regarding poster presentation: The convention decorator may discard posters if the presenting author does not dismantle them according to teardown instructions and times.

EPOSTERS
ICRS poster presenters have the opportunity to submit their posters to “ePosters” the online journal of scientific posters. If you are a poster presenter at the ICRS and have not done so already, please follow the instructions outlined at: http://sgmeet.com/icrs2016/eposters.asp. Submitting a poster to “ePosters” is strictly optional, and it is a great way to ensure additional exposure and to share your poster with colleagues who were not able to attend this year’s ICRS.

Uploading a poster to “ePosters” does not take the place of a poster presentation at the meeting. It is another way to add long-lasting visibility to your research by placing it in an online library. Please note that you must be registered and presenting at the meeting in order to post electronically to this site. If you have withdrawn you presentation or were not able to attend and present, you may NOT submit your poster to the “ePosters” site.

MEDIA
The Media Room is located in Room 304 B. Daily media conferences will be held daily at 10:00 and 14:00.

EDUCATION STATIONS
Meet six locally based non-profit organizations dedicated to enriching Hawaii’s natural resources based on Hawaiian and/or other principles of sustainability and stewardship will be located in the Exhibit Hall. Learn how their missions help foster healthy watersheds and coral reef ecosystems. Take your photo at each station and post it to the ICRS Instagram (#ICRS2016) and social media sites including Twitter and Facebook, to help promote their efforts.

REGISTRATION SCHOLARSHIPS
Be sure to introduce yourself to the 15 middle and high school science teachers in Hawaii who were selected to attend this year’s ICRS. Find out how your work can facilitate their efforts in teaching the next generation of young leaders about environmental stewardship.

LOCAL ARTISTS
Visit the many artists from Hawaii selling their artwork at ICRS. Each artist in attendance offers unique artwork ranging from seascapes, landscapes, marine art, fine art, woodcrafts, clothing, and jewelry. Be sure to visit and learn how they use their art as a tool to promote environmental education and awareness.

ALL WORK AND NO PLAY?
Take a break and experience Hawai‘i! Customized scientific excursions are still available, as well as traditional cultural, historical and entertainment activities that await you after a long day of sessions. Visit the Tour and Excursion desk in the lobby. It will be open daily during registration hours.
PLENARY PRESENTATIONS

MONDAY MORNING PLENARY PRESENTATION
Date: Monday, 20 June 2016
Time: 08:00 to 09:30
Location: Kalakaua Ballroom A/B/C

PRESIDENT TOMMY ESANG REMENGESAU, JR., THE EIGHTH PRESIDENT OF THE REPUBLIC OF PALAU
Biographical Information: President Remengesau is the first Palauan to be elected as President three times. He was first elected President in 2000 and was re-elected in 2004. Constitutionally limited to two consecutive presidential terms, Remengesau was elected in 2008 as Senator in the Palau National Congress (Olbiil Era Kelulau) where he served until his election as President again in 2012.

In 2014, the voice for the environment in the United Nations system, the United Nations Environmental Programme, awarded Remengesau with its top accolade, The Champion of the Earth Medal is John (Jack) Randall, of the Bernice P. Bishop Museum, Honolulu, Hawai‘i. The medal is the society’s most prestigious award, for his visionary leadership in strengthening Palau’s economic resilience by spearheading national initiatives to protect its biodiversity. President Remengesau is now spearheading a historic effort in the establishment of the Palau National Marine Sanctuary, signed into law on October 28, 2015. This large scale marine protected area covers 100% of Palau’s waters (over 600,000 square km) and includes an 80% no-take reserve and a 20% protected domestic fishing zone, providing even greater protection for Palau’s environment while further enhancing Palau’s tourism revenues. The world’s sixth largest fully protected marine area, the Palau National Marine Sanctuary is Palau’s contribution to preserving the world’s ocean resources.

MONDAY AFTERNOON PLENARY PRESENTATION
Date: Monday, 20 June 2016
Time: 13:15 to 14:00
Location: Kalakaua Ballroom A/B/C

THE 2016 DARWIN MEDAL AWARD PRESENTATION TO JACK RANDALL, BERNICE P. BISHOP MUSEUM, HONOLULU, HAWAI‘I
The recipient of the 2016 Darwin Medal is John (Jack) Randall, of the Bernice P. Bishop Museum, Honolulu, Hawai‘i. The medal is the society’s most prestigious honor, awarded only once every four years, to an eminent scientist based on their lifetime’s achievements. Previous winners have been David Stoddart, Peter Glynn, Ian MacIntyre, Charlie Veron, Terry Hughes, and Jeremy Jackson. It is awarded to a senior ISRS member who is recognized worldwide for major scientific contributions throughout their career.

Biographical Information: Jack Randall has, since his career began some 70 years ago, made a quite remarkable contribution to coral reef science by tackling the identification of the thousands of species of reef fish, which, when a student he began diving, were very poorly known. At that time, while many species had never been described, reef fish taxonomy was nevertheless riddled with synonyms, because so many widespread species had been described multiple times by different authors working in multiple, widely scattered places. It is very largely due to Jack, and his many younger collaborators whom he inspired to take up the challenge, that the global reef fish fauna has become so well known.

During his years of research, Jack has undertaken 177 field expeditions to reef locations throughout the tropics. At the time of his nomination, he had published 878 papers, and at the age of 91 had five more in press and six more submitted. He has described 30 new genera and 815 new fish species of fish and is particularly proud of the high percentage of his new species (97%) that have stood the test of time. His age now restricts his ability to travel internationally, so it is a happy coincidence that he is receiving the award in the year ICRS has come to Hawaii.

For more information about Jack Randall, see http://hbs.bishopmuseum.org/staff/randall.html.

TUESDAY MORNING PLENARY PRESENTATION
Date: Tuesday, 21 June 2016
Time: 08:00 to 09:00
Location: Kalakaua Ballroom A/B/C

CHARLES BIRKELAND, UNIVERSITY OF HAWAI‘I AT MANOA, DEPARTMENT OF BIOLOGY, HONOLULU, HAWAI‘I, USA

Presentation: Palau Leads the Way by Basing Policy on Biology

Presentation Description: Birkeland reports on how the fisheries policies of Palau uniquely fit the life-history traits and ecology of coral-reef and pelagic fishes, and so the Palauans are working with, not against, their fisheries. Some of the policies of Palau are being emulated by other tropical countries.

Biographical Information: Charles Birkeland is a naturalist that has been studying coral reefs for 46 years. From 1970-1975, he was a post-doc in Panamá at the Smithsonian Tropical Research Institute, during his years of research, Jack has undertaken 177 field expeditions to reef locations throughout the tropics. At the time of his nomination, he had published 878 papers, and at the age of 91 had five more in press and six more submitted. He has described 30 new genera and 815 new fish species of fish and is particularly proud of the high percentage of his new species (97%) that have stood the test of time. His age now restricts his ability to travel internationally, so it is a happy coincidence that he is receiving the award in the year ICRS has come to Hawaii.

For more information about Jack Randall, see http://hbs.bishopmuseum.org/staff/randall.html.

TUESDAY AFTERNOON PLENARY PRESENTATION
Date: Tuesday, 21 June 2016
Time: 12:45 to 13:45
Location: Kalakaua Ballroom A/B/C

AULANI WILHELM

Biographical Information: Aulani Wilhelm is a 2015 Social Innovation Fellow at Stanford University, focused on the development of social enterprise models in support of natural resource management and sustainability. She has spent nearly 20 years working in the field of natural resource management, primarily ocean conservation. She is the founder of Island Water, a social venture aimed at...
addressing the lack of clean water and plastic pollution on islands. She is also the founder of Big Ocean, a network of the world’s large-scale marine managed areas that collectively cover 7.2 million km² of ocean. She has also served on the founding team of several organizations, committees and boards in support of conservation, culture and community. Wilhelm holds an MS degree from Stanford University Graduate School of Business and a Bachelor of Arts degree from the University of Southern California.

WEDNESDAY MORNING
PLENARY PRESENTATION
Date: Wednesday, 22 June 2016
Time: 08:00 to 09:00
Location: Kalakaua Ballroom A/B/C

PETER MUMBY, UNIVERSITY OF QUEENSLAND, BRISBANE, QUEENSLAND, AUSTRALIA

Presentation: Embracing a World of Subtlety on Coral Reefs

Presentation Description: Historically, many researchers have enjoyed the ‘luxury’ of studying relatively intact coral communities. Where studies focused on damaged reefs, the sites chosen were usually severely impacted, such as following the effects of recent cyclones, blast fishing or acute pollution. In other words, our science has tended to represent the extremes of reef health. Yet, the cumulative effects of multiple stressors are reducing the diversity of reef environments, yielding a few truly spectacular reefs, and a large proportion of pretty degraded ecosystems. Increasingly, we will have to target management interventions towards reefs that no longer differ dramatically in their state: When faced with a limited portfolio of reef health, how do we target activities meaningfully? The good news is that the advent of resilience-based management is, in part, directing research towards understanding the subtleties of reef drivers and dynamics. Mumby will review drivers of reef resilience and functioning and describe how science and management can advance in an increasingly ‘subtle’ world. In some instances, this will require us to revisit how and what we monitor.

Biographical Information: Professor Peter Mumby is a reef ecologist at the University of Queensland. Prior to undertaking a Ph.D., Peter worked as a practitioner of conservation planning in Belize and discovered first-hand the limited scientific basis of conservation. In 1997, Peter completed a Ph.D. at the University of Sheffield, which helped develop the use of remote sensing tools for coral reef assessment. He then obtained a NERC Post-doctoral fellowship at the University of Newcastle and began focusing on ecological processes. This was followed by a Royal Society Fellowship at the University of Exeter during which time Peter began combining ecological modelling with field experiments, observational studies and spatial datasets. Eventually, the chilly British winters drove Peter to the University of Queensland (2010).

Peter’s research has an ecosystem-level perspective, integrating studies of algae, corals, sponges, fish, food webs, connectivity and disturbances. Where possible, Peter tries to undertake research that will help manage coral reefs. He has contributed research on MPA effects, larval and ontogenetic connectivity, reef resilience, ecosystem functioning, and fisheries. In 2015, Peter was awarded the inaugural ISRS award for a mid-career scientist. He is also the recipient of a Pew Fellowship in Marine Conservation, the Rosenstiel Award, and Marsh Award for marine conservation. Peter is happiest at a depth of 10 m with a camera or transect line.

WEDNESDAY AFTERNOON
PLENARY PRESENTATION
Date: Wednesday, 22 June 2016
Time: 12:45 to 13:45
Location: Ballroom A/B/C

Nancy Knowlton, Sant Chair of Marine Science, Department of Invertebrate Zoology National Museum of Natural History Smithsonian Institution, Washington, DC, USA

THURSDAY MORNING
PLENARY PRESENTATION
Date: Thursday, 23 June 2016
Time: 08:00 to 09:00
Location: Kalakaua Ballroom A/B/C

JANICE M. LOUGH, SENIOR PRINCIPAL RESEARCH SCIENTIST, AUSTRALIAN INSTITUTE OF MARINE SCIENCE, TOWNSVILLE, MC, QUEENSLAND, AUSTRALIA

Presentation: A Changing Climate for Coral Reefs

Presentation Description: Climate is changing for tropical coral reef ecosystems which are already showing their vulnerability with the relatively modest increases in global average temperatures observed to date. In this presentation I will describe how the thermal environment is changing for tropical coral reefs and the historical insights we gain from natural archives of growth and paleoclimate obtained from annually-banded massive coral skeletons. I will also consider what the 2015 Paris pledge to constrain global warming to ‘well below 2.0°C’ and ideally ‘limit to 1.5°C’ means for the thermal environments of coral reefs.

Biographical Information: Janice Lough is a Senior Principal Research Scientist at the Australian Institute of Marine Science (AIMS, Townsville) and Adjunct Professorial Research Fellow and Partner Investigator with the ARC Centre of Excellence for Reef Studies, James Cook University. She is a climate scientist who has been publishing on issues related to climate change for over 30 years. Janice has a BSc in Environmental Sciences from the University of East Anglia, Norwich, UK. She completed a Ph.D. on tropical Atlantic sea surface temperatures and climate in sub-Saharan Africa in 1982 at the Climatic Research Unit, University of East Anglia. She held an NSF-funded post-doctoral position at the Laboratory of Tree-Ring Research, University of Arizona, from 1982 to 1986. In 1986, she came to AIMS for a two-year postdoctoral position working with environmental records from corals and has been a research scientist at AIMS since 1988. Current research activities focus on: 1) obtaining annual proxy environmental and growth records from massive corals over the past several centuries; this places current changes in an historical context, and 2) assessing how climate is already changing for
tropical marine ecosystems; climate change is not a future event, significant warming of the tropical oceans has already occurred with observable consequences for coral reefs.

Please note: There is no Plenary Presentation Session on Thursday afternoon.

FRIDAY MORNING PLENARY PRESENTATION
Date: Friday, 24 June 2016
Time: 08:00 to 09:00
Location: Kalakaua Ballroom A/B/C
Speaker TBD

FRIDAY AFTERNOON PLENARY PRESENTATION
Date: Friday, 24 June 2016
Time: 12:45 to 13:45
Location: Kalakaua Ballroom A/B/C
RUTH D. GATES, PH.D., DIRECTOR AND RESEARCHER, HAWAII INSTITUTE OF MARINE BIOLOGY, KANEOHE, HI, USA

Presentation: ISRS Presidential Address

Research in the Gates Lab is a dynamic and multifaceted endeavor. Her group works on coral reefs, tropical marine ecosystems that protect coastlines, support tourism, and provide nutrition to many island nations. The lab’s focus is on defining biological traits that drive the differences in performance among corals and reefs. Its goal is to contribute knowledge that expands our basic understanding of how coral reefs function, and informs the management and conservation of these beautiful, important, but threatened ecosystems.

REPORT OUT SESSION
Date: Friday, 24 June 2016
Time: 16:15 to 18:00
Location: Kalakaua Ballroom A/B/C

SYMPOSIUM PROCEEDINGS
Guidelines for preparing manuscripts for the symposium proceedings can be found on the symposium website under Program & Agenda. The manuscripts should be completed before arriving at the symposium, but the deadline for submitting the manuscript to your session chairs is not until June 30. This is to allow you to make any small modifications you may wish to make based on feedback from colleagues after your presentation. The proceedings will be produced as online open access and as on-demand hardcopy.

MENTORING LUNCH PROGRAM
Date: Monday – Thursday
Location: Exhibit Hall 2, look for the designated tables

We will be having “Lunch with Mentors” (mentoring sessions) for students to meet senior scientists and ask questions at the lunch time during the Symposium.

FRIDAY MORNING PLENARY PRESENTATION

GRAB YOUR LUNCH, AND COME AND ENJOY CONVERSATIONS WITH CORAL REEF SCIENTISTS! WE WILL SEND OUT A LIST OF MENTORS, WHO WILL BE AT THE LUNCH ALONG WITH A SIGN UP SITE BEFORE THE CONFERENCE. NO PREPARATION IS NECESSARY. IT IS SIMPLY AN OPPORTUNITY FOR YOU TO ASK QUESTIONS AND GET TO KNOW THE RESEARCHERS FROM AROUND THE WORLD.

HOPe MANY OF YOU CAN JOIN US.

Monday, 20 June 2016 .............................................. 12:00 – 13:15
Tuesday, 21 June 2016 .............................................. 11:30 – 12:45
Wednesday, 22 June 2016 ......................................... 11:30 – 12:45
Thursday, 23 June 2016 ............................................. 11:30 – 12:45

If you are interested in volunteering one hour of your time to mentor/interact with students at ICRS, please let us know as well!

Email Kaho Tisthammer
Educational Committee of 2016 ICRS
kahot@Hawaii.edu

WORKSHOPS AND TOWN HALLS

CORAL IDENTIFICATION CAPACITY BUILDING PROGRAM - CORAL IDENTIFICATION WORKSHOP

Dates/Times: Saturday, 18 June 2016, 08:30 to 16:30
and Sunday, 19 June 2016, 09:30 to 16:30
Location: Waikiki Aquarium, Honolulu, Hawai‘i, USA
Cost: Australian $240.00

Includes: 2 full days of lab tuition; take home training materials including the Coral Finder Toolkit 3.0: (the revised Coral Finder 3.0 paper edition, magnifier and a complete set of training movies/revision movies/resources. (Normally $AU80).

Note: Morning and afternoon tea provided. Lunch and snacks can be purchased locally. Accommodation is not included.

The program is based around the Coral Finder Toolkit, a suite of proven, practical resources for coral identification. The Coral Finder uses a visual approach that makes it possible for beginners to advance rapidly with little prior knowledge. Led by Russell Kelley (author of the Coral Finder and the Reef Finder) the workshop uses audio-visual and hands-on training, tutorials and instruction. The workshop includes a take home Coral Finder Toolkit including the completely revised Coral Finder 3.0 and complete audiovisual training on a USB flash drive.

Participants learn how to use the Coral Finder to identify corals to genus, regardless of growth form, and how to cross-reference field results back to formal knowledge for species ID. Special emphasis is placed on techniques for field identification, self-directed learning and problem solving. For non-coral specialists, the workshop rapidly develops basic coral identification skills. For current or future coral specialists, the workshop improves the reliability and consistency of coral identification and develops a mature understanding of how to approach species identification. The training applies equally topside or underwater. Even people with extensive prior knowledge of corals benefit significantly from the problem solving training built into the Coral Finder workshop. The workshop also summarizes the changes and implications of new molecular taxonomy findings while providing an easy-to-grasp, practical, field focused approach to coral identification.
A download link to the flyer and the option to book a place can be found at www.byoguides.com/shop. Please address inquiries to Russell Kelley at russell@byoguides.com.

DEVELOPING A REEF RESILIENCE FRAMEWORK
Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 302 A/B

THIS IS AN INVITATION ONLY WORKSHOP. The Great Barrier Reef Foundation is convening a global think tank to develop a Reef Resilience Framework, which will operationalise resilience. The framework will be a mechanism to drive action toward reef resilience and resilience planning, and will be internationally applicable and scalable. Essentially, the Framework will be a roadmap for how a hierarchy of management solutions, sound understanding, decision support tools, and monitoring, evaluation and reporting contribute towards achieving the vision of enhancing reef resilience. This workshop will convene a think tank of resilience practitioners to contribute towards Framework development, and share experiences and lessons learned globally.

For more information about this event, contact Melissa Rodgers, Great Barrier Reef Foundation at Mrogers@barrierreef.org.

RAINE ISLAND RESTORATION WORKSHOP
Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 303 A/B

THIS IS AN INVITATION ONLY WORKSHOP. The Raine Island Restoration Project aims to restore and maintain Raine Island (Great Barrier Reef, Australia) as a viable island ecosystem, which facilitates green turtle breeding, and seabird nesting and feeding, to support sustainable populations of those species and other depending species. Research and monitoring over the last 30 years clearly shows that the northern GBR green turtle stock is in the early stage of decline, and that Raine Island has been failing as a turtle rookery since the late 1990s. This is significant, as 90% of the GBR green turtles nest here. The major issues include very low nesting success, reductions in the number of clutches laid, hatching failure, and adult female mortality. A pilot project trialing artificial barriers indicated that turtle mortality can be reduced. Sand redistribution was also trialed, and resulted in a more even nesting distribution, which increased hatching results. This project will undertake further works over 5 years to restore nesting success or indicate additional and alternative strategies required to restore the Raine Island nesting site, in conjunction with ongoing monitoring and research to assess its success and record population status. This workshop will be a knowledge-sharing think tank to discuss restoration experiences and lessons learned from a range of global practitioners. This project is collaboration between the Great Barrier Reef Foundation, the Queensland Government, and BPH Billiton.

For more information about this event, contact Melissa Rodgers, Great Barrier Reef Foundation, Mrogers@barrierreef.org.

GETTING PUBLISHED
Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 307 A/B

Announcement for a one-day workshop on “Getting Published.” In conjunction with the 13th International Coral Reef Symposium, the Australian Research Council Centre of Excellence for Coral Reef Studies will host a one-day workshop on “Getting Published” on June 19, 2016. This workshop will be directed at early career scientists interested in learning how to navigate the publication process. The workshop will be run by Professors Joshua Cinner and Terry Hughes. Josh and Terry have each published over 100 peer-reviewed papers in journals such as Current Biology, Nature, Nature Climate Change, PNAS, and Science. They have served on the Editorial Boards of journals such as Coral Reefs, Conservation Biology, Global Environmental Change, Ecology & Society, and Coastal Management. Profs Cinner and Hughes will use their considerable editorial, publishing, and reviewing experience to provide insights into how to structure manuscripts effectively, navigate the peer-review process, and on how to build a portfolio of publications from early in your career. The workshop will be suitable for early career researchers, ranging from graduate students working on their first publication to postdoctoral researchers within a few years of their Ph.D.

The workshop will use five manuscripts from the participants as living examples of what to do and what not to do. Thus, participants who are interested in having their work openly critiqued should indicate so in their application. We will select five participants to submit manuscripts that will serve as examples for the section of the workshop focusing on structuring a manuscript effectively. However, you need not have a manuscript prepared to attend the workshop.

This workshop is open only to those who will be attending the Symposium and registration will be on a first come first serve basis. For more information, please contact Cindy Huchery @jcu.edu.au.

CoE FOR CORAL REEF STUDIES - STUDENT WORKSHOPS
Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 313 C

A promising approach to integrating science, policy, and practice effectively is to connect more directly those who are producing scientific tools and those who are using them. This side event will address practical options for making science more useful for coral reef restoration and management, using the topic of emerging molecular technologies such as genomics, transcriptomics, and proteomics. We intend to have an interactive session focused on matching tools with potential users. First, managers and scientists will describe existing case studies of the use of molecular techniques for coral reef management in the field. Second, scientists and law enforcement officials will discuss the current or proposed use of molecular techniques for finding and addressing sources of coral damage.

For more information about this event, contact Vivian Doherty, ARC Center of Excellence, Coral Reef Studies JCU, vivian.doherty@jcu.edu.au.
Two data workshop sessions will be held. The morning session will focus on preparing legacy data and images for storage, discovery, and retrieval, including access to free data storage sites and developing metadata. The afternoon session will focus on more cutting edge techniques for image analysis, data analysis, and cyberinfrastructure readiness.

For more information about this event, contact Ouida Meier, Hawai‘i Institute of Marine Biology, UH Manoa, omeier@Hawaii.edu.

FIELD IDENTIFICATION OF CORAL DISEASE
Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 308 A/B

Coral disease is an increasing problem for reefs worldwide. The critical first step in understanding the ecological significance of coral disease is to conduct baseline field surveys of disease prevalence and establish a longer-term monitoring program. However, many scientists and resource managers trained in reef monitoring lack sufficient background in the identification and description of coral diseases. This workshop is designed to familiarize field biologists with in situ identification of common coral diseases and present current methods for investigating coral disease ecology. Approaches to disease management will also be discussed. The workshop will consist of a lecture component to share information and a field component, where participants will get hands-on training in coral lesion identification and description. The field component will be conducted on snorkel, and participants will be expected to provide their own mask, fins and snorkel. A small fee will be at the beginning of the session to cover transportation to the field site and lunch.

Please address inquiries to Greta Aebly, greta@Hawaii.edu.

COMBATING IUU FISHING NEARSHORE: THE OPPORTUNITIES OF EMERGING TECHNOLOGY AND ITS LIMITS
Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 311

Efforts to combat illegal, unregulated, and unreported (IUU) fishing are gaining momentum globally with both the U.S. and Europe currently implementing major initiatives to eliminate illegal fishing. These efforts often focus on traceability systems, vessel-monitoring efforts, and the implementation of the Port State Measures Agreement that target larger vessels engaged in IUU. There is a critical need to identify, pilot, and scale-up technologies, patrolling approaches, and institutional arrangements that are appropriate for near-shore fisheries, where most of the boats are engaged in small-scale fisheries. These areas are often plagued by unreported catches that compromise local management efforts, as well as illegal encroachment by larger vessels that damage coral reef habitats and stocks. This workshop will draw on recent experiences from Africa, Southeast Asia and Central and South America - to consider how emerging technologies can help address illegal and unregulated fishing in near-shore waters, and what broader social and institutional arrangements are needed to enable their success.

For more information about this event, contact Heidi Schuttenberg, U.S. Agency for International Development, hschuttenberg@usaid.gov.

CORAL DISEASE INVESTIGATIONS
Date: Sunday, 19 June 2016
Time: 08:00 - 18:00
Location: Windward Community College

Since coral diseases were first reported in the 1970s, protocols have been developed and applied to identify diverse pathogens and understand their effects on the organisms. This workshop will focus on histopathological examination of coral cells and tissues, which is the diagnostic tool that should be used in every study. We will present principles of wildlife disease investigations, how to describe gross lesions, field sampling methods, and basic gross and microscopic anatomy of corals. Participants will read histoslides from normal and diseased corals using light microscopes and learn how to use NOAA’s Coral Virtual Microscopy slide collection for online study. Histotechniques will be discussed during the lunch break. Participants should bring their own lunch and drinks.

Transportation will be provided to the event location held at Windward Community College. To confirm your participation please notify Mike Sweet at M.Sweet@derby.ac.uk.

CORAL TRIANGLE STRATEGY CONSULTATION WORKSHOP
Date: Sunday, 19 June 2016
Time: 09:30 - 16:30
Location: 306 A/B

THIS IS AN INVITATION ONLY MEETING. We are holding a consultation workshop for comment on a draft Coral Triangle (CT) strategy document, which will feed into the European Commission’s process to develop their “strategic approach to biodiversity conservation” in Asia. WCS is coordinating overall, in this meeting, we will present a draft marine report highlighting ongoing conservation efforts in the CT region and opportunities to build on successes and lessons learned, based on key documents and expert interviews. This consultation workshop will be important in order to make sure CT government and partner organizations’ views are properly incorporated into the report. As we recommend promising approaches moving forward, the intention of the report is to consult broadly with the conservation community experts and key government and non-government organizations.

For more information about this event or the EC process, contact Helen Fox on behalf of the Wildlife Conservation Society, foxconservation@gmail.com.
SEAGRASS FUTURES IN THE TROPICAL INDO-PACIFIC

Date: Sunday, 19 June 2016
Time: 13:00 - 17:00
Location: 313 B

Coral reef and seagrass ecosystems adopt a mutualistic relationship in which the structural integrity of the reef provides habitat for reef top and lagoon seagrass meadows that, in turn, deliver vital nursery grounds and multi-level trophic inputs to support a more resilient reef system. Climate change-driven threats to coral reefs and the human populations they support are well established. However, impacts on reef-associated seagrass communities and the human dimension associated with such loss have been inadequately addressed. Indo-Pacific island nations are under pressure to find solutions to cope with this imminent change. Our goal is to engage ICRS attendees, particularly those working in this region, to identify effective and applied science solutions in Pacific Island communities facing climate-scale issues that will impact their relationship with seagrass communities. The workshop will promote cross-communication between coral, fisheries and seagrass scientists working on threats such as sea-level rise, ocean acidification, and the human costs of these problems. Evidence of a successful workshop will be 1) identifying gaps in knowledge and research programs, 2) exploring opportunities for research with other reef scientists, 3) designing a “boots-on-the-ground” approach to the needs of Pacific Island nations, 4) establishing effective and meaningful partnerships with a plan to engage participants post-ICRS, and 5) producing a manuscript summarizing our findings.

For more information about this event, contact: Katie Chartrand, James Cook University, Katie.Chartrand@jcu.edu.au.

A CONVERSATION ON ECOSYSTEM-BASED MANAGEMENT OF HAWAII’IAN REEFS

Date: Sunday, 19 June 2016
Time: 13:00 - 17:00
Location: 313 A

The Ocean Tipping Points project, a collaboration led by U. Hawaii and UC Santa Barbara, invites representatives of local managers, NGO’s, stakeholders and scientists to gather for a discussion of the immediate and long-term science needs for catalyzing holistic management of Hawaii’s reefs. Our ultimate goals are to foster collaboration between scientists and the broader community, and identify priority research topics and upcoming engagement opportunities.

Topics will be tailored to the attendees’ interests, and may include:

- latest science of ecosystem “tipping points”
- decision support tools for managing land-based pollution,
- managing cumulative human impacts,
- metrics of reef resilience,
- place-based conservation strategies,
- ecosystem service valuation,
- science needs for reef restoration,
- data sharing and open-access science,
- science communication and stakeholder outreach.

Scientists working on the topics above will be on hand to give speed-talks on their latest research and discuss future directions. Open discussion will follow. This is intended to be a chance for sharing ideas about filling knowledge gaps, improving data integration, brainstorming strategies for both the science and communication of ecosystem-based management, and supporting communities to improve local reef management. Please visit www.ocean tippingpoints.org to find out more about this project and contact Kim Selkoe at selkoe@nceas.ucsb.edu to RSVP or to ask questions.

CO-MANAGEMENT RESPONSES DURING MASS CORAL BLEACHING EVENTS: WHAT WE’VE LEARNED

Date: Sunday, 19 June 2016
Time: 13:00 - 17:00
Location: 317 A/B

The last decade has seen an exponential increase in the scientific evidence that reducing local stressors to coral reefs enhances their resilience by supporting coral survival during bleaching events and reef recovery afterward. This workshop brings together expertise in science and management to synthesize what we have learned about implementing short-term closures of reef areas during bleaching events toward a goal of enhancing coral reef survival. It recognizes that short-term closures are frequently the result of effective co-management collaborations between governments and communities, and that these arrangements rely on trust, good technical advice, and effective communications.

To better understand the potential of temporary closures as a management response to bleaching events, the session will examine:

- The role of social capital between governments, local businesses, and NGOs in effectively implementing temporary closures in tourism and fisheries areas during bleaching events;
- Technical guidance on: the percentage of area that should be closed, which areas should be selected, and ecological or accumulated temperature thresholds that should trigger the beginning and end of closures;
- Evidence about the influence of temporary closures in enhancing coral survival to bleaching under different use scenarios; and
- The role of the media in influencing the economic impact of closures and the willingness of businesses to comply with these temporary measures.

For more information about this event, contact Heidi Schuttenberg, U.S. Agency for International Development at hschuttenberg@usaid.gov.

CORAL REEF CONSERVATION THROUGH TRANSFORMATIONAL EDUCATION

Date: Sunday, 19 June 2016
Time: 13:00 - 17:00
Location: 312

We in Hawaii have created coral reef conservation success stories through diverse, widely targeted transformational educational efforts facilitated by almost every kind of entity concerned
with conservation and education. Collectively, we have much to share with the conservation community, and we can demonstrate how, when we all work together, we can have a significant positive impact. Our session is designed to serve diverse stakeholders all interested in coral reef conservation education that leads to change. Our session goals are to share our tools and methodologies for transformational conservation education in an interactive way. Our facilitator has assisted people from around the world in active learning beyond the formal learning environment. We will highlight programs in which traditional knowledge from Hawai'i and the Pacific Islands and western science have worked well together. We will share our collective wisdom for overcoming obstacles. The reef, like many ecosystems, is not always an easy place to take learners to, so we will share our techniques for circumventing this challenge and bringing the place to people, as well as our methods for getting the people into the place safely.

We aim to develop new connections and commitments in our own backyard while also catalyzing the formation or strengthening of networks in other regions. We would love to help the ICRS develop further worldwide transformational conservation education networks and activities.

For more information about this event, contact Gail Grabowsky, Chaminade University, ggrabows@chaminade.edu.

**CORALCOLLAB.NET BETA: A COLLABORATIVE AND OPEN SOURCE PLATFORM FOR MANAGING AND ANALYZING DATA**

Date: Monday, 20 June 2016  
Time: 12:00 - 13:15  
Location: 305 A/B

Come learn about and interact with www.CoralCollab.net, a new collaborative and open source application that will allow users to store, manage, analyze, and visualize coral reef ecological monitoring data. In the face of global threats to coral reefs, there is an urgent need to scale up local data to address global research questions. While tens of millions of dollars are invested in coral reef monitoring, conservation, and management, this information remains largely disparate in separate organizations and on computers of individual researchers. The Coral Collaboration online database allows scientists, managers, and organizations to aggregate and share coral reef data within organizations and among networks of researchers. CoralCollab.net integrates coral reef science with the latest open source technology standards to facilitate scientific analysis and actionable science. In this interactive workshop, we will demonstrate the core functions of CoralCollab.net, including streamlined data entry, quality control mechanisms, data storage and management, setting the level of data privacy for your own projects, and built-in and customizable data analyses and visualizations. We also seek feedback to guide further development of the database and protocols: what functions are most important for your research and management needs? CoralCollab.net is designed to serve the scientific and management communities, so come see how it can work for your data management and analysis needs.

For more information about this event, contact Jill Harris, WWF, jill.harris@wwfus.org.

**CORALS OF THE WORLD**

Date: Monday, 20 June 2016  
Time: 12:00 - 13:15  
Location: Kalakaua Ballroom A/B/C

Fifteen years have now passed since the three-volume book, Corals of the World was published. During this time, there has been extensive new fieldwork, the Coral Triangle has been delineated, and molecular studies have proliferated. The building of an open access website of the same name was started soon after the book was published has now reached the point of initial public release. You can find it located at www.coralsoftheworld.com.

The website has the many interlinked components. These include:

- Summary pages of the 840+ species considered by the authors to be valid. These pages contain basic information, extensive photography and taxonomic overviews.
- An electronic name finder accessing over 2000 names including synonyms together with relevant literature.
- Coral Geographic generates maps according to user needs, including complex ones. Data supporting species distributions are very extensive and basic statistical information accompanies maps.
- Coral ID, the identification tool is under development. Coral Enquirer, an endpoint for assessing the vulnerability of species, is also under development and will be open for discussion.

This will not be a regular session. It is intended to be for questions, answers, contributions and ideas for future development. Please bring photographs of corals if you are happy for us to use them.

For more information about this event, contact Charlie Veron at j.veron@coralreefresearch.com.

**CORAL DISEASE ACROSS THE INDO-PACIFIC: THREATS AND MANAGEMENT**

Date: Monday, 20 June 2016  
Time: 19:00 - 21:00  
Location: 301 B

Coral disease has emerged as a problem on reefs across the Indo-Pacific. Recent research has uncovered much information on the ecology of many of the diseases, factors that increase disease prevalence and strategies for disease management. This talk will be designed for the general public to familiarize themselves with basic information on understanding coral diseases and why they have become a current management problem for coral reefs. It will also use regional examples to illustrate local stressors that underlie disease problems and management actions being taken to address the growing threat.

For more information about this event, contact Greta Aeby, Hawaii Institute of Marine Biology, at greta@Hawaii.edu.
USING CHLOROPHYLL FLUORESCENCE TO MEASURE CORAL PHOTOPHYSIOLOGY  
Date: Monday, 20 June 2016  
Time: 19:00 - 21:00  
Location: 302 A/B  
Chlorophyll fluorescence PAM-style measurements have been widely used to address coral physiological status. While the technique has the potential for wide application, many anecdotal accounts and even published papers indicate some users are not getting the most from their fluorometers. This workshop seeks to redress this by outlining fundamental principles of chlorophyll fluorescence, with an emphasis on setting up commonly used instruments for lab and field based studies. Experimental design will be discussed, with case studies from participants used to illustrate important principles. Attendees should leave the workshop with confidence in designing and executing robust photosynthesis experiments with corals and coral systems.

For more information about this event, contact John Runcie, Aquation Pty Ltd, at john.runcie@aquation.com.au.

THE SCIENCE AND MANAGEMENT OF WATER QUALITY ON CORAL REEFS  
Date: Monday, 20 June 2016  
Time: 19:00 - 21:00  
Location: 308 A/B  
The US Coral Reef Task Force and its member organizations have identified water quality as a key factor that impacts coral reef health. There is currently a gap between the management community conducting the monitoring, and the science that identifies key constituents, and quantities that cause impacts.

This workshop will be an opportunity for experts to assist Task Force member agencies with efforts at revising and updating monitoring to support resource management. Key types of questions for discussion would be:

- Rather than the standard suite of nutrients, sediment, and other water quality parameters, is there a condensed set of parameters that are best for monitoring for coral reefs?  
- What are the key constituents that are impacting coral reefs, and what are the trigger levels for managers to be aware of?  
- Are there ways to adequately estimate when resources are approaching those trigger levels of concern?  
- Modeling is often proposed as a means to obtain estimated trigger levels, however they have not been at a scale to sufficiently calibrate or ground-truth, and thus not useful for direct management. Are there new/better models that can achieve this?  
- Are there more effective ways to find out information about impacts to coral other than from water quality monitoring, i.e. satellite imagery monitoring, or tissue sample collection from marine species, etc?

For more information about this event, contact Dana Okano, NOAA CRCP, dana.okano@noaa.gov.

USING GENOMICS FOR CORAL REEF MANAGEMENT – A NEEDS ASSESSMENT  
Date: Tuesday, 21 June 2016  
Time: 11:30 - 12:45  
Location: 302 A/B  
A promising approach to integrating science, policy, and practice effectively is to connect more directly those who are producing scientific tools and those who are using them. This side event will address practical options for making science more useful for coral reef restoration and management, using the topic of emerging molecular technologies such as genomics, transcriptomics, and proteomics.

We intend to have an interactive session focused on matching tools with potential users. First, managers and scientists will describe existing case studies of the use of molecular techniques for coral reef management in the field. Second, scientists and law enforcement officials will discuss the current or proposed use of molecular techniques for finding and addressing sources of coral damage. We will then moderate a discussion among managers, decision-makers, law enforcement officials, and researchers about other possibilities for using genomics, transcriptomics, and proteomics for coral reef management. We intend to recruit a diverse set of discussion participants among the ICRS attendees.

We hope that by promoting a high level of interaction among participants, the session can help identify promising new uses for molecular techniques and foster partnerships among those working on coral reef management, and link directly to the ICRS 2016 theme of “Bridging science to policy.”

For more information about this event, contact Angela Bednarek, The Pew Charitable Trusts, at abednarek@pewtrusts.org.

ISRS TOWN HALL MEETING: CLIMATE CHANGE & CORAL BLEACHING  
Date: Tuesday, 21 June 2016  
Time: 19:00 - 21:00  
Location: 310 Theater  
This meeting is organized by ISRS and supporting organizations to discuss the current dire threat of climate change and coral bleaching to reef ecosystems. What should the reef science and management community do to alert both decision makers and the general public to the seriousness of this threat? The meeting is open to both ISRS members and non-members.

For more information about this event, contact Rupert Ormond, ISRS, at rupert.ormond.mci@gmail.com.

ACTION NETWORK FOR CORAL HEALTH AND RESILIENCE WORKING GROUP  
Date: Tuesday, 21 June 2016  
Time: 19:30 - 21:30  
Location: 306 A/B  
THIS IS AN INVITATION ONLY WORKSHOP. ANCH&R was developed to:

- Facilitate communication among in-country scientists, managers, and coral disease experts,
• Build and support in-county capacity for baseline disease surveys and disease outbreak response, and
• Improve our understanding of the causes and consequences of disease to enable reef managers to assess and manage disease risk.

During this working group meeting, ANCH&R partners will discuss projects that address these three goals. We will also discuss other topics such as large funding opportunities to expand ANCH&R, membership, future meetings, ANCH&R coordination and communication.

For more information about this event, contact Courtney Couch, Hawai‘i Institute of Marine Biology, courtneycouch@gmail.com.

HAWAI‘I MARINE ENFORCEMENT CONFERENCE II
Date: Tuesday, 21 June 2016
Time: 19:30 - 21:30
Location: 303 A/B

The William S. Richardson School of Law will be hosting the second Hawai‘i Marine Enforcement Conference (HMREC II) in June 2016. This conference brings together partners in nearshore marine enforcement, such as the Hawai‘i State Department of Land & Natural Resources, NOAA, Coast Guard, county police/sheriffs, fishers, the judiciary, prosecutors, public defenders, legal practitioners, scientists, and citizens groups. The goal of the conference is to improve collaboration across entities and interest groups, and to enhance the strategic and consistent enforcement of state marine protection laws and regulations.

For more information about this event, contact Denise Antilini, William S. Richardson School of Law, at antolini@Hawaii.edu.

MARINE HABITAT & ECOSYSTEM THREATS OF PERSONAL CARE PRODUCTS
Date: Tuesday, 21 June 2016
Time: 19:30 - 21:30
Location: 307 A/B

THIS IS AN INVITATION ONLY WORKSHOP. The International Programme on the State of the Ocean, IUCN and World Parks Congress will present the findings of a scientific workshop held in the Spring of 2016, which examines the threats posed to marine habitats and ecosystems from pollution originating in domestically used personal care products (PCPs). The scientists will review the existing literature and consider the state of the ocean in regards to PCP pollution. The workshop held during the Coral Symposium will gather a broader group of scientists and experts to consider these scientific findings and develop recommendations arising from them with a view to helping to inform policy and other measures.

For more information about this event, contact Mirella Von Lindenfels, Communications Inc., at mirella@communicationsinc.co.uk.

USGS TOWN HALL
Date: Wednesday, 22 June 2016
Time: 11:30 - 12:45
Location: 301 B

THIS IS AN INVITATION ONLY MEETING. U.S. Geological Survey scientists will gather to discuss opportunities for collaboration, program growth, and new initiatives to meet the science needs of our partners.

For more information about this event, contact Ilsa Kuffner, U.S. Geological Survey, at ikuffner@usgs.gov.

EXPERIENCES AND BEST PRACTICES WITH CITIZEN SCIENCE ACTIVITIES
Date: Wednesday, 22 June 2016
Time: 11:30 - 12:45
Location: 305 A/B

In connection with Session 88: “Citizen Science in Support for Coral Reef Protection and Sustainability” we invite meeting attendees to a special town hall forum to share their experiences as an organizer, scientist, and/or participant in citizen science activities and to learn from each other. Along with our formal paper and poster sessions, this open dialog will help to identify challenges and opportunities, levels of engagement, lessons learned and best practices for the role of citizen science in coral reef conservation.

We seek to address questions such as: What practices help/hinder success and why? Did experiences meet expectations by all involved? What roles are citizen scientists asked to carry out? How do we attract, engage, and follow up with participants? Do we ask too much/little of citizen scientists? How are citizen science contributions measured? Can citizen science activities be standardized to address broader global-scale issues? Who is an ideal citizen scientist? By addressing these and other questions, we can begin to refine the scope, role and utility of citizen science approaches to coral reef conservation.

For more information about this event, visit www.greatbarriercoralscience.org.au/icsr-2016/ or contact Karsten Shein, NOAA, at Karsten.Shein@noaa.gov.

A SEA OF GLASS
Date: Wednesday, June 22 2016
Time: 11:30 - 12:45
Location: 306 A/B

A showing of the 30-minute film, Fragile Legacy (Ted Danson narrated) and introduction to the Blaschka Biodiversity project, which aims to use art to inspire appreciation of the invertebrate biodiversity in our oceans. The father-son glassmaking team of Leopold and Rudolf Blaschka created a glass menagerie of over 800 marine invertebrate models 150 years ago. The Blaschkas were captivated by sea anemones, soft corals, nudibranchs, octopus and squid and spun their likenesses into exquisite glass replicas, documenting life in oceans untouched by climate change and human impacts. Inspired by the Blaschkas’ uncanny replicas, Harvell, who curates Cornell’s glass model collection, set out in search of their living counterparts. In the film Fragile Legacy and the just-released book A Sea of Glass, we describe our quest to find what living representatives remain of the Blaschka’s subjects. This is a conservation project, revealing the surprising and unusual biology of some of the most ancient animals on the tree of life. It is a way to communicate a century of change in our
ocean ecosystems and learn which of the living matches for the Blaschkas’ creations are, indeed, as fragile as glass.

The documentary Fragile Legacy, won the Best Short Film award at the 2015 Blue Ocean Film Festival & Conservation Summit. View a trailer of the film at http://fragilelegacy.info.


For more information about this event, contact Drew Harvell, Cornell University, cdh5@cornell.edu.

GLOBAL REEF REPORTING – FROM SCIENCE TO POLICY. THE ROLES OF ICRS/ISRS, IUCN, GCRMN AND OTHERS/ BRIDGING THE GAP: SCIENCE AND CONSERVATION

Date: Wednesday, 22 June 2016
Time: 19:30 - 21:30
Location: 301 B

This event will identify how the scientific community (ISRS/ICRS) can contribute more formally in global science-policy processes through: a) building on GCRMN to develop a mature global observation network, b) identifying and producing Essential Biodiversity/Ocean Variables that will enable comprehensive reporting on coral reef state and trends, and c) linking these to conservation decision-support tools (e.g. IUCN Red List of Species/Ecosystems, Red List Index, Key Biodiversity Areas) for greater impact.

The session will provide for debate among participants on key themes, building on findings from other ICRS sessions (In particular GCRMN, the current bleaching event, etc.) Prior to the session, a survey will be circulated to ISRS members and ICRS attendees, and preparation materials will be provided. The format will include a 30-minute panel outlining the potential roles of multiple programs followed by 45 minutes for working groups using rapid/social lab tools. Topics will be determined from survey results, and priority issues identified in building up to the ICRS. Groups will present 5 key messages to the plenary, to be compiled into a short-list of key messages from the Town Hall meeting, and submit more detailed notes for inclusion in a session report. This will contribute to a GEOBON Open Science session (July) and the IUCN Congress (Sept, in Hawai‘i), and thereafter, a 2017-2020 work plan to deliver global reporting on coral reefs (Aichi Target 10) and SDG14 (Oceans).

For more information about “Global reef reporting” contact David Obura, CORDIO East Africa/IUCN Coral Specialist Group, dobura@cordioea.net

For more information on a scientific evidence base for reef conservation, contact Sue Wells at suewells1212@gmail.com or Helen Fox at fox.conservation@gmail.com.

GLOBAL CHALLENGES AND PERSPECTIVES IN MESOPHOTIC BIODIVERSITY RESEARCH

Date: Wednesday, 22 June 2016
Time: 19:30 - 21:30
Location: 302 A/B

THIS IS AN INVITATION ONLY WORKSHOP. In the recent years, Mesophotic Coral Ecosystem research gained momentum rapidly. Numerous studies using the latest available technologies have been performed on mesophotic corals and their associated fauna. However, most of these studies were restricted to specific locations and there is very little information available to draw generalizations and understand the global ecology of the mesophotic zone in tropical and subtropical waters. Knowledge on the biodiversity and distribution of mesophotic organisms are particularly important bottlenecks in MCE research. This meeting aims to provide a platform to discuss these issues in a more in-depth manner than possible in the tight schedule of a formal session. With a smaller attendance than at the formal session, this meeting will also provide a timely and appropriate opportunity to discuss topics which would not find their place in the formal session.

For more information about this event, contact Frederic Sinniger, University of the Ryukyus, at fredsinniger@hotmail.com.

EPGENETIC RESEARCH IN CORAL REEFS

Date: Thursday, 23 June 2016
Time: 11:30 - 12:45
Location: 302 A/B

The premise of epigenetic modification in corals as a potential adaptation response has generated a surge of ongoing research. In order to coordinate current research efforts and determine the current state of the field, we invite scientists to this workshop, who conduct, plan or are interested in epigenetic investigations on corals (and other reef organisms).

To understand the complexity and functionality of epigenetic modifications, for example, (i) when and how which modifications occur, (ii) what role they play in organism function and (iii) when and how they are transferred to the next generation, will be a great challenge for researchers in the coming years. Different complementary research approaches are needed to tackle these questions, using spatio-temporal in situ investigations, controlled ex situ experiments and an array of analytical tools, such as different epigenetic analyses (DNA methylation, histone variants, micro RNA), transcriptomic and proteomic analyses and investigations of diverse ‘fitness parameters’ (growth, reproduction success, immunity, etc.). Only combined, these efforts are able to provide a holistic view on the potential role of epigenetic modifications for coral adaptation in a changing world, which may alter our future predictions for coral reefs substantially, and our strategies to manage coral reefs efficiently. Please indicate your attendance in advance by contacting the organizers.

For more information about this event, contact Yvonne Sawall, GEOMAR Helmholtz Center for Ocean Research, ysawall@geomar.de.

A TOWN HALL: FUTURE IMPACTS OF PERSONAL CARE PRODUCT POLLUTION TO CORAL REEFS

Date: Thursday, 23 June 2016
Time: 11:30 - 12:45
Location: 303 A/B

The International Programme on the State of the Ocean, IUCN and World Parks Congress will present the findings of a scientific workshop held in the Spring of 2016 and in June 2016 in Hono-
lulu. Findings of threats posed to marine habitats and ecosystems from pollution originating in domestically used personal care products (PCPs), the possible implications for future marine science field investigation, policy recommendations to decision makers, and approaches to communications to the general public.

For more information about this event, contact Mirella Von Lindenfels, Communications Inc., mirella@communicationsinc.co.uk.

FROM CORAL REEFS TO CAPITOL HILL: BUILDING BRIDGES BETWEEN SCIENTISTS AND POLICY MAKERS FOR EFFECTIVE CORAL ECOSYSTEM MANAGEMENT AND CONSERVATION

Date: Thursday, 23 June 2016
Time: 11:30 - 12:45
Location: 306 A/B

Increased communication between scientists and policy makers is necessary to effectively manage and sustain coral reef ecosystems. Policy makers need the best available science to inform, develop, and initiate effective policies and legislation directed at ocean conservation and management. But where do they obtain their scientific information from and how is it used to inform the decision making process?

Scientists are the best primary source for interpreting the practical implications of their research, but may find it difficult to navigate the legislative process, establish communication with policy makers, or determine how to best present their science in a way that's understandable and useful. Non-profit organizations often serve as intermediaries, spanning the divide between scientists and decision makers and facilitating the translation of science into effective policy. This session will focus on ways to build capacity amongst scientists and policy makers through informative presentations and discussions. A panel of experts will demystify how science is sourced and used by non-profit organizations, policy makers, and in the U.S. Congress and how scientists can actively inform policy by providing scientific information to decision makers. A discussion aimed at identifying the needs of each stakeholder group will follow.

Presenters for this session will include:
• Rupert Ormond, Heriot-Watt University, Edinburgh, Scotland, rupert.ormond.mci@gmail.com, "From Campfire to Conference Chamber: Tactics for Securing Conservation Legislation";
• Brett Hartl, Center for Biological Diversity, bhartl@biologicaldiversity.org, "Leveraging Under-Utilized Environmental Laws to Advance Coral Conservation in The United States";
• Jennifer Salerno, George Mason University, jsalerno@gmu.edu, “From the Ivory Tower to the Halls of Congress: How Scientific Information is Sourced and Used in the Legislative Process”;
• Arthur O. Tuda, Kenya Wildlife Service, tudahke@yahoo.com, “Understanding the Use of Science in Marine Protected Area Decision Making in the Western Indian Ocean”;
• Karen McLeod, COMPASS, karen.mcleod@compassonline.org, “A Compass to Help Scientists to Navigate the Science-Policy Divide”;
• Susan White, United States Fish and Wildlife Service, susan_white@fws.gov, “Discover, Inspire and Conserve the United States Pacific Marine National Monuments”

MEETINGS

SCIENTIFIC MANAGEMENT COMMITTEE

Date: Saturday, 18 June 2016
Time: 12:00 - 17:00
Location: 302 A/B

THIS IS AN INVITATION ONLY MEETING. For more information, please contact Vivian Doherty, James Cook University, vivian.doherty@jcu.edu.au

CARIBBEAN ACROPORA RESEARCH, MONITORING, MANAGEMENT, AND POPULATION ENHANCEMENT

Date: Sunday, 19 June 2016
Time: 08:00 - 17:00
Location: 301 B

NOAA Fisheries released the Recovery Plan for Acropora palmata and Acropora cervicornis in 2015. The plan contains actions that broadly fall into the categories of research, monitoring, threat reduction, and population enhancement. NOAA Fisheries has the responsibility of tracking and reporting activities that contribute to actions in the Recovery Plan, yet knowledge of activities is often incomplete, particularly outside of US jurisdiction. Additionally, researchers whose work may be beneficial to management of coral reefs sometimes have little to no direct contact or interaction with managers. The intent of this meeting is to bring together researchers and managers to share information on activities pertaining to any aspect of research, monitoring, management, or population enhancement of Caribbean Acropora spp. The planned format is for attendees to give very brief overviews (5 minutes or less) of research and activities with which they are involved and for the group to discuss how it all fits into the broader picture of Caribbean Acropora conservation and recovery. The expected outcome is to create a dialog and establish connections among those involved in Caribbean Acropora research and conservation. If you are interested in attending this meeting, please email Jennifer Moore, Jennifer.Moore@noaa.gov and indicate if you plan to give an overview of your work.

MESOPHOTIC CORAL ECOSYSTEMS MEETING

Date: Sunday, 19 June 2016
Time: 13:00 - 17:00
Location: 305 A/B

Mesophotic Coral Ecosystems (MCEs) are an increasingly important component of our global understanding of coral reef ecology. However, site-specific differences between MCEs in the Caribbean and Indo-Pacific indicate local differences in abiotic and biotic factors affect MCEs. This meeting will provide an update on the state of MCE research since the 2nd Intl MCE Workshop (Eilat 2014), with the opportunity to plan future collaborative efforts including dataset sharing/analysis, etc. so that we might better understand the structure and function of MCEs.
For more information about this event, contact Marc Slattery, University of Mississippi, slattery@olemiss.edu.

**ISRS OFFICERS MEETING**
Date: Sunday, 19 June 2016  
Time: 15:00 - 17:00  
Location: 309  
THIS IS AN INVITATION ONLY MEETING. Pre-meeting for ISRS office holders

**CLIMATE CHANGE OUTREACH VIDEO COMPETITION PLANNING MEETING**
Date: Monday, 20 June 2016  
Time: 12:00 - 13:15  
Location: 302 A/B  
Given the recent adoption of the ISRS Consensus Statement on Coral Bleaching and Climate Change, I have proposed an outreach competition in which we will solicit student-created videos or audio jingles that explain the climate change impacts on coral reefs. Given the current global bleaching events, we felt this was an important and timely topic to cover now. We are in the planning stages of this effort and would welcome any favorite videos to be brought as examples of what has worked well in your local areas. This meeting will serve as a brainstorming session on ways we can best engage students in a future competition as well as how to most effectively use these videos locally, regionally, and globally.

For more information about this event, contact Kelley Anderson Tagarino, UH Sea Grant and American Samoa Community College, KelleyAT@Hawaii.edu.

**ISRS COUNCIL MEETING**
Date: Monday, 20 June 2016  
Time: 12:00 – 13:15  
Location: 309  
INVITATION ONLY. Official ISRS Council Meeting.

**CRESCYNT NODE COORDINATORS MEETING**
Date: Monday, 20 June 2016  
Time: 15:00 - 18:00  
Location: 307 A/B  
THIS IS AN INVITATION ONLY MEETING. Meeting of node coordinators for the Coral Reef Science and Cyberinfrastructure Network.

For more information about this event, contact Ouida Meier, Hawai‘i Institute of Marine Biology, UH Manoa, omeier@Hawaii.edu.

**“CORAL REEFS” EDITORIAL MEETING**
Date: Monday, 20 June 2016  
Time: 19:00 - 21:00  
Location: 303 A/B  
THIS IS AN INVITATION ONLY MEETING. A meeting of the Topic Editors and Editorial Board to discuss current status and future directions for the journal.

For more information about this event, contact Howard Lasker, University at Buffalo, hlasker@buffalo.edu.

**OCTOCORAL LUNCH**
Date: Tuesday, 21 June 2016  
Time: 11:30 - 12:45  
Location: 301 B  
Informal get-together of octocoral researchers to meet one another and exchange information about community resources. For more information about this event, contact Catherine McFadden, Harvey Mudd College, mcfadden@g.hmc.edu.

**INFORMING MANAGEMENT DECISIONS FOR CORAL REEFS IN A WORLD OF RISK AND UNCERTAINTY**
Date: Tuesday, 21 June 2016  
Time: 19:30 - 21:30  
Location: 305 A/B  
This will be a panel discussion facilitated by Prof. Hugh Possingham and Ken Anthony to wrap up Session 67.

**PULLEY RIDGE SCIENCE MEETING**
Date: Wednesday, 22 June 2016  
Time: 11:30 - 12:45  
Location: 302 A/B  
THIS IS AN INVITATION ONLY MEETING. Gathering of PIs, students and related researchers/stakeholders participating in the Pulley Ridge Project (Understanding Coral Ecosystem Connectivity in The Gulf of Mexico-Pulley Ridge to the Florida Keys). This is an opportunity for further project coordination and discussion of collaborative products, as well as future directions.

For more information about this event, contact Robert Cowen, Oregon State University, robert.cowen@oregonstate.edu.

**CARICOMP-2**
Date: Wednesday, 22 June 2016  
Time: 11:30 - 12:45  
Location: 308 A/B  
THIS IS AN INVITATION ONLY MEETING. This meeting regarding CARICOMP-2 is for those who have been working to start new regional projects in the Greater Caribbean. Representatives of the Global Coral Reef Monitoring Network-Caribbean Branch will be in attendance.

For more information about this event, contact Jorge Cortes, University of Costa Rica, jorge.cortes@ucr.ac.cr

**ISRS GENERAL MEETING**
Date: Wednesday, 22 June 2016  
Time: 11:30 - 12:45  
Location: Kalakaua Ballroom A/B/C  
ISRS AGM open to all members. This meeting is open to all members plus those considering joining the ISRS.
For more information about this event contact Rupert Ormond, ISRS, rupert.ormond.mci@gmail.com or visit www.coralreefs.org/members-meeting.

LATIN-AMERICAN REEF ENCOUNTER
Date: Wednesday, 22 June 2016
Time: 19:30 - 21:30
Location: 305 A/B

The meeting is intended to bring together all Latin American and Caribbean coral reef researchers to discuss the need to formally organize a Latin American Chapter of the ISRS. A quick examination of the active membership of ISRS suggests that Latin American reef researchers are significantly under-represented in ISRS.

This activity will be an one-hour meeting to discuss with Latin American and Caribbean researchers, students, managers, and representatives from ISRS board of directors, the best strategies for enhancing the representation of Latin American reef researchers. Discussions will include the willingness and need to formally establish a Latin American Chapter, and the possibility of developing Spanish-written products at ISRS web page, including Spanish-written articles in Reef Encounter. This will represent a first step towards organizing a small team of scientists willing to collaborate in such efforts.

For more information about this event, contact Edwin A. Hernandez-Delgado, University of Puerto Rico, edwin.hernandezdelgado@gmail.com.

INDO-PACIFIC CORAL COLLABORATION: PARTNERS MEETING
Date: Thursday, 23 June 2016
Time: 11:30 - 12:45
Location: 301 B

THIS IS AN INVITATION ONLY MEETING. Over the past two years, nearly 100 scientists from around the world have contributed to the largest coral community database, with 2,301 sites in 51 countries. ICRS provides a timely opportunity for all collaborators to meet in person and discuss next steps for the analysis and continued governance of this collaborative effort.

The agenda will include: 1) Update and summary of regional analyses and two key papers; 2) Discussion of future scientific questions that can be addressed with the database; 3) Future governance and sustainability of the dataset, e.g., conditions for continued use (or not) by PIs and all contributing authors, addition of new data; 4) Evaluation of data repository and use permissions for datasets.

Data sharing and future governance are critical and sensitive topics that need to be addressed for the continued legacy of this dataset. ICRS will be the first opportunity for many collaborators to meet the PIs in person, and discuss face-to-face with each other. We hope ICRS can provide us with the opportunity to host this meeting, with timely and valuable contributions for the reef science community.

For more information about this event, contact Emily Darling, Wildlife Conservation Society, edarling@wcs.org.

JAPANESE CORAL REEF SOCIETY (ICRS) CEREMONY OF AWARD: WINNERS OF FINANCIAL SUPPORT FOR GRADUATE STUDENTS AND YOUNG RESEARCHERS
Date: Thursday, 23 June 2016
Time: 18:15 - 19:00
Location: 303 A/B

The Japanese Coral Reef Society will be recognizing ten recipients during this award ceremony. For more information, please contact Beatriz Casareto, Japanese Coral Reef Society, dcbeatr@ipc.shizuoka.ac.jp

SOCIAL EVENTS
WELCOME RECEPTION
Date: Sunday, 19 June 2016
Time: 17:00 - 20:00
Location: Rooftop Garden Terrace

A unique welcome to Honolulu and to the 2016 ICRS Symposium will be held on Sunday, 19 June 2016 on the Rooftop Pavilion at the Hawai'i Convention Center. Conference registration will be open prior to the reception to allow you to pick up your conference materials. Light hors d’oeuvres and a cash bar.

REEF RESILIENCE HAPPY HOUR
Date: Tuesday, 21 June 2016
Time: 18:00 - 18:30
Location: 307 A/B

The Reef Resilience Network (RR Network) supports reef managers and practitioners globally to better address climate change and other stressors on coral reef ecosystems. Capacity building is implemented through the web-based Reef Resilience toolkit located at www.reefresilience.org, online courses, in-person trainings, a webinar series, and an online community of coral reef, fisheries, and MPA managers and practitioners. Global experts are critical for our Network to ensure we continue to provide the best science available to inform and support on-the-ground management efforts. Experts currently volunteer their time to support core RR Network activities including serving as: mentors for the online course, coaches for trainings, webinar speakers, mentors for ask-the-expert online discussion forums, and developers and reviewers of web-based toolkit content. To evaluate how we can better address the needs of our network, we invite our expert contributors to come together to thank them for their contribution, share experiences participating in the Network, identify opportunities for better meeting their needs, and explore approaches for expanding our network. We invite global coral reef/climate change/fisheries experts who have served as mentors and coaches for online course, toolkit reviewers, and webinar speakers. We also invite those interested in learning about contributing to our network to support coral reef and fisheries managers and practitioners around the world.

For more information about this event, contact Elizabeth McLeod, The Nature Conservancy, at emcleod@tnc.org.
GLENN ALMANY MEMORIAL
Date: Tuesday, 21 June 2016
Time: 19:30 - 21:30
Location: 301 B

In April of 2015, our community was saddened to lose a dear friend and colleague, Dr. Glenn Almany. Glenn had a major influence on coral reef ecologists, conservation practitioners, and resource managers from around the world. His remarkable curiosity, creativity, and passion to make a difference led to groundbreaking discoveries about the dispersal patterns of coral reef fishes. Perhaps more importantly, Glenn enriched our lives through his humor, friendship, storytelling, authenticity, and love of nature. During this session, we will remember Glenn by sharing stories and photos. This event is open to anyone who wants to share their own memories of Glenn, the impacts his life and work had on them, and perhaps drink a gin and tonic in his honor. This event will be MC'ed by two of his long-time friends and colleagues, Dr. Michael Webster and Dr. Karen McLeod, both of whom were graduate students with Glenn during their Ph.D.’s.

For more information about this event, contact Michael Webster, Coral Reef Alliance, mwebster@coral.org.

MESOPHOTIC AND DEEP-SEA CORAL ECOSYSTEMS: A TRIBUTE TO THE PIONEERING EFFORTS OF DR. JOHN ROONEY
Location: 308 A/B
Dates/Times: Tuesday, 21 June, 2016, 13:45 to 18:15 and Wednesday, 22 June 2016, 09:30 to 18:15

Please join us for Session 29 on Mesophotic and Deep-sea Coral Ecosystems to honor the late Dr. John Rooney, an ocean scientist and ecologist with the National Oceanic and Atmospheric Administration's Pacific Islands Fisheries Science Center and Joint Institute for Marine and Atmospheric Research. John, who died in a diving accident on January 16, 2016 in Hawai‘i, was passionate about exploring the deeper depths of the ocean and shared this enthusiasm with all that knew him. This session will begin with a discussion of John and his work, followed by talks focused on the biology, ecology, and geology of mesophotic and deep-sea coral ecosystems. This is a two-day tribute session. Talks will take place on Tuesday, 21 June, from 13:45 to 18:00 and on Wednesday, 22 June, from 09:30 to 18:00. The posters for Session 29 will be presented on Tuesday evening.

EVENING EVENT - PA‘INA, A TRADITIONAL FEAST
Date: Thursday, 23 June 2016
Time: 19:00 - 21:00
Location: Kalakaua Ballroom A/B/C

The public is invited to join ICRS in a myriad of fun and exciting activities celebrating coral reefs with cultural performances and artwork displays.

Anders Paulsson is the artistic director for the Coral Guardians, a group that will perform during the Thursday evening event at the ICRS. Paulsson’s intention as a composer is to create music that can inspire audiences to strengthen their commitment to environmental stewardship and also be symbols of understanding and reconciliation between cultures. According to Paulsson, when Narissa Spies, a native Hawaiian doctorate student at Kewalo Marine Laboratory, introduced him to Hawaiian “Olis” and the poetic beauty of the Hawaiian Creation Chant “Kumulipo,” it inspired him to create music that can inspire audiences to strengthen their commitment to environmental stewardship and also be symbols of understanding and reconciliation between cultures. According to Paulsson, when Narissa Spies, a native Hawaiian doctorate student at Kewalo Marine Laboratory, introduced him to Hawaiian “Olis” and the poetic beauty of the Hawaiian Creation Chant “Kumulipo,” it inspired...
him to conceive a Tone Poem as a Symphonic reflection. As a devoted environmentalist, Paulsson loves that the “Kumulipo” illustrates humanity’s intimate relationship with every living creature and plant as our beloved ancestors and that Hawaiians regard the Coral Polyp as the most basic unit of life.

Aaron Mahi and Anders Paulsson will perform a preview version of “Kumulipo Reflections.” The evening also will include a performance of “Danjugan Sanctuary” which was conceived as tribute to Philippine Reef and Rainforest Conservation. For more information visit www.prrcf.org.

Additionally, Kevin Chang and his band will perform two songs, “The Light,” an original song about the Light that transcends all obstacles, and “Hawai’i 78,” a valid perspective from the Native Hawaiians. The band includes Stanley Tibayan on bass, Kalama Cabigon on backing vocals, with Paulsson on soprano saxophone.

**EXHIBITORS**

Exhibits will be in the Kamehameha Exhibit Hall of the Hawai’i Convention Center. Exhibitors will set up Sunday between 13:00 and 17:00 and will be in place over the following days and times:

- **Monday, 20 June 2016** 08:00 to 19:30
- **Tuesday, 21 June 2016** 08:00 to 19:45
- **Wednesday, 22 June 2016** 08:00 to 19:45
- **Thursday, 23 June 2016** 08:00 to 16:30
- **Friday, 24 June 2016** 08:00 to 14:00

ICRS 2016 appreciates the support of the following organizations who are exhibiting at the Symposium:

**INTERNATIONAL SOCIETY FOR REEF STUDIES (BOOTHS E29 AND E30)**

- **5 Lang Rigg, #6**
- **South Queensferry**
- **Edinburgh, Scotland, United Kingdom**
- **Contact: Prof. Rupert Ormond**
- **Phone:** 00-44-131-3191042
- **Email:** rupert.ormond.mci@gmail.com
- **Website:** www.coralreefs.org

**ARC CENTRE OF EXCELLENCE FOR CORAL REEF STUDIES (BOOTHS E20)**

- **James Cook University**
- **James Cook Drive**
- **Townsville, Queensland 4811, Australia**
- **Contact: Ms. Jenny Lappin**
- **Phone:** +61747814222
- **Email:** jennifer.lappin@cu.edu.au
- **Website:** www.coralcoe.org

**AQUATION PTY, LTD (BOOTHS E36)**

- **PO Box 3146**
- **Umina Beach, NSW 2257, Australia**
- **Contact: John Runcie, Ph.D.**
- **Phone:** +61-(0)-400 088 662
- **Email:** john.runcie@aquisition.com.au
- **Website:** http://aquisition.com.au

**AUSTRALIAN INSTITUTE OF MARINE SCIENCE (BOOTHS E37 AND E38)**

- **1526 Cape Cleveland Road**
- **Cape Cleveland, Queensland 4810, Australia**
- **Contact:** David Souter, Ph.D.
- **Phone:** +61 (0) 7 4753 4102
- **Email:** dsouter@aims.gov.au
- **Website:** www.aims.gov.au

**BULLETIN OF MARINE SCIENCE (BOOTHS E32)**

- **4600 Rickenbacker Causeway**
- **Miami, Florida 33149, USA**
- **Phone:** 305-421-4681
- **Email:** raraujo@rsmas.miami.edu
- **Website:** rsmas.miami.edu/bms

**ECOTONE (BOOTHS E39)**

- **P.O. Box 1255 Sluppen**
- **Trondheim N-7462, Norway**
- **Contact: Ivar Erdal**
- **Phone:** +47 91189395
- **Email:** ivar@ecotone.com
- **Website:** www.ecotone.com

**FLUID IMAGING TECHNOLOGIES (BOOTHS E17)**

- **200 Enterprise Drive**
- **Scarborough, Maine 04074, USA**
- **Contact:** Kent Peterson
- **Phone:** 207-289-3200
- **Email:** harry@fluidimaging.com
- **Email:** joyce.brown@fluidimaging.com
- **Website:** www.fluidimaging.com

**GLOVER’S REEF RESEARCH STATION (BOOTHS E15)**

- **2300 Southern Boulevard**
- **Bronx, New York 10460, USA**
- **Contact:** Sofia Sainz
- **Phone:** 718-220-5144
- **Email Address:** ssainz@wcs.org
- **Website:** www.wcs.org

**JAPANESE CORAL REEF SOCIETY (BOOTHS E02)**

- **Earth and Planetary Science**
- **Hongo, Tokyo 113-0033, Japan**
- **Contact:** Hajime Kayanne
- **Phone:** +81-3-5841-4573
- **Email:** kayanne@eps.s.u-tokyo.ac.jp
- **Website (English):** www.jcrs.jp/en

**LOLIGO SYSTEMS (BOOTHS E06)**

- **Niels Pedersen Allé 2**
- **Tjøle 8830, Denmark**
- **Contact:** Jannik Herskin
- **Phone:** +45 6166 6929
- **Email:** jh@loligosystems.com
- **Website:** www.loligosystems.com
LOTEK WIRELESS, INC. (BOOTH E04)
472A Logy Bay Road
St. John’s, NL, A1C 5C6, Canada
Contact: Padraic O’Flaherty
Phone: 1-709-746-9798
Email: poflaherty@lotek.com
Website: www.lotek.com

MECO, INC. (BOOTH E05)
POB 790
Duvall, WA 98049, USA
Contact: Mike Chapman
Phone: 425-788-4522
Email: mecco@meccoinc.com
Website: www.meccoinc.com

MOTE MARINE LABORATORY (BOOTH E34)
Coral Reef Ecology and Microbiology Program
1600 Ken Thompson Parkway
Sarasota, FL 34236, USA
Contact: Kim Ritchie
Phone: 941-388-4441
Email: ritchie@mote.org
Website: www.mote.org

NOAA CORAL REEF CONSERVATION PROGRAM (BOOTH E31)
1305 East West Highway, SSMC4, Rm 10409
Silver Spring, MD 20910, USA
Contact: Alicia Clarke
Phone: 240-533-0776
Email: alicia.clarke@noaa.gov
Website: www.coralreef.noaa.gov

NOAA OFFICE OF NATIONAL MARINE SANCTUARIES (BOOTH E27)
NOAA IRC/NOS/ONMS/PMNM/Toni Parras
1845 Wasp Blvd, Building 176
Honolulu, HI 96818, USA
Contact: Toni Parras
Email: toni.parras@noaa.gov
Website: www.sanctuaries.noaa.gov

THE NATURE CONSERVANCY (BOOTH E18)
4245 North Fairfax Drive, Suite 100
Arlington, VA 22203-1606, USA
Contact: Petra MacGowan
Phone: 206-214-6229
Email: pmacgowan@tnc.org
Website: www.nature.org

THE OCEAN AGENCY (BOOTH E29)
131-133 Devonshire Street
Surry Hills, Sydney, NSW 2010, Australia
Contact: Richard Vevers/Lorna Parry
Phone: +61 411 505 477/+61 411 54 54 59
Email: richard@theoceanagency.org/lorna@theoceanagency.org
Website: www.theoceanagency.org

PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT (BOOTH E28)
NOAA IRC/NOS/ONMS/PMNM/Toni Parras
1845 Wasp Blvd, Building 176
Honolulu, HI 96818, USA
Contact: Toni Parras
Email: toni.parras@noaa.gov
Website: www.papahanaumokuakea.gov

THE PEW CHARITABLE TRUSTS - GLOBAL OCEAN LEGACY (BOOTH E11)
901 E Street NW
Washington, DC 20011 USA
Contact: Seth Horstmeyer
Phone: 202-230-9073
Email: shorstmeyer@pewtrusts.org
Website: www.pewtrusts.org/en/projects/global-ocean-legacy

PRO-OCEANUS SYSTEMS (BOOTH E26)
80 Pleasant Street
Bridgewater, Nova Scotia B4V 1N1, Canada
Contact: Mark Barry
Phone: 902-530-3550
Email: mark@pro-oceanus.com
Website: www.pro-oceanus.com

RBR LTD. (BOOTH E14)
5-95 Hines Road
Ottawa, ON K2K 2M5, Canada
Contact: Chris Kontoes
Phone: +1-519-599-8900
E-Mail: marketing@rbr-global.com
Website: www.rbr-global.com

REEF GUARDIAN SDN BHD (BOOTH E23)
1st Floor Block C, Lot 38
Bandar Tyng Mile 6, Sandakan
Sabah 90000, Malaysia
Contact: Fung Chen Chung
Phone: +6 089-278002
Fax: +6 089-675111
Email: achier300@yahoo.com
Website: www.reefguardian.com.my

SDSU RESEARCH FOUNDATION (BOOTH E35)
5500 Campanile Drive
Rohwer Lab LS 301
San Diego, CA  92182-4614, USA
Contact: Gina Sidel
Phone: 619-594-0536
Email: gspidel@mail.sdsu.edu
Website: www.coralandphage.org

SCHMIDT OCEAN INSTITUTE (BOOTH E25)
555 Bryant St., #374
Palo Alto, CA 94301, USA
Contact: Carlie Wiener
Phone: 808-628-8666
Email: cwiener@schmidtocean.org
Website: www.schmidtocean.org
SEABIRD SCIENTIFIC (BOOTH E21)
13431 NE 20th Street
Bellevue, WA 98005, USA
Contact: Payal Parikh
Phone: 425-644-3207
Fax: 425-644-3207
Email: pparikh@seabird.com
Website: www.sea-birdscientific.com

SPRINGER (BOOTH E12)
233 Spring Street
New York, NY 10013, USA
Contact: Acasia Dalmau
Phone: 212-460-1600
Email: exhibits-ny@springer.com
Website: www.springer.com

TEXAS A&M UNIVERSITY - CORPUS CHRISTI (BOOTH E07)
6300 Ocean Drive
Unit 5892
Corpus Christi, TX 78412-5892, USA
Contact: Derek Hogan
Phone: 361-825-5883
Fax: 361-825-2025
Email: james.hogan@tamucc.edu
Website: www.tamucc.edu

TORI RICHARD, LTD. (BOOTH E01)
1334 Mo‘onui Street
Honolulu, Hawai‘i 96817, USA
Contact: Jason Zambuto
Email: jason@toririchard.com
Website: www.toririchard.com

UNISENSE A/S (BOOTH E16)
Tueager 1
Aarhus 8200, Denmark
Contact: Dr. Thomas Rattenborg
Phone: +45 89-44-9500
Email: tr@unisense.com
Website: www.unisense.com

UNIVERSITY OF MILANO-BICOCCA (BOOTH E24)
Piazza dell’Ateneo Nuovo, 1
Milan, MI 20126, Italy
Contact: Dr. Paolo Galli
Phone: +39 02 6448 3417/5998
Email: paolo.galli@unimib.it
Website: www.unimib.it

VEMCO (BOOTH E33)
20 Angus Morton Dr.
Bedford, NS B4B 0L9 Canada
Contact: Nancy Edwards
Phone: 902-450-1700 x279
Fax: 902-450-1700
Email: nancy.edwards@vemco.com
Website: www.vemco.com

WALZ/BAY INSTRUMENTS (BOOTH E22)
930 Port Street
Easton, MD 21601, USA
Contact: Todd Kana
Phone: 1-443-746-2176
Email: kana@bayinstruments.com
Website: www.bayinstruments.com

XYLEM, INC. (BOOTH E19)
1725 Brannum Lane
Yellow Springs, OH 45387, USA
Contact: Amber Botkin
Email: amber.botkin@xyleminc.com
Website: www.YSI.com
## MONDAY AT-A-GLANCE

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<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Topic</th>
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<tbody>
<tr>
<td>08:00-09:30</td>
<td>301 B</td>
<td>OPENING PLENARY: PRESIDENT TOMMY ESANG REMENGESAU, JR., THE EIGHTH PRESIDENT OF THE REPUBLIC OF PALAU</td>
</tr>
<tr>
<td>09:30-10:00</td>
<td>66</td>
<td>MORNING BREAK (Kamehameha Exhibit Hall 1)</td>
</tr>
<tr>
<td>12:00-13:15</td>
<td>69</td>
<td>LUNCH (Kamehameha Exhibit Hall 2)</td>
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<tr>
<td>13:15-14:00</td>
<td>75</td>
<td>AFTERNOON PLENARY SESSION: DARWIN MEDAL AWARD ACCEPTANCE BY JACK RANDALL (Kalakaua Ballroom A/B/C - Floor 4)</td>
</tr>
<tr>
<td>14:00-16:00</td>
<td>60</td>
<td>The value of historical, archeological and paleoecological data for assessing and conserving coral reefs. Evaluating the ecological, social and economic effectiveness of MPAs. Prevention, Assessment, and Mitigation of Coral Reef Impacts Resulting from Planned and Unplanned Human Activities. Integrated ecosystem-based management for coral reefs and the value of socio-ecological studies. Coastal pollution: nutrients, sewage and contaminants. Coral reefs in extreme, compromised and marginal environments, and their roles as refugia - Highly stressed, urbanized and exposed reef systems. Reef fish ecology, conservation, and fisheries: the scientific legacy of Glenn Almany.</td>
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<tr>
<td>16:00-16:30</td>
<td>40</td>
<td>AFTERNOON BREAK (Kamehameha Exhibit Hall 1)</td>
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<tr>
<td>18:00-19:30</td>
<td>308 A/B</td>
<td>POSTER SESSION AND RECEPTION (Exhibit Hall 1)</td>
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<td>19:00-20:30</td>
<td>20</td>
<td>PUBLIC SESSION - (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>19:00-21:00</td>
<td>20</td>
<td>TOWN HALLS AND EVENING MEETINGS</td>
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**MORNING BREAK (Kamehameha Exhibit Hall 1)**
09:30-10:00

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**AFTERNOON PLENARY SESSION: DARWIN MEDAL AWARD ACCEPTANCE BY JACK RANDALL (Kalakaua Ballroom A/B/C - Floor 4)**
13:15-14:00

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</tbody>
</table>

**MORNING BREAK (Kamehameha Exhibit Hall 1)**
10:00-12:00

**AFTERNOON BREAK (Kamehameha Exhibit Hall 1)**
14:00-16:00

**MEETINGS AND WORKSHOPS**
12:00-13:15

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**POSTER SESSION AND RECEPTION (Kamehameha Exhibit Hall 1)**
18:00-19:30

**PUBLIC SESSION - (Kalakaua Ballroom A/B/C - Floor 4)**
19:00-20:30

**TOWN HALLS AND EVENING MEETINGS**
19:00-21:00
## TUESDAY AT-A-GLANCE

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>08:00 - 09:00</td>
<td>MORNING PLenary. Charles Birkeland (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>09:00 - 09:30</td>
<td>MORNING BREAK (Kamehameha Exhibit Hall 1)</td>
</tr>
<tr>
<td>09:30 - 12:45</td>
<td>Morning Plenary: Charles Birkeland (Kalakaua Ballroom A/B/C - Floor 4)</td>
</tr>
<tr>
<td>12:45 - 15:15</td>
<td>Afternoon Plenary Session: Aulani Wilhelm (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>15:15 - 16:15</td>
<td>Afternoon Break (Kamehameha Exhibit Hall 1)</td>
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<tr>
<td>16:15 - 18:15</td>
<td>Afternoon Plenary Session: Aulani Wilhelm (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>18:15 - 19:45</td>
<td>Poster Session and Reception (Exhibit Hall 1)</td>
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<tr>
<td>19:00 - 20:30</td>
<td>Public Session - (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>19:00 - 21:00</td>
<td>ISRS Town Hall Meeting: Climate Change and Coral Bleaching (310 Theater)</td>
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<tr>
<td>19:30 - 21:30</td>
<td>Evening Meetings</td>
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</tbody>
</table>

**Key Points**
- **Coral reef structural dynamics and complexity:** accretion versus bioerosion and dissolution.
- **MPAs and other tools for scientifically sound place-based management.**
- **Conservation research for small-island nations:** climate change, fisheries, tourism, and land-use change.
- **Informing management decisions for coral reefs in a world of risk and uncertainty.**
- **Watershed impacts on coral reefs:** land-based sources of pollution.
- **Coral reefs in extreme, compromised and marginal environments, and their roles as refugia - low diversity, non-reef and high latitude reef systems.**
- **Reef fish ecology, conservation, and fisheries:** the scientific legacy of Glenn Almany.

**Session Details**
- **Design of MPA networks for fisheries and ecosystem management.**
- **Global change impacts on coral reef seaweeds.**
- **Indicator taxa:** What can they tell us about the past, present and future for coral reefs?
- **Watershed impacts on coral reefs:** land-based sources of pollution.
- **Reef fish ecology, conservation, and fisheries:** the scientific legacy of Glenn Almany.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:00</td>
<td>MORNING PLENARY: CHARLES BIRKELAND (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>09:00</td>
<td>MORNING BREAK (Kamehameha Exhibit Hall 1)</td>
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<tr>
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<td>WORKSHOPS AND MEETINGS</td>
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<tr>
<td>10:00</td>
<td>AFTERNOON PLenary SESSION: ALLENI WILHELM (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<td>15:45</td>
<td>AFTERNOON BREAK (Kamehameha Exhibit Hall 1)</td>
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<tr>
<td>18:15</td>
<td>POSTER SESSION AND RECEPTION (Exhibit Hall 1)</td>
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<tr>
<td>19:00</td>
<td>PUBLIC SESSION - (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>19:00</td>
<td>ISRS TOWN HALL MEETING: CLIMATE CHANGE AND CORAL BLEACHING (310 Theater)</td>
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<tr>
<td>19:30</td>
<td>EVENING MEETINGS</td>
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## WEDNESDAY AT-A-GLANCE

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:00-09:00</td>
<td>MORNING PLenary: Peter Mumby (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>09:00-09:30</td>
<td>MORNING BREAK (Kamehameha Exhibit Hall 1)</td>
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<tr>
<td>11:30-12:45</td>
<td>LUNCH (Kamehameha Exhibit Hall 2) / ISRS GENERAL MEETING (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>12:45-13:45</td>
<td>AFTERNOON PLenary: Nancy Knowlton (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<td>13:45-15:45</td>
<td>AFTERNOON BREAK (Kamehameha Exhibit Hall 1)</td>
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<td>15:45-16:15</td>
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<tr>
<td>16:15-18:15</td>
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<td>18:15-19:45</td>
<td>POSTER SESSION AND RECEPTION (Exhibit Hall 1)</td>
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<td>19:00-20:30</td>
<td>PUBLIC SESSION - (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td>19:30-21:30</td>
<td>EVENING MEETINGS and WORKSHOPS</td>
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### Session Details

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<tr>
<th>Room</th>
<th>Session</th>
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<tbody>
<tr>
<td>301 B</td>
<td>Geology and paleoecology as tools to decipher the modern coral reef crisis</td>
</tr>
<tr>
<td>302 A/B</td>
<td>Marine resource sustainability, conservation and management in the Coral Triangle &amp; Southeast Asia</td>
</tr>
<tr>
<td>303 A/B</td>
<td>Co-management partnerships for achieving effective resource outcomes on coral reefs - Partnerships with and among communities and stakeholders</td>
</tr>
<tr>
<td>305 A/B</td>
<td>Innovations in socioecological research for resilience based management</td>
</tr>
<tr>
<td>306 A/B</td>
<td>Ridge to reef management approaches</td>
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<tr>
<td>308 A/B</td>
<td>Mesophotic and deep sea coral ecosystems</td>
</tr>
<tr>
<td>310 Theater</td>
<td>Reef fish ecology, conservation, and fisheries: the scientific legacy of Glenn Almany</td>
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<tr>
<th>Room</th>
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<tr>
<td>42A</td>
<td>Propagation and active reef restoration – techniques and considerations for the production of corals and propagules and transplantation onto degraded reefs</td>
</tr>
<tr>
<td>72</td>
<td>Marine resource sustainability, conservation and management in the Coral Triangle &amp; Southeast Asia</td>
</tr>
<tr>
<td>73A</td>
<td>Co-management partnerships for achieving effective resource outcomes on coral reefs - Partnerships across agencies and organizations</td>
</tr>
<tr>
<td>63</td>
<td>Innovations in socioecological research for resilience based management</td>
</tr>
<tr>
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<td>Ridge to reef management approaches</td>
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<td>Marine resource sustainability, conservation and management in the Coral Triangle &amp; Southeast Asia</td>
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<tr>
<td>73A</td>
<td>Co-management partnerships for achieving effective resource outcomes on coral reefs - Partnerships across agencies and organizations</td>
</tr>
<tr>
<td>64</td>
<td>Social science applications to coral reef management: Human and social dimensions and the link to reef health and ecological change</td>
</tr>
<tr>
<td>36</td>
<td>Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses</td>
</tr>
<tr>
<td>29</td>
<td>Mesophotic and deep sea coral ecosystems</td>
</tr>
<tr>
<td>20</td>
<td>Reef fish ecology, conservation, and fisheries: the scientific legacy of Glenn Almany</td>
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**Contact Information:**
- **Organizer:** [Name]
- **Venue:** [Location]
- **Phone:** [Number]
- **Email:** [Email]

**Note:** Schedule subject to change. Please check the official program for the most accurate information.
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<tr>
<td><strong>MORNING PLENARY:</strong> PETER MUMBY (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td><strong>MORNING BREAK</strong> (Kamehameha Exhibit Hall 1)</td>
<td>09:00-09:30</td>
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<tr>
<td>Biodiversity, biogeography and evolution of coral reef organisms</td>
<td>Unmanned systems for coral reef research, management and conservation</td>
<td>Coral reef ecosystem dynamics: instabilities, invasions, transitions and reorganization</td>
<td>Speciation, hybridization and species boundaries in coral reef ecosystems</td>
<td>Animal-algal symbioses: molecular, physiological and genetic interactions, processes and adaptations</td>
<td>Coral bleaching: monitoring, management responses and resilience</td>
<td>Larval recruitment on coral reefs facing global change</td>
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<tr>
<td><strong>WORKSHOPS AND MEETINGS</strong></td>
<td>11:30-12:45</td>
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<td><strong>AFTERNOON PLENARY:</strong> NANCY KNOWLTON (Kalakaua Ballroom A/B/C - Floor 4)</td>
<td>12:45-13:45</td>
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<tr>
<td><strong>AFTERNOON BREAK</strong> (Kamehameha Exhibit Hall 1)</td>
<td>15:45-16:15</td>
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<tr>
<td><strong>POSTER SESSION AND RECEPTION</strong> (Exhibit Hall 1)</td>
<td>18:15-19:45</td>
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<tr>
<td><strong>PUBLIC SESSION</strong> - (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<tr>
<td><strong>EVENING MEETINGS and WORKSHOPS</strong></td>
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# THURSDAY AT-A-GLANCE

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<td>301 B, 302 A/B, 303 A/B, 305 A/B, 306 A/B, 308 A/B, 310 Theater</td>
<td>MORNING PLENARY: JANICE LOUGH (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<td>09:00-09:30</td>
<td>42B, 72, 77, 64, 36, 45, 21</td>
<td>MORNING BREAK (Kamehameha Exhibit Hall 1)</td>
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<tr>
<td>09:30-11:30</td>
<td>42B, 71, 57, 65, 36, 47, 21</td>
<td>Propagation and active reef restoration, distribution, transplantation, monitoring and evaluation of restoration activities, Marine resource sustainability, conservation and management in the Coral Triangle &amp; Southeast Asia, Corals and the U.S. Endangered Species Act: Bridging the gap between science, management, and conservation action, Social science applications to coral reef management: Human and social dimensions and the link to reef health and ecological change, Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses, Fluorescence on Coral Reefs: From Biology to Technology, Achieving sustainable coral reef fisheries: policy development, implementation, management and enforcement</td>
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<tr>
<td>11:30-12:45</td>
<td>42B, 71, 57, 65, 36, 47, 21</td>
<td>LUNCH (Kamehameha Exhibit Hall 2)</td>
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<td>12:45-13:45</td>
<td>42B, 71, 57, 65, 36, 47, 21</td>
<td>NO AFTERNOON PLENARY SESSION</td>
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<td>13:45-15:45</td>
<td>42B, 71, 57, 65, 36, 47, 21</td>
<td>Propagation and active reef restoration, distribution, transplantation, monitoring and evaluation of restoration activities, Designing Marine Managed Areas for fisheries management and biodiversity conservation: Bridging science and policy, Capacity building in ocean governance and coral reef ecosystem management: Equipping leaders, practitioners, and institutions to sustain healthy ecosystems, Improving the understanding and management of coral reef socio-ecological systems through community and stakeholder engagement, Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses, Movement ecology on coral reefs, Achieving sustainable coral reef fisheries: policy development, implementation, management and enforcement</td>
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<tr>
<td>15:45-16:15</td>
<td>42B, 71, 57, 65, 36, 46, 21</td>
<td>AFTERNOON BREAK (Kamehameha Exhibit Hall 1)</td>
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<tr>
<td>16:15-18:15</td>
<td>42B, 71, 57, 65, 36, 46, 21</td>
<td>Propagation and active reef restoration, distribution, transplantation, monitoring and evaluation of restoration activities, Designing Marine Managed Areas for fisheries management and biodiversity conservation: Bridging science and policy, Capacity building in ocean governance and coral reef ecosystem management: Equipping leaders, practitioners, and institutions to sustain healthy ecosystems, Improving the understanding and management of coral reef socio-ecological systems through community and stakeholder engagement, Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses, Trait-based approaches in coral reef ecology: from functional ecology to management, Achieving sustainable coral reef fisheries: policy development, implementation, management and enforcement</td>
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<tr>
<td>19:00-21:00</td>
<td>42B, 71, 57, 65, 36, 46, 21</td>
<td>THURSDAY EVENING EVENT (Ballroom Prefunction Area and Rooftop)</td>
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**MORNING PLENARY: JANICE LOUGH** (Kalakaua Ballroom A/B/C - Floor 4) 08:00-09:00

**MORNING BREAK** (Kamehameha Exhibit Hall 1) 09:00-09:30

- **Incorporating mechanistic processes in spatial decision science: dispersal, movement, functional groups, evolution and range shifts**
- **Big Data: Using open access, evolving platforms and the emerging field of data science to improve resource management**
- **Coral reef ecosystem dynamics: instabilities, invasions, transitions and reorganization**
- **Acclimatization and adaptation in reef organisms**
- **Diseases on the reef: presence, persistence and responses**
- **Ocean acidification: Measuring and scaling impacts across multiple scales**
- **Connectivity, recruitment and isolation among coral reef populations** 09:30-11:30

**WORKSHOPS AND MEETINGS** 11:30-12:45

**NO AFTERNOON PLENARY SESSION** 12:45-13:45

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- **Coral reef records of sea level, climatic and environmental changes: a tribute to Lucien Montaggioni**
- **Modeling and computational tools for coral reef management and conservation**
- **Coral reef ecosystem dynamics: instabilities, invasions, transitions and reorganization**
- **Acclimatization and adaptation in reef organisms**
- **Diseases on the reef: presence, persistence and responses**
- **Ocean acidification: Measuring and scaling impacts across multiple scales**
- **Connectivity, recruitment and isolation among coral reef populations** 13:45-15:45

**AFTERNOON BREAK** (Kamehameha Exhibit Hall 1) 15:45-16:15

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- **Coral reef records of sea level, climatic and environmental changes: a tribute to Lucien Montaggioni**
- **Modeling and computational tools for coral reef management and conservation**
- **Coral reef ecosystem dynamics: instabilities, invasions, transitions and reorganization**
- **Acclimatization and adaptation in reef organisms**
- **Diseases on the reef: presence, persistence and responses**
- **Ocean acidification: Measuring and scaling impacts across multiple scales**
- **Connectivity, recruitment and isolation among coral reef populations** 16:15-18:15

**THURSDAY EVENING EVENT** (Ballroom Prefunction Area and Rooftop) 19:00-21:00
### FRIDAY AT-A-GLANCE

<table>
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<tr>
<th>Time</th>
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<td>08:00-09:00</td>
<td>MORNING PLENARY (Kalakaua Ballroom A/B/C - Floor 4)</td>
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<td>09:00-09:30</td>
<td>MORNING BREAK (Prefunction/Kalakaua Ballroom B/C - Floor 4)</td>
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</table>
| 09:30-11:30 | **Reefs of tomorrow:** Applications of reef restoration, structure, and conservation for socio-economic risk reduction and climate adaptation  
**Offshore coral reefs in the South China Sea:** Science, problems and solutions  
**Citizen science in support of coral reef protection and sustainability**  
**The science of compliance:** linking judicial actions, enforcement and management for policy and practice  
**Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses**  
**Trait-based approaches in coral reef ecology:** from functional ecology to management  
**Achieving sustainable coral reef fisheries:** policy development, implementation, management and enforcement |  |
| 11:30-12:45 | LUNCH (Kamehameha Exhibit Hall 2)                                       |                                             |
| 12:45-13:45 | PLENARY SESSION: PRESIDENT’S TALK - RUTH GATES (Kalakaua Ballroom A/B/C - Floor 4) |                                             |
| 13:45-15:45 | **New large-scale strategies in coral reef mitigation supporting reef recovery – creating a toolbox**  
**Innovations in the use of digital tools and the media for communication, outreach and education in support of coral reef protection**  
**Funding and finance in support of coral reef research, conservation and education**  
**A critical examination of ecosystem response to herbivore management**  
**Assessing and addressing the effects of multiple stressors on coral reefs towards developing effective management and policy responses**  
**Emerging technologies in cellular, molecular, and ecotoxicology techniques**  
**Achieving sustainable coral reef fisheries:** policy development, implementation, management and enforcement |  |
<p>| 15:45-16:15 | AFTERNOON BREAK (Prefunction/Kalakaua Ballroom A/B/C - Floor 4)         |                                             |
| 16:15-18:00 | CLOSING SESSION (Kalakaua Ballroom A/B/C - Floor 4) REPORT OUT SESSION  |                                             |</p>
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**MORNING PLENARY** *(Kalakaua Ballroom A/B/C - Floor 4)*
08:00-9:00

**MORNING BREAK** *(Prefunction/Kalakaua Ballroom B/C - Floor 4)*
09:00-9:30

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- Rising sea level and the responses of reefs and reef islands
- Discussion & Synthesis: Emerging technologies for reef science and conservation
- Coral reef ecosystem dynamics: instabilities, invasions, transitions and reorganization
- Acclimatization and adaptation in reef organisms
- Diseases on the reef: presence, persistence and responses
- Large reef predators: ecology, status and management
- Connectivity, recruitment and isolation among coral reef populations

**WORKSHOPS AND MEETINGS**
11:30-12:45

**PLENARY SESSION: PRESIDENT’S TALK - RUTH GATES** *(Kalakaua Ballroom A/B/C - Floor 4)*
12:45-13:45

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- Discussion & Synthesis: Emerging technologies for reef science and conservation
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**AFTERNOON BREAK** *(Prefunction/Kalakaua Ballroom A/B/C - Floor 4)*
15:45-16:15

**CLOSING SESSION** *(Kalakaua Ballroom A/B/C - Floor 4)*
REPORT OUT SESSION
16:15-18:00
MONDAY ORALS

01 MODERN REEFS AND REEF ISLANDS: REFLECTIONS AND RESONANCE OF DAVID STODDART’S CONTRIBUTION TO CORAL REEF SCIENCE.

Chair(s): Roger McLean, r.mclean@adfa.edu.au
Tom Spencer, Tss111@cam.ac.uk
Barbara Brown, Barbara.brown@ncl.ac.uk

Location: 301 B

10:00  Spencer, T. Brown, B. E.: RE-VISITING THE ECOLOGY AND MORPHOLOGY OF RECENT CORAL REEFS (28415)


10:30  Woodroffe, C. D.: MICROATOLLS AS INDICATORS OF SEA-LEVEL CHANGE ON REEFS (28523)


11:00  Hagan, A. B.; Hampton, S. M.; Spencer, T.: REFLECTIONS ON MODERN AND HISTORIC APPROACHES TO MAPPING CORAL REEF ENVIRONMENTS AT ALDABRA ATOLL (29025)


02 THE VALUE OF HISTORICAL, ARCHAEOLOGICAL AND PALEOECOLOGICAL DATA FOR ASSESSING AND CONSERVING CORAL REEFS

Chair(s): Loren McClanachan, Loren.mclenachan@gmail.com
Katie Cramer, Katie.cramer@gmail.com
Ayana Elizabeth Johnson, ayana@waittinstitute.org
John N. Kittinger, jkittinger@conservation.org
Richard Norris, rnorris@ucsd.edu
Aaron O’Dea, odeaa@si.edu
Michelle Lefebvre, mjl201@ufl.edu

Location: 301 B

14:00  Baker, D. M.; Duprey, N.: REEFS OF FUTURE PRESENT: HONG KONG CORALS FROM THE QING DYNASTY TO THE INFORMATION AGE (20014)


14:30  Markham, H. L.; Roff, G.; Zhao, J. X.; Menendez, P.; Thompson, A.; Clark, T.; Prazeres, M.; Pandolfi, J. M.: RECONSTRUCTING CORAL COMMUNITIES THROUGH TIME TO DETERMINE THE EFFECT OF HUMAN INFLUENCE ON THE INSHORE GREAT BARRIER REEF (28414)


15:00  Rachello-Dolmen, P. G.; Roff, G.; Ponder, W. F.; Pandolfi, J. M.: MODERN MICROGASTROPOD COMMUNITIES DRIVEN TO DEEPER WATER IN RESPONSE TO DECLINING WATER QUALITY IN THE MORETON BAY MARINE PARK, QUEENSLAND, AUSTRALIA (29540)


15:30  Sealey, K. M.: SPECIES DIVERSITY CHANGES SINCE 1980 ON BAHAMIAN REEFS SHOWS SHIFTS IN ECOLOGICAL STRUCTURE (29663)

15:45  Johnson, K. G.; Santodomingo, N.: A SUSTAINABLE REPOSITORY FOR CORAL REEF HISTORICAL IMAGERY (29369)

16:30  Dunbar, R. B.; Osborne, M.; Mucciareno, D.; Roark, B.: EASTERN ISLAND (RAPA NUI) CORALS TRACK 19TH AND 20TH CENTURY DECADAL AND LONGER PERIOD VARIANCE IN SE PACIFIC SEA SURFACE TEMPERATURES (29937)

17:00  LeFebvre, M. J.; Cramer, K. L.; Keegan, W. F.; Giovas, C. M.; Fitzpatrick, S. M.: CARIBBEAN CORAL REEF BASELINES FROM AN ARCHAEOLOGICAL PERSPECTIVE: PROSPECTS AND CHALLENGES FOR INTERDISCIPLINARY STUDIES AND CONSERVATION EFFORTS (29996)


17:45  Dillon, E. M.; O’Dea, A.; Cramer, K.; Norris, R.: DERMAL DENTICLES AS A TOOL TO RECONSTRUCT HISTORICAL SHARK COMMUNITIES (28558)

18:00  Lavides, M. N.; Polunin, N. C.; Molina, E. V.; De la Rosa, G. E.; Mill, A. C.; Stead, S. S.; Rusthon, S. P.: RESPONDING TO WIDESPREAD REEF FINISH EXTRAPOLATIONS IN THE PHILIPPINES INFERRED FROM ORAL HISTORY AND FISHERS’ KNOWLEDGE USING LINEAR MIXED MODELS (27938)


03 THE USE OF GENOMICS, PROTEOMICS AND TRANSCRIPTOMICS IN CORAL REEF STUDIES

Chair(s): Christian Voolstra, Christian.voolstra@kaust.edu.sa
David J. Miller, David.miller@jcu.edu.au
Paul F. Long, Paul.long@kcl.ac.uk
David Bourne, d.bourne@aims.gov.au
Timothy Ravasi, timothy.ravasi@kaust.edu.sa

Location: 313 B

10:00  Aguilar, C.; Fretet, S.; Moya, A.; Bourne, D. G.; Miller, D. J.: ELEVATED CO2 SUPPRESSES THE INNATE IMMUNE RESPONSE OF THE CORAL ACROPORA MILLEPOLLA TO LPS CHALLENGE* (28103)


11:00  Krediet, C. J.; Lehnert, E. M.; Clevea, P. A.; Tran, C.; Fringle, J. R.: GENE EXPRESSION UNDER THERMAL STRESS AND THE POTENTIAL FOR THERMAL ACCLIMATION IN A SYMBIOTIC CNIDARIAN* (28069)


14:00  Ling, L.; Kredit, C. J.; Fringle, J. R.: FOLLOWING PROTEOMIC CHANGES IN SYMBIOTIC Aiptasia CYTOSOL AND SYMBOIOSOME MEMBRANES DURING Aiptasia PALLIDA (29550)

14:15  Matz, M. V.; Groves, D. B.: USING GENOMICS TO RECONSTRUCT CORAL POPULATION SIZES OVER THE PAST 100,000 YEARS (29553)


14:45  Lopez, E. H.; Palumbi, S. R.: UNCOVERING WITHIN-COLONY GENETIC DIVERSITY USING HIGH-THROUGHPUT SEQUENCING DATA OF CORALS (28276)


15:45  Cockett, P. M.; Bird, C. E.: EVERY POPULATION MATTERS: HOTSPOTS OF GENOME-WIDE GENETIC DIVERSITY IN HAWAIIAN ‘OPHI (CELLANA EXARATA) (29760)

16:30  Ying, H.; Miller, D.; Hayward, D.; Ball, E.; Foret, S.; GENOME-WIDE DNA METHYLATION PROFILING REVEALED COMPLEX ROLES IN ACROPORA MILLEPORA (28995)


17:00  Sawall, Y.; Al-Sofyani, A.; Barshis, D. J.: SPAZIO-TEMPORAL VARIATION OF CORAL GENE EXPRESSION ACROSS 12 LATITUDES AND 2 SEASONS IN THE RED SEA (TEMPERATURE: 21° - 33°C) (29327)


17:30  Lin, M.; Foret, S.; Miller, D. J.: ANALYSES OF CORALLIMORPHARIAN TRANSCRIPTOMES PROVIDES NEW PERSPECTIVES ON THE EVOLUTION OF CALCIFICATION IN THE SCLERACTINIA (CORALS) (28129)


**06 CORAL CONSERVATION IN TIMES OF CHANGE:**

**LETTING NATURE PICK THE WINNERS**

Chair(s): Madhavi A. Colton, mcolson@coral.org

Michael S. Webster, mwebster@coral.org

Malin L. Finsky, malin.finsky@ruger.edu

**Location:** 312

**10:00**  Bay, R. A.; Rose, N. H.; Palumbi, S. R.: EVOLUTIONARY RESCUE AND GENOMIC ADAPTATION TO OCEAN WARMING (28245)

**10:15**  Chan, W. Y.; Peplow, L. M.; Hoffmann, A. A.; van Oppen, M. J.: ASSISTED EVOLUTION VIA HYBRIDIZATION: A NEW APPROACH IN CORAL REEF CONSERVATION (28272)

**10:30**  Adrian, A. C.; Schindler, D. E.; Pinsky, M. L.; Essington, T.; Webster, M. S.; Colton, M. A.: CAN CLIMATE ADAPTATION PORTFOLIOS MITIGATE RISK IN THE FACE OF UNCERTAIN IMPACTS OF GLOBAL CHANGE? (28746)


**11:00**  Paris, C. B.; Le Hénaff, M.; Chaput, R.; Dahlgren, C.: REVERSING THE DECLINE: MODELING TARGETED CONNECTIVITY IN BAHAMIAN ACROPORIDS (29865)

**11:15**  Colton, M. A.; Webster, M. S.: EVOLUTIONARY ADAPTATION POTENTIAL: FROM NOVEL SCIENCE TO PRACTICAL APPLICATION (29799)

**07 BIODIVERSITY, BIOGEOGRAPHY AND EVOLUTION OF CORAL REEF ORGANISMS**

Chair(s): Danwei Huang, huangdanwei@nus.edu.sg

Francesca Benzioni, francesca.benzioni@unimib.it

Marcelo V. Kitahara, mkitahara@unjfes.br

James D. Reimer, jreimer@sci.u-ryukyu.ac.jp

Molly Timmers, molly.timmers@noaa.gov

Christopher Meyer, meyre@si.edu

Forest Rohwer, frohwer@gmail.com

Gustav Paulay, paulay@flmnh.ufl.edu

Peter F. Cowman, peter.cowman@yaale.edu

Jennifer Hodge, jhodge@unimib.it

Libby Liggins, luggins@massey.ac.nz

**Location:** 311

**10:00**  Knowles, B.; Silveira, C. B.; Nulton, J.; Edwards, R. A.; Rohwer, F.: FISHGAME-THE-WINNER: ECOSYSTEM AND EVOLUTIONARY EFFECTS OF VIRAL LYTIC TO LYSOGENIC SWITCHES ON CORAL REEFS (28882)


**10:30**  Chen, P. C.; Wang, W. L.; Liu, S. L.: DNA-BARCODING REVIEWS NICHE DIFFERENTIATION AMONG DIFFERENT GALAXAURACEAE SPECIES (RHODOPHYTA) IN THE DONGSHA ATOLL NATIONAL PARK, TAIWAN (27947)

**10:45**  Martin, S. B.; Cutmore, S. C.; Cribb, T. H.: A NEW GENUS FOR THE HAWAIIAN CORAL PARASITE Podocorynoides STENOMETRA (DIGENEA: OPECOELIDAE) AND A COMPLEX OF NEW SPECIES FROM THE SOUTH PACIFIC (27976)

**11:00**  Mudrova, S.; Nikitin, M.; Fontaneto, D.; Berumen, M. L.; Ivancenko, V.: MOLECULAR DIVERSITY AND HOST SPECIFICITY OF CRUSTACEAN COPEPODS LIVING IN SYMBIOSIS WITH TWO CO-OCCURRING SPECIES OF GALAXEA (SCLERACTINIA) FROM AUSTRALIA (28848)
**MONDAY**

11:15 **Titus, B. M.**; Daly, M.: **COMPARATIVE PHYLOGEOGRAPHY IN A MULTI-LEVEL SEA ANEMONE SYMBIOSIS: EFFECTS OF HOST SPECIFICITY ON PATTERNS OF CO-DIVERSIFICATION AND GENETIC DIVERSITY** (28162)


11:45 **LaJeunesse, T. C.**; Parkinson, J. E.; Reimer, J. D.; Voolstra, C.: **A SYSTEMATIC REVISION OF SYMBIODINIUM: “CLADES” ARE GENERAL** (29647)

14:00 Lin, M. F.; Miller, D. J.; Kitahara, M.; Chen, C. L.; **Forêt, S.**: A PHYLOGENOMIC APPROACH REVEALS THE MONOPHONY OF SCLERACTINIANS (28760)

14:15 **Combosch, D. J.**; Lemers, S.; Girbet, G.: A PHYLOGENOMIC BACKBONE FOR SCLERACTINIA BASED GENOME AND TRANSCRIPTOME DATA. (29590)


15:00 **Terraneo, T. I.**; Benzioni, F.; Arrigoni, R.; Baird, A. H.; Berumen, M. L.: A MODERN APPROACH FOR SPECIES Delimitation IN THE CORAL GENUS GONIOPORA (28652)


15:30 **Fuji, T.**; Reimer, J. D.: PHYLOGENETIC RELATIONSHIPS BETWEEN THE ORDERS ZOANTHARIA AND ACTINARIARIA (Cnidaria: Anthozaa-Hexacorallia) UTILIZING NEWLY OBTAINED SPECIMENS FROM JAPAN (28155)


16:45 **Łukowiak, M.**; TO BE. OR NOT TO BE NOTICED: THE IMPORTANCE OF SPICULAR ANALYSIS FOR RECONSTRUCTIONS OF SPONGE COMMUNITIES IN MODERN CORAL REEFS (27814)

17:00 **Miller, A. K.**; Kerr, A. M.; Reich, M.; Paulay, G.; Carvajal, J. I.; Roux, G. W.: HIGHER LEVEL SYSTEMATICS OF THE WALKING, SWIMMING, AND BURROWING HOLOTHUROIDEA (Echinodermata): A SIX-GENE MOLECULAR PHYLOGENETIC APPROACH (28518)

17:15 **Matsuda, S. B.**; Gosliner, T. M.: PHYLOGENETIC AND MORPHOLOGICAL ANALYSES REVEAL CRYPITIC SPECIES COMPLEXES IN GLOSSODOSIS NUDIBRANCHS (28284)

17:45 **Postaire, B.**; Magalon, H.; Bourmaud, C.; Bruggemann, H.: EXTENSIVE LINEAGE DIVERSITY AND CRYPITIC SPECIES IN AGALOEPHENIIDEA (HYDROZOA) SPECIES REVEALED BY MOLECULAR SPECIES DELIMINATION METHODS AND POPULATION GENETICS (29309)

18:00 **Floeter, S. R.**; Bender, M. G.; Siqueira, A.; Cowman, P. F.: PHYLOGENETIC PERSPECTIVES ON THE EVOLUTION OF REEF FISH FUNCTIONAL DIVERSITY (27992)


**09 BIOGEOCHEMISTRY OF CORAL REEF SYSTEMS**

Chair(s): Christian Lomborg, c.lomborg@aims.gov.au

Craig Nelson, craig.nelson@hawaii.edu

Christian Wild, christian.wild@uni-bremen.de

Bradley Eyre, bradley.eyre@scu.edu.au

**Location:** 313 C

10:00 **Bednarz, V.**; Cardini, U.; Rix, L.; Pogoreutz, C.; Radecker, N.; Naumann, M. S.; **Wild, C.**: CARBON AND NITROGEN FIXATION BY REEF ORGANISMS AND SUBSTRATES IN RESPONSE TO SEASONAL CHANGES (27985)

10:15 **Lesser, M. P.**; Morrow, K. M.: METHODOLOGICAL UNDERESTIMATION OF NITROGEN FIXATION IN STYLOPHORA PISTILLATA (27768)


11:45 **McCulloch, M. T.**; Holcomb, M.; D’Olivo Cordero, J. P.; Falter, J. L.; Montagna, P.; Taviani, M.; Trotter, J. A.: HOW CORALS CONTROL CALCIFICATION IN A HIGH CO2 WORLD (28616)

14:00 **De Goeij, J. M.**: HOW FAST AND EFFICIENT SPONGE ENGINES DRIVE AND MODULATE THE FOOD WEB OF SHALLOW AND DEEP-SEA REEF ECOSYSTEMS (28696)

14:15 **McMurray, S. E.**; Pawlik, J. R.; Finelli, C. M.: CARBON-CYLING ON CARIBBEAN CORAL REEFS: THE INCREASING ROLE OF GIANT BARREL SPONGES (28192)


15:00 **Fiore, C. L.**; Freeman, C. J.; Kujawinski, E. B.: THE IMPACT OF SPONGE FILTRATION ON THE CHEMICAL COMPOSITION OF CORAL REEF DISSOLVED ORGANIC MATTER (29994)


16:00 **Mueller, B.**; Brocke, H. J.; Vermeij, M. J.; Wild, C.; Van Duyf, P. C.: EFFECTS OF LIGHT, NUTRIENTS AND THE CIRCADIAN CYCLE ON QUANTITY AND QUALITY OF DISSOLVED ORGANIC MATTER RELEASED BY CARIBBEAN BENTHIC PRIMARY PRODUCERS (28743)
10 METABOLISM STUDIES/OBSERVATIONS OF CORAL REEF COMMUNITIES

Chair(s): Rebecca Albright, ralbright@carnegiescience.edu
Chris Langdon, clangdon@rsms.miami.edu

Location: 317 A/B


10:30 Shamberger, K. E.; Cohen, A. L.; Lentz, S. J.; Barkley, H. C.; DeCarlo, T. M.; McCorkle, D. C.; Golbuu, Y.: SPATIOTEMPORAL VARIABILITY IN NET COMMUNITY CALCIFICATION OF A WESTERN PACIFIC CORAL REEF SYSTEM (29053)

10:45 Takeshita, Y.; Andersson, A.; Cyronak, T.; Kindeberg, T.; Martz, T.; McGillis, W.; Price, N.; Smith, J.: DRIVERS FOR BENTHIC METABOLISM AND ITS FEEDBACK TO CARBONATE CHEMISTRY ON A CORAL REEF IN BERMUDA (29050)

11:00 Albright, R.; Caldeira, K.: REVERSAL OF OCEAN ACIDIFICATION ENHANCES NET CORAL REEF CALCIFICATION (28392)


11:30 Gruber, R. K.; Lowe, R. J.; Falter, J. L.: COMMUNITY PRODUCTION AND RESPIRATION IN AN EXTREME ENVIRONMENT: NEW INSIGHTS FROM TROPICAL TIDE-DOMINATED FRINGING REEFS (28424)


15:00 van der Zande, R.; Achlatis, M.; Hoegh-Guldberg, Q.; Dodge, S.: INCREASED TEMPERATURE IS THE DOMINANT DRIVER OF CLIMATE CHANGE IMPACTS ON ACROPORA FORMOSA (29173)

15:15 Wooster, M. K.; Hochberg, E. J.: PRELIMINARY MEASUREMENTS OF CORAL COMMUNITY LIGHT-USE EFFICIENCY IN RESPONSE TO VARIABLE ENVIRONMENTAL CONDITIONS (28716)

15:30 Mello-Athalyde, M. A.: Dodge, S.: IMPORTANCE OF HETEROOTROPIC FEEDING FOR PORITES CYLINDRICA AS AN ALTERNATIVE SURVIVAL STRATEGY (29224)

15:45 Thompson, P. D.; Baker, D. M.: DO CORALS ADAPT THEIR ANNUAL SYMBIOTIC METABOLISM STRATEGIES TO COPE WITH SEASONAL TEMPERATURE STRESS AND NITROGEN POLLUTION? (29298)

11 ANIMAL-ALGAL SYMBIOSES: MOLECULAR, PHYSIOLOGICAL AND GENETIC INTERACTIONS, PROCESSES AND ADAPTATIONS

Chair(s): Virginia Weis, weisv@science.oregonstate.edu
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Koty Sharp, kotysharp@gmail.com

Location: 313 C

16:30 Ng, T. Y.; Chui, P. Y.; Ang, P. O.: TEMPERATURE AND SALINITY EFFECTS ON THE ONSET OF SYMBIOSIS BETWEEN ACROPORA VALIDA AND VARIOUS SUBCLADES OF SYMBIODINIUM (20017)

16:45 Williams, S. D.; Ji, K.: SIX DEGREES OF BLEACHING: A WEIGHTED LINK REMOVAL MODEL FOR THE CORAL-SYMBIONT MUTUALISM NETWORK (28128)

17:00 Roth, M. S.; Diaz-Almeida, E. M.; Medina, D.; Deheyn, D.: DYNAMICS OF CORAL-ALGAL PHYSIOLOGY AND TEMPERATURE STRESS ASSOCIATED WITH GLOBAL CHANGE (28675)

17:15 Carballo-Bolaños, R.; Chen, A.: PHYSIOLOGICAL STRATEGIES TO ACCLIMATISE TO HIGH SEAWATER TEMPERATURE STRESS WHEN HOSTING DIFFERENT SYMBIODINIUM (29165)

17:30 Abdel-Salam, H. A.; Donia, A. H.; Ali, A. A.; El Shaarawy, H. I.; Hegazy, H.: HEAT SHOCK PROTEIN GENE HSP70 AS AN INDICATOR FOR DETERMINING THERMAL STRESS RESPONSE IN STYLOPHORA PISTILLATA FROM GULF OF SUZE, RED SEA (28371)


18:00 Pogoreutz, C. I.; Radecker, N.; Cardénas, A. J.; Gardes, A.; Voolstra, C. R.; Wäb, C.: RESPONSES OF THE CORAL HOLOBIOTON TO LABILE DISSOLVED ORGANIC CARBON SHIELD LIGHT ON THE ROLE OF DINITROGEN FIXATION IN BLEACHING (27902)

18:15 Sawyer, S. J.; Ramezan, E. E.: INVESTIGATING THE ROLE OF EXTRACELLULAR MATRIX GENES DURING TEMPERATURE STRESS IN THE SEA ANEMONE, Aiptasia Pallida (29011)

12 THE CORAL REEF MICROBIOME AND REEF MICROBIAL INTERACTIONS AND CHANGES

Chair(s): Max Teplitzki, maxtep@ufl.edu
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Simon Davy, simon.davy@uwac.ac.nz

Location: 313 A

10:00 Vega Thurber, R. L.; Zaneveld, J. R.; Burkepile, D. E.: RETHINKING CORAL MICROBIOLOGY PARADIGMS: DESTABILIZATION VERSUS ALTERNATIVE STABLE STATES AS CRITICAL HALLMARKS OF STRESSED CORAL ECOSYSTEMS (28764)

10:30 Ding, J.; Shiu, J.; Chen, W.; Chiang, Y.; Tang, S.: GENOMIC INSIGHT INTO HOST-ENDOSYMBIONT RELATIONSHIP OF ENDOZOOCODONAS MONTIPORAE CL-35T WITH ITS CORAL HOST (29147)


11:00 McMinds, R. C.; Zaneveld, J. R.; Vega Thurber, R. L.: SEARCHING FOR CODEVIVERENCE AMONG CORALS AND BACTERIA WITH THE GLOBAL CORAL MICROBIOME PROJECT (28101)


14:30 Little, M. J.; Lim, Y. W.; Guietos, G.; Rohwer, F.: PHAGE-BACTERIA INTERACTIONS IN CORAL REEF BENTHIC COMPETITION (28919)

14:45 Pasculi, C.; Laffy, P.; Kupresanin, M.; Botté, E.; Weynberg, K.; Ravasi, T.; Webster, N.: DIVERSITY AND FUNCTION OF VIRUSES IN CORAL REEF SPONGES (28990)


16:00 Sneed, J. M.: Campbell, J. E.; Johnston, L. N.; Paul, V. J.: MACROALGAE AND OCEAN ACIDIFICATION CAUSE SHIFTS IN BACTERIAL COMMUNITIES ON CCA WITH IMPLICATIONS FOR CORAL LARVAL SETTLEMENT (29547)


17:00 Caruso, C.; Palumbi, S.: BACTERIAL COMMUNITY PROFILING OF CORAL SPECIES ACROSS A BLEACHING EVENT (28791)


17:30 Claar, D. C.; Gates, R. D.; Baum, J. K.: CORAL-SYMBIODIUMUM INTERACTIONS ACROSS A GRADIENT OF LOCAL STRESSORS ON KIRITIMATI ATOLL (29057)


14 REPRODUCTION IN CORALS

Chair(s): Jacqueline Padilla-Gamino, jgpamino@csudh.edu

Location: 317 A/B


16:45 Chiu, Y. L.: OOCYTES EXPRESS AN ENDOGENOUS RED FLUORESCENT PROTEIN IN A STONY CORAL, EUPHYLLIA ANCORA: A POTENTIAL INVOLVEMENT IN CORAL OOGENESIS. (28041)

17:00 Shikina, S.: EGG FORMATION OF A STONY CORAL, EUPHYLLIA ANCORA (CNIDARIA, ANTHOZOA): A MOLECULAR PERSPECTIVE. (28130)


17:45 Viladrich, N.; Bramanti, L.; Tsounis, G.; Martinez-Quitana, A.; Coppari, M.; Domínguez-Carrión, C.; Ambrosio, S.; Rossi, S.: ENERGETIC RESOURCE ALLOCATION FOR REPRODUCTION IN TWO MEDITERRANEAN GORGONIANS WITH DIFFERENT REPRODUCTIVE STRATEGIES: SURFACE VERSUS INTERNAL BROODERS (27839)

18:00 Eyal-Shaham, L.; Eyal, G.; Harii, S.; Síniger, F.; Loya, Y.: INDIVIDUAL ANNUAL FECUNDITY AND REPRODUCTIVE ENERGY INVESTMENT IN MUSHROOM SCLERACTINIAN CORALS (28800)


20 REEF FISH ECOLOGY, CONSERVATION, AND FISHERIES: THE SCIENTIFIC LEGACY OF GLENN ALMANY

Chair(s): Mark Hixon, bixon@hawaii.edu

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David Feary, david.feary@nottingham.ac.uk

Location: 310 THEATER
10:00  Hixon, M. A.; Jones, G. P.; Hamilton, R. J.: GLENN ALMANY’S CAREER IN REEF FISH ECOLOGY, CONSERVATION, AND FISHERIES: FISH COMMUNITIES, CONNECTIVITY, AND COMMUNITY-BASED MANAGEMENT (28199)

10:30  Oyafuso, Z. S.; Franklin, E. C.: FILL AN OLD NICHE OR FIND A NEW ONE? COMPARING HABITAT USE FOR INVASIVE REEF FISHES IN NATIVE AND INVADED CORAL REEF HABITATS WITH SPECIES DISTRIBUTION MODELS (29988)

10:45  Kindinger, T. L.; Hixon, M. A.: INVASIVE MARINE PREDATOR ALTERS COMPETITION BETWEEN NATIVE CORAL-REEF FISHES (28866)

11:00  Smith, N. S.; Green, S. J.; Akins, J. L.; Miller, S.; Côté, I. M.: TO CULL OR NOT TO CULL AN INVASIVE PREDATOR? IT DEPENDS . . . (29783)

11:15  Tuttle, L. J.; Hixon, M. A.: HOW INVASIVE INDO-PACIFIC RED LIONFISH INTERACT WITH FISH PARASITES AND CLEANING MUTUALISTS NATIVE TO ATLANTIC CORAL REEFS (29030)


11:45  Langlois, T.: EVIDENCE OF THREE LEVEL TROPHIC CASCADES WITHIN REEF FISH ASSEMBLAGES FROM BODY-SIZE DISTRIBUTIONS (28937)

14:00  Palacios, M. M.; Malerba, M. E.; McCormick, M. I.: MULTIPLE PREDATOR EFFECTS ON JUVENILE FLEET MORTALITY (28954)


14:30  Shima, J. S.; Olsenberg, C. W.; Sweare, S. E.; Noonburg, E. G.; Alonso, S. H.: ARE SUCCESSFUL FISH SIMPLY BORN ‘LUCKY’ OR DO THEY ‘PLAY THEIR CARDS WELL?’ (28027)

14:45  Ramasamy, R. A.; Allan, B. J.; McCormick, M. I.: PLASTICITY OF ESCAPE RESPONSES: HOW EXPERIENCED CORAL REEF FISH ALTER THEIR ESCAPE PERFORMANCE (28283)

15:00  Ridlon, A. D.; Warner, R. R.; Gaines, S. D.: CHANGES IN FISH WARINESS ACROSS A GRADIENT OF INTENSITY IN SCUBA DIVING ACTIVITY (28408)


15:30  Adam, T. C.; Duran, A.; Fucxa, C.; Roycroft, M.; Rojas, M.; Ruttenberg, B.; Burkepile, D.: COMPARATIVE ANALYSIS OF FORAGING BEHAVIOR REVEALS HIGH FUNCTIONAL DIVERSITY AMONG CARIBBEAN PARROTFIISHES (29005)

15:45  Smith, K. M.; Childress, M. J.: TOP-DOWN VERSUS BOTTOM-UP REGULATION OF CORALS IN THE FLORIDA KEYS (28571)


17:00  Burich, J. G.; Miller, A.; McCormick, M. I.; Jones, G. P.; THE DAMSELFISH DOMINO EFFECT: A COMPETITIVE RELEASE IN A HIGHLY PARTITIONED GUILD REVEALS SUBORDINATES VERSATILITY (29078)


17:30  Gajdžik, L.; Parmentier, E.; Sturaro, N.; Lepoint, G.; Fréderich, B.: RELATIONSHIPS BETWEEN HABITAT, SOCIAL BEHAVIOUR AND DIET: A CASE STUDY IN DAMSELFISHERS FROM MOOREA (18446)

17:45  Pereira, P. H.; Munday, P.: COLONY SIZE AND STRUCTURE AS DETERMINANTS OF HABITAT USE AND FITNESS OF CORAL-DWELLING FISHES (27951)

18:00  Kerry, J. T.; Bellwood, D. R.: THE ROLE OF TABULAR STRUCTURE IN THE ECOLOGY OF LARGE REEF FISHES (27788)


24 THE ROLE OF MACROINVERTEBRATES ON CORAL REEFS

Chair(s): Marc Slattery, slattery@olemiss.edu

Location: 312


17:00  Rivera-Irizarry, F.; Fonseca, J.; Bruno-Laureano, Y.; Mercado-Molina, A. E.: DEMOGRAPHIC DYNAMICS OF THE COMMON DEMOSPONGE Ircinia Felix (30092)

17:15  Rohde, S.; Nielsen, S.; Schupp, P. J.: DYNAMIC SPONGE DEFENSE SYSTEMS AGAINST PREDATOR AND PATHOGEN ATTACKS (27954)

17:30  Schupp, P.; Helber, S.; Rohde, S.; Schoenig, E.; BIOACTIVE SPONGES OUTCOMPETE SCLERACTINIAN CORALS (29803)

17:45  Nelson, H. R.; Edmunds, P. J.: INTEGRATION AND ALLOMETRY CONTRAIN CARIBBEAN OCYTCORAL MORPHOLOGY (28282)

18:00  Tsounis, G.; Lasker, H.; Bramanti, L.; Gambrel, B.; Edmunds, J. P.: OCTOCORAL COMMUNITY ECOLOGY AT TWO SITES OF CONTRASTING ENVIRONMENTAL CONDITIONS IN ST JOHN, US VIRGIN ISLANDS (28888)
18:15 Slattery, M.; Gochfeld, D. J.: BUTTERFLYFISHES EXHIBIT
SPECIES-SPECIFIC RESPONSES TO CHANGES IN PACIFIC
SOFT CORAL COMMUNITIES (28189)

28A CORAL REEFS IN EXTREME, COMPROMISED AND
MARGINAL ENVIRONMENTS, AND THEIR ROLES
AS REFUGIA - HIGHLY STRESSED, URBANIZED AND
EXPOSED REEF SYSTEMS

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Location: 308 A/B

10:00 Cacciapaglia, C. W.; van Woestik, R.: THE NEED TO FIND
CORAL REFUGES IN A CHANGING CLIMATE (29481)


11:00 Alhaqeen, S. H.; Burt, J.; Alsaflar, A. H.; Chen, W.; Al-Kandari, M. A.: LONG-TERM CORAL COMMUNITY STABILITY IN A DISTURBED MARGINAL REEF IN KUWAIT (27921)


11:30 Holstein, D. M.; Smith, T. B.: EMERGENT CLIMATE CHANGE REFUGIA FROM IMPERFECT CONNECTED REFUGES (28747)


14:00 Smith, T. B.; Baker, A. C.; Brandtner, S. V.; Gynn, P. W.; Manzello, D. P.; Matl, J. L.; McGillis, W. R.; Palacio, A.; Feng, P.: BLEACHING AND DEPTH REFUGES IN THE EASTERN PACIFIC DURING THE STRONG 2015-2016 EL NIÑO (29959)

14:15 MacDonald, C.; Bridge, T. C.; Jones, G. P.: ECOLOGICAL DETERMINANTS OF DEPTH RANGES IN CORAL-FEEDING BUTTERFLYFISH: ARE DEEP REFUGES A REFUGE? (28143)

14:30 Hurley, K. K.; Timmers, M. A.; Godwin, L. S.; Reardon, K. G.; Skllings, D. J.; Toonen, R. J.: DEPTH IS A MORE POTENT STRUCTURING FORCE FOR BRACHYURAN CRAB ASSEMBLAGES THAN LATITUDE, GEOGRAPHY, OR HUMAN IMPACT ACROSS THE HAWAIIAN ARCHIPELAGO (29599)


15:15 Cassola, G. E.; Pacheco, M. S.; Barbosa, M. C.; Hansen, D. M.; Ferreira, C. L.: DECLINE IN ABUNDANCE AND HEALTH STATE OF AN ATLANTIC SUBTROPICAL GORGONIAN POPULATION (29560)


15:45 Bauman, A. G.; Feary, D. F.; Hoey, A. S.; Dunshea, G.; Low, J.; Todd, P. A.: MACROALGAL BROWSING ON A HEAVILY DEGRADED, URBANIZED EQUATORIAL CORAL REEF SYSTEM (29319)

28B CORAL REEFS IN EXTREME, COMPROMISED AND
MARGINAL ENVIRONMENTS, AND THEIR ROLES AS
REFUGIA - LOW DIVERSITY, NON-REEF AND HIGH
LATITUDE REEF SYSTEMS

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Location: 308 A/B

16:30 Morgan, K. M.; Perry, C. T.; Smithers, S. G.; Johnson, J. A.; Daniell, J. J.: EXTENSIVE REEF DEVELOPMENT WITHIN THE “MESOPHOTIC” NEARSHORE GREAT BARRIER REEF: EVIDENCE FOR INNER-REGIONAL VARIATIONS IN CORAL RESILIENCE (27826)

16:45 Ryan, J. E.; Smithers, S. G.; Lewis, S. E.; Clark, T. R.; Zhao, J. X.: REEF PLAT CORES FROM THE INSHORE GREAT BARRIER REEF PRESERVE RECORDS OF HOLOCENE REEF GROWTH, TERRESTRIAL SEDIMENTATION AND TROPICAL CYCLOONES (28416)

17:00 Santodomingo, N.; Johnson, K. G.: REVEALING THE MURKY HISTORY OF THE CORAL TRIANGLE (29339)

17:15 Porter, S. N.; Schleyer, M. H.: HIGH-LITUDE CORAL COMMUNITY AT SODWANA BAY, SOUTH AFRICA (29347)

17:30 Rieg, B.: DISTURBANCE DYNAMICS AND MARGINAL REEF POPULATIONS (28095)

17:45 Schleyer, M. H.: ARE ALCYONACEAN SOFT CORALS THE “GLUE” THAT HOLDS A REEF TOGETHER UNDER EXTREME CONDITIONS? (29195)

18:00 Moyer, R. P.; Yates, K. K.; Rogers, C. S.; Lunz, K. S.: MANGROVE-CORAL HABITATS AS A NOVEL REFUGE FROM CLIMATE CHANGE (29603)

18:15 Camp, E. F.; Smith, D. J.; Rodolfo-Metalpa, R.; Suggett, D. J.: MANGROVE HABITATS SELECT CORAL POPULATIONS TOLERANT OF PH AND TEMPERATURE CONDITIONS PREDICTED FOR REEFS UNDER CLIMATE CHANGE (28099)

30 CORAL BLEACHING: MONITORING, MANAGEMENT
RESPONSES AND RESILIENCE

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Location: 314

14:15 Johnson, M. E.: Bergh, C.; Byrne, J. R.: TEN YEARS OF LARGE SCALE CORAL BLEACHING MONITORING ACROSS THE FLORIDA REEF TRACT (28678)


15:00 Nava-Martinez, G.; Garcia-Salgado, M.; Samos-Falcon, E.; Chavez-Estrada, J.: RECORD OF CORAL REEFS STRUCTURAL CHANGES, CORAL BLEACHING IMPACTS AND RESILIENCE FACING CLIMATE CHANGE EFFECTS AT THE SIAN KAAN BIOSPHERE RESERVE (29833)


15:30 Witman, J. D.; Smith, F.; Brandt, M.; Banks, S.; Altieri, A.; Moore, E.; Lamb, R.: ASYMETRIC, LARGE SCALE COMMUNITY RESPONSES TO CLIMATE OSCILLATIONS IN GALAPAGOS SUBTIDAL ECOSYSTEMS (29048)

15:45 Narida, E. G.; Arito, P. M.; Lcuwan, Y.: IMpACTS OF THERMAL STRESS ON THE PORITES SP. CORAL-POPULATION DYNAMICS IN A SMALL PHILIPPINE EMBAYMENT (29056)

16:30 Penafior, E. L.; David, L. T.; Villanoy, C. L.; Skirving, W. J.: MASSIVE BLEACHING IN THE CORAL TRIANGLE: THE OCCURRENCE OF SURFACE WARMING ANOMALIES AND POSSIBLE CONNECTION TO OTHER PHYSICAL PARAMETERS (28138)


17:00 Mondal, T.; Raguhanathan, C.: STUDIES ON EFFECT OF CLIMATE CHANGES ON SCLERACTINIAN CORALS THROUGH LONG TERM PERMANENT MONITORING PLOTS IN ANDAMAN AND NICOBAR ISLANDS (29219)

17:15 Islam, M. Z.: CORAL REEF STATUS AND BLEACHING INTENSITY AT ST. MARTIN ISLAND, BANGLADESH, (28275)


18:00 Donner, S. D.; Rickett, G. J.; Heron, S. F. A NEW, HIGH-RESOLUTION GLOBAL MASS CORAL BLEACHING DATABASE (28000)

18:15 Maina, J. M.; Darling, E. S.; Messié, M.; Posingham, H. P.; McClanahan, T. R.: ONE HUNDRED YEAR OCEAN THERMAL SIGNATURES INFORM CLIMATE RISK AND REFUGE FOR CORAL REEFS (29219)


10:30 Ferreira, C. L.; Cordeiro, C. A.; Mendes, T. C.; Harborne, A. R.: DISTRIBUTION OF NOMINALLY HERBIVOROUS FISHES ACROSS A TEMPERATURE GRADIENT ON BRAZILIAN ROCKY REEFS (27962)

10:45 Booth, D. J.: PATTERN AND PROCESS IN TROPICAL FISH EXPATRIATION POLEWARD FROM THE GREAT BARRIER REEF (27948)


11:15 Cure, K.; Hobbs, J. P.; Harvey, E. S.; Langlois, T. J.; Kennington, W. J.: EMPIRICAL ASSESSMENT OF CLIMATE-INDUCED RANGE SHIFT IN AN ENDEMIC AND EXPLOITED REEF FISH (28978)

11:30 Maor-Landaw, K.; Levy, O.: WHAT MAKES TEMPERATE CORAL SO ROBUST IN AN ERA OF GLOBAL WARMING? A COMPARATIVE TRANSCRIPTOMIC STUDY BETWEEN SUB-TROPICAL AND TEMPERATE CORALS (27825)


37 THE IMPACTS OF DREDGING AND COASTAL MODIFICATION ON CORAL REEF ECOSYSTEMS

Chair(s): William F. Precht, William.Frecht@gmail.com
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William H. Hanson, WHHanson@gldc.com
Ken J.C.P Deslauriers, deslaries@creocean.fr

Location: 306 A/B

10:00 Hanson, W. H.; Precht, W. F.: CAN CORAL REEFS AND LARGE-SCALE DREDGING PROJECTS COEXIST? (28986)

10:15 Jones, R. J.; Fisher, R. F.; Bessel-Browne, P.: MANGING DREDGING NEAR CORAL REEFS (28779)

10:30 Bessel-Browne, P.; Jones, R.; Negri, A.; Clode, P.: LETHAL AND SUB-LETHAL IMPACTS OF DREDGE RELATED STRESSORS ON CORALS (28529)


11:00 Fisher, R.: PREDICTORS OF CORAL STRESS AND MORTALITY DURING DREDGING (29023)


11:30 Hodell, E.; Spring, K.; Ampela, K.; Khan, A.; Hansen, S.: RESPONSE OF MELANIN-CONTAINING CELLS IN GUAM PORITID CORALS TO SEDIMENTATION STRESS (28066)

11:45 Seguin, F.; Bergeron, J. D.; Aubert-Moulin, J.; Batailler, C.; Deslaries, K. J.; Le Brun, O.: CORAL TRANSPLANTATION TO MITIGATE DREDGING IMPACTS ON CORAL REEFS FOR A PORT EXTENSION PROJECT (GUADALOUPE, FRENCH WEST INDIES) (29060)

40 COASTAL POLLUTION: NUTRIENTS, SEWAGE AND CONTAMINANTS

Chair(s): Stephanie Wear, swear@tnc.org
Elizabeth Bradford, elizabeth.bradford@ch2m.com
James Byrne, jbyrne@tnc.org
Aaron Hutchins, ahutchins@tnc.org

Location: 306 A/B

14:00 Wear, S. L.; Vega Thurber, R.: SEWAGE POLLUTION: MITIGATION IS KEY FOR CORAL REEF STEWARDSHIP (29004)
ICRS 13TH INTERNATIONAL CORAL REEF SYMPOSIUM

MONDAY


15:00 Lonnstedt, O. M.; McCormick, M. I.: ENVIRONMENTALLY RELEVANT CONCENTRATIONS OF MICROPLASTIC PARTICLES INFLUENCE REEF FISH ECOLOGY (28053)

15:15 Downs, C. A.; Cruz, S. A.; Fauth, J. E.: PERSONAL CARE PRODUCT POLLUTION ON CORAL REEFS: TOXICOLOGY AND CONTAMINATION OF UV SUNSCREENS, PRESERVATIVES, PLASTIC MICROSPHERES AND OTHER INGREDIENTS (29544)


16:00 Bachok, Z.; Ali, H. R.: EFFECT OF BOOSTER BIOCIDES, IRGAROL ON CORALS FROM MALAYSIAN REEF SOUTH CHINA SEA, AS INDICATE BY FATTY ACID MARKERS (27971)

16:45 Strahl, J.; Stolz, I.; Rocker, M.; Fabricius, K. E.: PHYSIOLOGICAL RESPONSES OF ACROPORA TENUIS ON A NUTRIENT AND TURBIDITY GRADIENT IN THE GREAT BARRIER REEF (29584)

17:00 Hedberg, N. E.; Tedengren, M.: EFFECTS OF AQUACULTURE ON MUSCUS PROPERTIES IN THE CORAL FUNGIA (29438)

17:15 La Valle, F. F.; Thomas, F. I.; Dalai, H.; Richardson, C.: GROUNDWATER-ASSOCIATED NUTRIENTS IMPACT BENTHIC PRODUCTIVITY AND NUTRIENT UPTAKE ACROSS A REEF FLAT IN MAUNALUA BAY, HAWAII (28765)


18:00 Baum, G.; Januar, H. I.; Ferse, S. C.; Wild, C.; Kunzmann, A.: WATER QUALITY LINKED TO ABUNDANCE AND PHYSIOLOGY OF DOMINANT SOFT CORALS IN JAKARTA BAY, INDONESIA (28311)

54 CONSERVATION RESEARCH FOR SMALL-ISLAND NATIONS: CLIMATE CHANGE, FISHERIES, TOURISM AND LAND-USE CHANGE

Chair(s): Takashi Nakamura, takasuke@sci.u-ryukyu.ac.jp Geraldine Rengill, grelligil@pier.org Peter Houk, peterhouk@gmail.com Robert Van Woesik, rwoesik@flu.edu Kaoruokami, kaoruokami@u-ryukyu.ac.jp

Location: 303 A/B


17:00 McLean, M.; Cueto-Bueno, J.; Nedlic, O.; Luckymis, M.; Houk, P.: LINKING PATTERNS AND PROCESSES WITH SHIFTING BASELINES ON CORAL REEFS (27969)


17:30 Venegas, R. M.: CORAL TRIANGLE FISHERIES VULNERABILITY IN A CHANGING CLIMATE: SKIPJACK TUNA THERMAL SHIFTS AND HABITATS (29529)


18:00 Tripathy, B.; Satyanarayana, C.; Rajan, R.; Kumar, N.; Roy, S.; Satam, A. H.: ASSESSMENT OF THE CURRENT STATUS OF CORALS AND ASSOCIATED FAUNA OF SINDHUDURU COAST IN MAHARASHTRA, INDIA (29055)

18:15 Satari, D. Y.: SPERMONDE ISLANDS AND CORAL REEF FLATS MORPHOLOGICAL DYNAMICS (30048)

60 INTEGRATED ECOSYSTEM-BASED MANAGEMENT FOR CORAL REEFS AND THE VALUE OF SOCIO-ECOLOGICAL STUDIES

Chair(s): Mariska Weijerman, mariska.weijerman@noaa.gov Rusty Brainard, rustybrainard@noaa.gov Portoforio Alexander Miel Alino, alino@noaa.gov Beth Fulton, beth.fulton@noaa.gov Hugh Sweatman, h.sweatman@noaa.gov Rusty Brainard, rustybrainard@noaa.gov Peter Mumby, p.mumby@noaa.gov Alan White, alan_white@tnc.org

Location: 305 A/B

14:00 Kimball, J. B.; Brainard, R.; Monaco, M.; Bohneack, J.; Clark, R.; Schull, J.; Manzello, D.; Enochs, I.; Oliver, T.; Williams, I.; Vargas-Ángel, B.; Blondeau, J.; Edwards, P.; Eakin, C. M.; Kelsey, H.; Donovan, C. E.; Koss, J.: NOAA'S NATIONAL CORAL REEF MONITORING PROGRAM: INTEGRATED ECOSYSTEM MONITORING AND REPORTING IN U.S. CORAL REEF AREAS TO INFORM CONSERVATION AND MANAGEMENT (29448)


14:30 Agardy, T.: USING CORAL REEF SCIENCE IN MSP TO ACHIEVE PERFORMANCE-BASED ZONING (29434)

14:45 Monaco, M. E.: BIOGEOGRAPHIC ASSESSMENTS: A FRAMEWORK FOR INFORMATION SYNTHESIS IN THE MANAGEMENT OF CORAL REEF Ecosystems (29589)

15:15 Mamauag, S. S.; Alino, P. M.; Arceo, H. O.; Muallil, R. N.; De Jesus, D.; De Ramos, R.; Cabral, R.: A FRAMEWORK TOWARDS INTEGRATING REEF FISHERIES MANAGEMENT IN SMALL-Scale FISHERIES IN THE Tropics (29162)


17:00  Ingles, J.; Muldoon, G.; Symington, K.: FISHERY IMPROVEMENT PROJECT (FIP): AN EFFECTIVE DELIVERY MECHANISM OF EAFM PRINCIPLES TO IMPROVE CORAL REEF FISHERIES MANAGEMENT (29316)


17:30  Peng, M.; Oleson, K. L.: WHAT’S A CLEAN BEACH WORTH: RECREATIONALIST WILLINGNESS TO PAY FOR COASTAL WATER QUALITY AND ATTRIBUTES (29662)


18:15  Weijerman, M.; Fulton, E. A.; Kaplan, I. C.; Brainard, R. E.: A COMPLEX ECO SYSTEM MODEL TO EVALUATE ECOSYSTEM SERVICES OF ALTERNATIVE MANAGEMENT SCENARIOS (29567)

61 ECO SYSTEM BASED MANAGEMENT OF CORAL REEF FISHERIES

Chair(s): Supin Wongbusarakum, supin.wongbusarakum@noaa.gov
Jason Link, jason.link@noaa.gov
Luky Adrianto, lukyadrianto@gmail.com
Robert Pomeroy, robert.pomeroy@uconn.edu

Location: 305 A/B
10:00  Link, J. S.; Fogarty, M. J.; et al.; ADVANCING ECO SYSTEM-BASED MANAGEMENT: ECO SYSTEM-BASED FISHERIES MANAGEMENT POLICY AND ROADMAP, WITH PARTICULAR EMPHASIS FOR CORAL REEFS (28073)

10:15  Pomeroy, R. S.: MOVING TOWARDS ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT IN THE CORAL TRIANGLE REGION (27924)

10:30  Kaur, C. R.: POLICY DEVELOPMENT ON IMPLEMENTING AN ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT IN MALAYSIA IN FULFILLING OBLIGATIONS UNDER THE CORAL TRIANGLE INITIATIVE (28374)

10:45  Adrianto, L.; Pratwiti, M. A.; Wardianto, Y.; Kamal, M. M.: ECO SYSTEM APPROACH TO FISHERIES ASSESSMENT FOR A CORAL REEFS BASED MARINE CONSERVATION AREA IN TROPICAL SPHERE (29756)

11:00  Bayate, D. E.; Perez, A. G.: THE ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT (EAFM) FRAMEWORK IN THE CONTEXT OF FISHERIES MANAGEMENT IN THE PHILIPPINES (29333)


11:45  Altman, I.; Kaufman, L.: A CRITICAL EXAMINATION OF THE LINKAGES AND OUTCOMES OF BIODIVERSITY VS. FISHERIES CONSERVATION INTERVENTIONS FOR CORAL REEF SYSTEMS (29493)

66 HUMAN-NATURAL COUPLED REEF SYSTEMS: INTEGRATING INDIGENOUS AND WESTERN SCIENCES FOR SUSTAINABLE MANAGEMENT SOLUTIONS

Chair(s): Nicole Crane, nicrane@cabrillo.edu
F. Joseph Pollock, FJPollrock@psu.edu
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Malcolm Mann, ilsep@cuq.edu.au
Aulani Wilhelm, aulani.wilhelm@noaa.gov

Location: 302 A/B

10:15  Puniwai, N.; Parrain, C.: SEASCAPE IDENTITIES: UNDERSTANDING VALUES AND CULTURAL PATTERNS (29276)

10:30  Goo, N. M.: K’INA A’O LAWA’A (30143)

10:45  Mann, M. L.: CQUNIVERSITY INDIGENOUS LAND AND SEA EDUCATION PROGRAM (28026)

11:00  Bonito, V. E.: Ravonoloa, K.; Simpson, R.: OUTCOMES AND LESSON’S LEARNED AFTER 14 YEARS OF COMMUNITY-BASED CO-MANAGEMENT INITIATIVES ON FIJI’S CORAL COAST. (29796)

11:15  Nawata, H.: INDIGENOUS CLASSIFICATION AND UTILIZATION OF THE RED SEA BLACK CORAL (28331)

11:30  Barry, G. A.; Crane, N. L.; Rulmal, J.; Precoda, K.: HUMAN DIMENSIONS OF REEF MANAGEMENT PLANNING: CRITICAL ISSUES ARTICULATED BY INDIGENOUS PRACTITIONERS FROM MICRONESIAN OUTER ISLANDS: YAP STATE (29861)

11:45  Brito-Millan, M.; Werner, B. T.; Sandin, S. A.; McNamara, D. E.: DYNAMICAL MODELING OF COUPLED SOCIETAL-CORAL REEF SYSTEMS (29889)

69 EVALUATING THE ECOLOGICAL, SOCIAL AND ECONOMIC EFFECTIVENESS OF MPAS.

Chair(s): Gabby Ahmadia, gabby.ahmadia@wwfus.org
Louise Glew, Louise.Glew@wwfus.org
Georgina Gurney, georgina.gurney@gmail.com
Helen Fox, fox.conservation@gmail.com
Nicolas Pascal, npacific@gmail.com

Location: 302 A/B
14:00  Pressey, B.: PLANNING AND MANAGING MARINE PROTECTED AREAS: FROM BELIEF SYSTEMS TO EVIDENCE (29115)


14:30  Semmens, B. X.; Pattengill-Semmens, C. V.: ASSESSING TRENDS IN TARGETED MARINE FISHES IN THE BONAIRE MARINE PARK, LEeward ANTILLES CARIBBEAN (30074)


15:15 
Alonso Aller, E.; Jiddawi, N. S.; Eldof, J. S.: MARINE PROTECTED AREAS BUFFER DIRECT AND INDIRECT EFFECTS OF MONSOON SEASONALITY ON TROPICAL SEAGRASS FISH COMMUNITIES (28162)

15:30 
Humphries, A. T.; McClanahan, T. R.: FISHERIES MANAGEMENT MITIGATES ALGAL CONSUMPTION THRESHOLDS ON CORAL REEFS IN KENYA (28631)

15:45 

16:30 

16:45 

17:00 
Hidayat, N. I.; Pada, D. N.; Hasan, A. W.; Mambrasar, R.; Purwanto, P.; Ayaluddin, A.; Ahmadia, G.; Fox, H.: LINKING COMPLIANCE AND ECOLOGICAL OUTCOMES IN A MARINE PROTECTED AREA NETWORK: A CASE STUDY IN THE BIRD’S HEAD SEASCAPE (27852)

17:15 

17:30 
Ytiguez, A. T.; Rosales, R.; Trinidad, A. C.; Ting, M. E.; Abrina, T. A.; Alito, P. M.: ASSESSING MPA EFFECTIVENESS USING ECOLOGICAL, SOCIAL AND ECONOMIC INDICATORS IN PHILIPPINE COMMUNITIES (20220)

17:45 
Abrina, T. S.; Ting, E. C.; Ytiguez, A. T.; Alito, P. M.: THE IMPACT OF PHILIPPINE MPA MANAGEMENT EFFORT ON HUMAN AND SOCIAL CAPITAL AND VICE VERSA: ASSIGNING NON-USE VALUES TO REEFS BEYOND ECONOMIC BENEFITS (29294)

18:00 
Gurney, G. G.; Pressey, R. L.; Cinner, J.; Pollnac, R.; Campbell, S.: INTEGRATED CONSERVATION AND DEVELOPMENT: EVALUATING A COMMUNITY-BASED MARINE PROTECTED AREA PROJECT FOR EQUALITY OF SOCIOECONOMIC IMPACTS (29277)

18:15 

75 PREVENTION, ASSESSMENT, AND MITIGATION OF CORAL REEF IMPACTS RESULTING FROM PLANNED AND UNPLANNED HUMAN ACTIVITIES

Chair(s): Jocelyn Karazsia, jocelyn.karazsia@noaa.gov
Tom Moore, Tom.Moore@noaa.gov
Wendy Wiltse, Wiltse.Wendy@epa.gov

Location: 303 A/B

14:00 
Karazsia, J. L.: THE EVOLUTION OF BEST PRACTICES TO PREVENT, ASSESS, AND MITIGATE CORAL REEF IMPACTS IN THE ATLANTIC/CARIBBEAN (29655)

14:15 
Davis, G. W.; Wiltse, W. I.: U.S. CORAL REEF TASK FORCE DRAFT HANDBOOK ON CORAL REEF IMPACTS (28216)

14:30 
Montgomery, A.: THE DEVELOPMENT AND IMPLEMENTATION OF MARINE HABITAT MAPPING TOOLS AS A MECHANISM TO ENCOURAGE IMPACT AVOIDANCE AND MINIMIZATION TO CORAL REEF RESOURCES (29284)

14:45 
Jayewardene, D. C.; Carrubba, L.: TWO NMFS CONSULTATION CASE STUDIES IN PACIFIC AND CARIBBEAN CORAL REEF ECOSYSTEMS TO AVOID AND MINIMIZE CORAL REEF IMPACTS (30114)

15:00 
Gleason, A.: Ginter, B.; Garcielas, N.; Reid, R. P.: BIGGER IS BETTER: UNDERWATER IMAGE MOSAICS OF LARGE AREAS FOR IMPROVED CORAL REEF MONITORING AND ASSESSMENT (29771)

15:15 

15:30 
Beveridge, S. D.; Lamb, J.: SHIPPIING AND MARINE PILOTAGE: ARE THERE SUFFICIENT SYSTEMS IN PLACE TO PROTECT VULNERABLE MARINE Ecosystems? (29946)

15:45 
Chan, N. T.; Gulkos, D. A.; Forsman, Z. H.; Wolk, C. S.; Ranson, S. P.; Del Rio Torres, L.: THE NEED FOR AN EX-SITU CORAL RESTORATION NURSERY IN HAWAII (28210)

85 HAWAII’S CORAL REEFS IN 2050: THE PATH TO SURVIVAL

Chair(s): Michael Field, mfield@usgs.gov
Eric Brown, Eric.Brown@noaa.gov
Alan Friedlander, friedlan@hawaii.edu

Location: 303 A/B

10:00 
Timmermann, A.: HAWAII’S CLIMATE IN 2050 CE (28406)

10:15 
Tribble, G. W.; Stock, J.; Jacobi, J.; Storlazzi, C.; Field, M.: TERRESTRIAL SEDIMENT EFFECTS ON HAWAIIAN CORAL REEFS: PAST, PRESENT, AND FUTURE (28950)

10:30 
Storlazzi, C. D.; van Ormond, M.; Chen, Y. L.; Elias, E.: MODELING CORAL LARVAL DISPERSAL AND INTERISLAND CONNECTIVITY TO HELP DESIGN MUTUALLY-SUPPORTING MARINE PROTECTED AREAS: INSIGHTS FROM MAUI NUI, HAWAI‘I (28753)

10:45 

11:00 
Schunkmaner, B. D.; Heron, S. F.; Vargas-Angel, B.: MULTI-FACTOR ASSESSMENT OF RESILIENCE POTENTIAL OF CORAL REEFS IN THE MAIN HAWAI‘IAN ISLANDS (29754)

11:15 
Jokiel, P. L.; Bahr, K. D.; Rodgers, K. S.: KANE’OHE BAY, OAHU HAWAI‘I: CENTURIES OF HUMAN IMPACT AND REEF RECOVERY WITH PROJECTIONS TO 2050 (29708)

11:30 

11:45 
Sparks, R. T.; Williams, I. D.; Stone, K. K.; White, D. J.; Castro, I. M.; Martinez, T. K.; Silva, I. F.; Brown, E. K.: MAUI’S CORAL REEFS, MANAGEMENT SUCCESSES AND FUTURE CHALLENGES (28469)
MONDAY POSTERS

Poster sessions take place in the Kamehameha Exhibit Hall 1.

01 MODERN REEFS AND REEF ISLANDS: REFLECTIONS AND RESONANCE OF DAVID STODDART’S CONTRIBUTION TO CORAL REEF SCIENCE.
Chair(s):
1 Darrell, J. G.; Rosen, B. R.: DARWIN, PIONEER OF REEF TRANSECTS, REEF ECOLOGY AND ANCIENT REEF MODELLING: SIGNIFICANCE OF HIS COCOS (KEELING) SPECIMENS IN THE NATURAL HISTORY MUSEUM, LONDON (29536)
2 Sandin, S. A.: THE STRUGGLE FOR EXISTENCE -- HOW COMPETITION REIGNS, ESPECIALLY WHEN PREDATION ABOUNDS (29907)

02 THE VALUE OF HISTORICAL, ARCHEOLOGICAL AND PALEOECOLOGICAL DATA FOR ASSESSING AND CONSERVING CORAL REEFS
Chair(s):
3 Courier, C. A.; O’Dea, A.; Altiere, A.: CHANGES IN THE INTENSITY OF DAMSELFISH ALGAL GARDENING IN BOCAS DEL TORO, PANAMA OVER 7000 YEARS (29927)
4 McComas, K.; Cramer, K.; O’Dea, A.; Concepcion, M. P.; Alvarez, M.; Rodriguez, F.; Norris, R. D.: A MODERN FISH TOOTH REFERENCE COLLECTION TO HELP TRACK HISTORICAL CHANGES IN THE CARIBBEAN REEF FISH COMMUNITIES FROM TOOTH FOSSILS FOUND IN REEF SEDIMENTS (29948)
5 Carpenter, C. S.; Cramer, K.: A 3000 YEAR RECORD OF ABUNDANCE AND DYNAMICS OF THE KEYSTONE URCHIN DIADEMA ANTILLARUM FROM ANALYSIS OF SUBFOSSIL SPIINES FROM REEF SEDIMENT CORES (30055)
6 Zapata Ramirez, P. A.; Flores, P.; Klaus, J.; Renema, W.; Jaramillo, C.; Pretkovic, V.; Braga, J. C.: EARLY-MIOCENE REEFS IN THE SIAMANÁ FORMATION, LA GUAJIRA – NE COLOMBIA (29726)
8 Reed, E. V.; Cole, J. E.; Lough, J. M.: SYNTHESIZING GEOCHEMICAL AND GROWTH BANDING PROXIES FROM GREAT BARRIER REEF CORAL RECORDS (28894)
12 Lescinsky, H. L.: CORAL HEALTH IN THE PAST: A PRE-HUMAN BASELINE FROM PARTIAL MORTALITY RECORDS IN THE PLEISTOCENE OF BARBADOS AND CURACAO (28180)

03 THE USE OF GENOMICS, PROTEOMICS AND TRANSCRIPTOMICS IN CORAL REEF STUDIES
Chair(s):

MONDAY

* REPRESENTS INVITED PRESENTATIONS
**09 BIOGEOCHEMISTRY OF CORAL REEF SYSTEMS**

**Chair(s):** Christian Longborg, c.longborg@aims.gov.au
Craig Nelson, craig.nelson@hawaii.edu
Christian Wild, christian.wild@uni-bremen.de
Bradley Eyre, bradley.eyre@scu.edu.au

**85**

**Miyano, J. K., Zill, J.; Silbiger, N. J.; Donahue, M. J.: CARBONATE CHEMISTRY OF REEFS ALTERED BY MACROALGAE: A SNAPSHOT STUDY OF HOW INVASIVE ALGAE CHANGE THEIR PH ENVIRONMENT (29911)**

**86**


**87**


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**89**

**Tanaya, T., Watanabe, K.; Kuwae, T.: EVALUATION OF THE CONTRIBUTION OF CORAL-DERIVED ORGANIC MATTER TO TOTAL SEDIMENTARY ORGANIC MATTER BY ELEMENTAL AND ISOTOPIC ANALYSIS (27942)**

**90**

**Rosset, S. L.; Reed, A. J.; D’Angelo, C.; Wiedenmann, J.: ULTRASTRUCTURAL FEATURES OF ZOOXANTHELLAE PROVIDE BIOMARKERS OF DISSOLVED INORGANIC NUTRIENT EXPOSURE OF REEF CORALS (28344)**

**91**

**Longborg, C., Talbot, S.; Carreira, C.: ORGANIC MATTER BIOAVAILABILITY IN THE GREAT BARRIER REEF LAGOON (28290)**

**92**

**Wong, C. W., Duprey, N.; Baker, D. M.: CORAL ISOQUANTES REVEAL VARIOUS NITROGEN SOURCES AND DYNAMICS IN HONG KONG’S COASTAL ENVIRONMENT (29155)**

**93**


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**Crook, E. D., Takeshita, Y.; Cooper, H.; Martinez-Fernandez, A.; Potts, D. C.; Rebollo-Meier, M.; Hernandez-Terrones, L. M.; Paytan, A.: DECIPHERING MULTIPLE CONTROLS ON CARBONATE CHEMISTRY IN COASTAL REEF SYSTEMS: AN EXAMPLE FROM A BACK REEF LAGOON WITH GROUNDWATER DISCHARGE (28908)**

**96**

**Sangsawang, L.; Casareto, B. E.; Vu, H. M.; Suzuki, Y.: PRIMARY PRODUCTION AND NITROGEN FIXATION OF ENDOLITHIC ALGAE ASSOCIATED WITH THE MASSIVE CORAL P. LUTEA (29008)**

**97**


**98**


**10 METABOLISM STUDIES/OBSERVATIONS OF CORAL REEF COMMUNITIES**

**Chair(s):** Rebeca Albright, raalbright@carnegiescience.edu
Chris Langdon, clangdon@rsmas.miami.edu

**99**


**101**

**Padmakumar, K., Muraleedharan Nair, G.: CUES FROM SPACE WAR OF MARINE SPONGES AND THE RELATIONSHIP WITH HUMAN TUMOR CELL PROLIFERATION INHIBITORY ACTIVITY (29577)**

**102**


**103**

**Ormond, R.; Al-Sofyani, A. A.; Zubler, K.: WEAK LINKAGE OF GROWTH AND SURVIVAL RATES OF CORAL ON IMPACTED REEFS AT JEDDAH (29082)**

**104**


**105**


**106**


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**108**


**109**

**Perez, D. I., Phinn, S.; Roelfsema, C.; Shaw, E.: VARIABILITY OF CORAL REEF PRIMARY PRODUCTION AND CALCIFICATION COMPLICATIONS SCALING UP RATES ON HERON ISLAND REEF FLAT IN SOUTHERN GREAT BARRIER REEF AUSTRALIA (28419)**

**110**


**111**


**112**

**11 ANIMAL-ALGAL SYMMES: MOLECULAR, PHYLOGENETIC AND GENETIC INTERACTIONS, PROCESSES AND ADAPTATIONS**

**Chair(s):** Virginia Weis, weisv@science.oregonstate.edu
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Tamar L. Golet, tgolet@olemiss.edu
William Pitt, fritt@uga.edu
Todd C. LaJunesse, tcl3@psu.edu

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**115**

**Suzuki, T., Casareto, B. E.; Kasihyama, Y.; Shioi, Y.; Ishikawa, H.; Suzuki, Y.: PRODUCTION OF CYCLO-ENOL IN CORAL ZOOXANTHELLAE (27794)**

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**REPRESENTS TUTORIAL PRESENTATIONS**


119 Chen, J. E.; Cui, G. X.; Aranda, M.: ATTEMPTED GENETIC TRANSFORMATION OF SYMBIODIUM MICROADRIATICUM USING VARIOUS TRANSFORMATION TECHNIQUES (28553)


124 Yuyama, I.; Ikeo, K.: DYNAMIC CHANGES IN GENE EXPRESSION DURING EARLY STAGE OF CORAL-ALGAL SYMBIOSIS (29403)


127 Lutfi, O. M.; Siagian, J.A.: CORALLIVOROUS FISH PREY ON FORITES LOBATA AT SOUTH JAVA SEA, INDONESIA (29454)


129 Clowes, S.; Grossman, A.: COMPARISONS OF PHOTOSYNTHETIC FUNCTION OF SYMBIODIUM GROWN IN CULTURE AND IN HOSPITE (29622)

130 Gonzalez, F. L.; Sanchez, J. A.: OSTREODIUM DIVERSITY IN THE SCROLL CORAL, AGRARICA UNDATA, AT MESOPHOTIC CORAL ECOSYSTEMS FROM SAN ANDRES ISLAND, COLOMBIA. (29594)


132 Tong, H.: TEMPERATURE SHUFFLES CORAL-ALGAL SYMBIOSIS IN THE SOUTH CHINA SEA (30046)

133 Suleiman, S.; Bruno-Laureano, Y.; Mercado-Molina, A. E.: PHYSIOLOGICAL RESPONSE OF SIDERASTREA RADIIANS TO LOW LIGHT ENVIRONMENTS AND THERMAL STRESS. (30122)

12 THE CORAL REEF MICROBIOME AND REEF MICROBIAL INTERACTIONS AND CHANGES

Chair(s): Max Teplitski, maxtep@ufu.edu Kim B. Ritchie, ritchie@mote.org Julie Meyer, julieemeyer@ufu.edu Jennifer Sneed, Sneed@st.edu Rebecca Vega Thurber, rvegathurber@gmail.com Deron Bakerpile, deron.bakerpile@lcsc.edu Adrienne M.S. Correa, ac53@rice.edu Shelby E. McIlroy, smcilroy@buffalo.edu David M. Baker, dbaker@hku.hk Ross Cunning, ross.cunning@gmail.com


135 Unzueta Martinez, A.: PIGMENTED PSEUODALTEROMONAS SPECIES CAN PROTECT CORAL MONTIFORIA CATAPTA FROM INFECTION BY THE PATHOGEN VIBRIO CORALLIYTTUS STRAIN OCRN008 (29242)


138 Robinett, N. L.: HOST IMMUNE SYSTEM POLYMORPHISM AND GENE EXPRESSION IN HOST-SYMBIOT RELATIONSHIPS (28816)

139 Weber, L. G.; DeForce, E.; Apprill, A.: OPTIMIZATION OF DNA EXTRACTION FOR CHARACTERIZATION OF CORAL-ASSOCIATED MICROBIAL COMMUNITIES (28643)

140 Banc-Prandi, G.; Inhoff, K.; Hall, J.; Ritchie, K. B.: MULTISPECIFIC BACTERIAL COMPETITION UNDER OCEAN ACIDIFICATION SCENARIOS (29510)


142 Zhou, G.; Tao, Y.; Cai, L.; Tong, H.; Liu, S.; Qian, P.; Huang, H.: MICROBIO DYNAMICS IN EARLY LIFE STAGES OF SCLERACTINIAN CORAL ACROPA GEMMIFERA (28288)

143 McNally, S. P.; Parsons, R. J.; Santoro, A. E.; Apprill, A.: MULTIFACETED IMPACTS OF THE STONEY CORAL FORITES ASTROIDES ON PICOPLANKTON ABUNDANCE AND COMMUNITY COMPOSITION (28084)

144 Bettarel, Y.; Auguet, J. C.; Bouchard, S.; Bouvier, T.; Bouvier, C.; Bui, V. N.; Desnues, C.; Hoang, T. Y.; Mai, T. C.; Got, P.; Pham, T. T.: COLLATERAL DAMAGES OF THE CORALLIVOROUS GASTROPOD DRUPELLA CORNUS ON CORAL MICROBIAL ASSOCIATES (28572)


146 Damjanovic, K.; Blackall, L.; Alfred, R.; van Oppen, M.: MANIPULATING PROKARYOT SYMBIONTS TO ENHANCE CORAL STRESS TOLERANCE (27936)

147 Diaz, L.; Conaco, C.: RESPONSE OF CORAL ASSOCIATED BACTERIA TOWARD THERMAL STRESS (27872)

148 14 REPRODUCTION IN CORALS

Chair(s): Jacqueline Padilla-Gamino, jgamino@cseuh.edu Robert vanWoesik, rrw@fit.edu

149 Kirdpol, P.; Chavanich, S.; Vyakarn, V.: REPRODUCTIVE BIOLOGY OF THE BRAIN CORAL, PLATYGYRA SINENSIS AT MU KO SAMAE SAN, CHON BURI PROVINCE IN THE UPPER GULF OF THAILAND (29700)

150 Spathias, H.; Weil, E.: SEXUAL REPRODUCTION IN THE CARIBBEAN CORAL GENUS COLPOPHYLLA IN PUERTO RICO (29692)

151 Lapacek, V. A.; Raymundo, L. J.; Burdick, D.; Quest, J.: GUAM’S STAGHORN ACROPA POPULATIONS REQUIRE MANAGING FOR RESILIENCE (29488)

152 Humanes, A.; Bastidas, C.: HIGH IN SITU SETTLEMENT RATES AND EARLY SURVIVORSHIP OF HARD CORALS IN A CARIBBEAN REEF (29322)

58

301 Buchanan, J. R.; Krupp, F.; Burt, J. A.; Feary, D. A.; Ralph, G. M.; Carpenter, K. E.: LIVING ON THE EDGE: REGIONAL EXTINCTION RISK OF CORAL-DEPENDENT FISHES IN A MARGINAL GULF (30006)

302 Chandran, R.; Ramakumar, K.; Suresh, P.; Satyanarayana, C.: ENHANCING HERBIVORE ASSEMBLAGES BARRICADE FURTHER DEGRADATION OF LINGERING CORAL REEFS IN KUCHICHI, INDIA (29245)

304 Tsang, R.; Ang, P. O.: HIGH TOLERANCE OF CORALS FROM MARGINAL ENVIRONMENT IN HONG KONG TO HYPOXILITUDE AND PREFERENCE OF CORALLIVORY ON OSMOTIC-STRESSED CORALS (29475)

305 Cao, D.; Cao, W.: SEASONAL VARIATIONS IN STABLE ISOTOPE VALUES OF PARTICULATE ORGANIC MATTER FROM LUSHUTOU FRINGING REEFS, SOUTH CHINA (27837)


307 Davis, K. A.; Reid, E.; DeCarlo, T.; Cohen, A.; Wong, G.: CORAL REEFS IN THE (SURFAL) SURF ZONE: EXTREME VARIABILITY IN WATER PROPERTIES ON DONGSHA ATOLL, SOUTH CHINA SEA. (28301)

28B CORAL REEFS IN EXTREME, COMPROMISED AND MARGINAL ENVIRONMENTS, AND THEIR ROLES AS REFUGIA - LOW DIVERSITY, NON-REEF AND HIGH LATITUDE REEF SYSTEMS

Chair(s): Chris Perry, c.perry@exeter.ac.uk
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Ryan P. Moyer, ryan.moyer@mfwc.com
Bernhardt M. Riegl, rieglb@nova.edu
Andrea Gomez, anni@gmail.com

346 Moore, A.; Browne, N. K.; O’Leary, M.; Richards, Z.: EXTRME 2011 LA NIÑA EVENT DRIVES CORAL RANGE EXPANSION ALONG THE WEST AUSTRALIAN COAST (28294)

350 Grillo, A. C.; Bonaldo, R. M.; Segal, B.: ABUNDANCE DRIVING PHYSICAL CONTACT INTERACTIONS WITH SCLERACTINIAN CORALS IN MARGINAL REEFS (27846)

352 Yamazaki, W.; Agostini, S.: THERMAL PERFORMANCE OF THE HIGH ALTITUDE CORAL PORITES HERONIENSIS: SIGNIFICANCE FOR ITS FUTURE DISTRIBUTION (28150)

354 Hayes, N. K.; Walton, C. J.; Brinkhuis, V.; Ruzicka, R.; Gilliam, D. S.: LONG-TERM TRENDS IN BENTHIC COVER OF A HIGH LATITUDE REEF SYSTEM OFFSHORE SOUTHEAST FLORIDA, USA (29425)

355 Beretta, G. A.; Booth, D. J.: SPATIAL AND TEMPORAL VARIATION IN NEAR-SHORE MARINE ASSEMBLAGES AROUND THE US VIRGIN ISLANDS (29392)

357 Dodge, D. L.; Voss, J. D.: INVESTIGATING POPULATION GENETICS OF THE SCLERACTINIAN CORAL, MONTASTREA CAVERNOSA, ALONG THE FLORIDA CORAL REEF TRACT’S NORTHERN EXTENT (29063)

Walker, B. K.; Klug, K.; Costaregni, A. R.: EXCEPTIONAL THREATENED CORAL POPULATIONS IN A MARGINAL REEF ENVIRONMENT ON THE SOUTHEAST FLORIDA REEF TRACT (29982)

Herlan, J. J.; Gaymer, C. F.; Lee, S. J.; Smith, T. B.; Ramos, M. Q.; Friedlander, A. M.; Rios, R. S.: CORAL BLEACHING IN RA Akehr: ENSO-RELATED? (29056)


30 CORAL BLEACHING: MONITORING, MANAGEMENT RESPONSES AND RESILIENCE

Chair(s): Keisha Bahr, kbah@hawaii.edu
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Britt Parker, britt.parker@noaa.gov


345 Chase, T. J.; Pratchett, M. S.; Hoogenboom, M. O.: CAN FISH HELP CORALS DURING BLEACHING EVENTS? (28520)


347 Martinez, N.; Roberson, L.: IMPACT OF THERMAL STRESS ON GROWTH AND PHOTOSYNTHESIS IN LARVAE AND ADULT STAGES OF FORITES ASTROIDEA (27972)

348 Muniz-Castillo, A. I.; Cabrera-Martínez, J. P.; Viveros-Martínez, C. I.; Arias-Conejero, J. E.: INFLUENCE OF PHYSICAL AND STRUCTURAL HABITAT VARIABLES IN ECOLOGICAL COMMUNITY INDICATORS AND BLEACHING OF CORALS IN A PROTECTED AREA OF THE GULF OF MEXICO (29350)

349 Sienes, P. Q.; Calumpong, H. P.: IN SITU TEMPERATURE PROFILE OF SHALLOW REEF COMMUNITIES IN NEGROS AND APO ISLAND: 2013-2014 (28847)

350 Bailey, H.; Swanson, D. W.; Vargas-Angel, B.: PATTERNS OF CORAL BLEACHING IN AMERICAN SAMOA (28835)

351 Buccella, L.; Cofroth, M. A.: SYMBIOT COMPOSITION AND DENSITY CHANGE WITHIN TWO MURICEA SPECIES OF THE FLORIDA KEYS ACROSS A BLEACHING EVENT (28987)

352 Patterson, M. R.; Williams, S. D.; Gladfelter, E. H.; Carpenter, L. W.: ELECTRICAL NETWORK MODELING OF PERFORATE AND IMPERFORATE CORAL PHYSIOLOGICAL PERFORMANCE UNDER ENVIRONMENTAL STRESS (29066)


**31 OCEAN WARMING AND THE TROPICALISATION OF TEMPERATE REEFS**

Chair(s): Adriana Verges, a.verges@unsw.edu.au
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Thomas Wernberg, thomas.wernberg@iowa.edu

362 Lobel, L. K.; Lobel, P. S.: A TEN YEAR TEMPERATURE RECORD FROM A SHALLOW WATER REEF IN THE MESOAMERICAN BARRIER REEF LAGOON (29875)

363 Matis, P. A.; Hoey, A. S.; Sommer, B.; Booth, D. J.: TROPICAL FISH ABUNDANCE IS PREDICTED BY HABITAT ACROSS A TROPICAL TO TEMPERATE GRADIENT (28964)

364 Florez-Leiva, L.; Deschaseaux, E.: DIMETHYL SULFIDE (DMS) IN MARINE ECOSYSTEMS. (27775)

366 Strangas, S.; Parra-Madrazo, G.; Reyes-Bonilla, H.; Morzaria-Luna, H. N.: POTENTIAL CHANGES IN THE DISTRIBUTION OF EASTERN PACIFIC REEF CORALS IN RESPONSE TO CLIMATE CHANGE (28179)

**37 THE IMPACTS OF DREDGING AND COASTAL MODIFICATION ON CORAL REEF Ecosystems**

Chair(s): William F. Frecht, William.Frecht@gmail.com
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362 Moeller, M.; Nietzer, S.; Schils, T.; Schupp, P. J.: JUVENILE CORALS ARE AFFECTED BY LOW SEDIMENTATION RATES. THE FIRST WEEKS ARE CRUCIAL (28758)


364 Saha, N.; Zhao, J.; Nguyen, A.; Lewis, S.; Brodie, J.: CORALLINE GEOCHEMICAL SIGNATURE TO IDENTIFY ANTHROPOGENIC INFLUENCES ON INSHORE CORAL REEFS OF MAGNETIC ISLAND, GREAT BARRIER REEF (GBR) (28972)


367 Kosmynin, V. M.; Miller, C. L.: EFFECTS OF SEDIMENTATION ON REEF-BUILDING SCLERACTINIAN CORALS IN SOUTHEAST FLORIDA (28970)

368 Jaramillo, J.: Instituto Nacional de Vias – INVias; Financiera de Desarrollo Nacional – FDN. : RELOCATION OF CORALS AND ASSOCIATED FAUNA LOCATED IN THE DREDGING AREA OF THE ACCESS CHANNEL TO CARTAGENA BAY (29764)

**40 COASTAL POLLUTION: NUTRIENTS, SEWAGE AND CONTAMINANTS**

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369 Muziyuma, M.; Reimer, J. D.: 40 YEARS OF ENVIRONMENTAL DISTURBANCES AND MOLLUSK COMMUNITIES IN THE INTERTIDAL ZONE OF OKINAWA ISLAND, JAPAN (30059)


367 May, L.: Woodley, C. E.; Downs, C. A.: TOXICOLOGY OF EXPLOSIVE COMPOUNDS TO CORALS (29883)


370 Goldberg, S. J.; Nelson, C. E.; Dulai, H.; Donahue, M. J.; Remple, K.; Richardson, C.; La Valle, F.; Packrell, J.; Thomas, F. I.: DETECTING HOURLY TO DAILY VARIABILITY IN SUBMARINE GROUNDWATER PLUMES, NUTRIENTS AND FLUORESCENT DISSOLVED ORGANIC MATTER AT A CORAL REEF IN MAUNALUA BAY, HI (29707)

371 Spring, S. M.; Agardy, T. S.: A CONCEPTUAL MODEL OF OYSTER REMEDIATION FOR CORAL REEF RESTORATION IN BARBADOS (29892)


375 Berry, K.; Hoogenboom, M.; Flores, F.; Negri, A.: EFFECTS OF UNBURNT COAL DUST ON A CORAL, REEF FISH, AND SEAGRASS SPECIES (29670)

376 Suresh, P.; Chandran, R.; Sathyarayana, C.: IMPACTS OF MACRO ALGAE ON THE CORAL TRANSPLANTATION/RESTORATION EFFORTS IN THE GULF OF KACHCHH, NORTH-WEST COAST OF INDIA (28159)

**54 CONSERVATION RESEARCH FOR SMALL-ISLAND NATIONS: CLIMATE CHANGE, FISHERIES, TOURISM AND LAND-USE CHANGE**

Chair(s): Takashi Nakamura, takasaku@sci.u-ryukyu.ac.jp
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60 INTEGRATED ECOSYSTEM-BASED MANAGEMENT FOR CORAL REEFS AND THE VALU OF SOCIO-ECOLOGICAL STUDIES

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67 Hernández-Fernández, L. H.: INCIDENCE OF SCUBA DIVING AND CARRYING CAPACITY OF DIVE SITES AT JARDINES DE LA REINA NATIONAL PARK, CUBA (27080)

68 Putra, S. A.: MARINE CONSERVATION MANAGEMENT OF KRAKATAU ISLANDS, INDONESIA (27897)

61 ECOSYSTEM BASED MANAGEMENT OF CORAL REEF FISHERIES

Chair(s): Supin Wongbusarakum, supin.wongbusarakum@noaa.gov
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572 Ault, J. S.; Adams, M. S.; Smith, S. G.; Bohnsack, J. A.; Luo, J.: SUSTAINABILITY RISK ASSESSMENT OF FLORIDA’S CORAL-REEF FISHERIES (20964)

573 Miller, J.; Beets, J.; Friedlander, A.; Feeley, M.; Rogers, C.: A 25-YEAR MONITORING PROGRAM REVEALS SIGNIFICANT DECREASES IN CORAL, BUT INCREASES IN REEF FISH ABUNDANCE AND BIOMASS ON REEFS IN ST. JOHN, US VIRGIN ISLANDS (20619)


575 Hilomen, V. V.; Campos, W. L.; Alino, P. M.: PROBLEMS IN CAPTURE FISHERIES IN RAGAY GULF, PHILIPPINES: COST OF INACTION (28992)


577 Bayate, D. E.; Perez, A. G.; Ramiscal, R. V.: RECENT BFAR INITIATIVES RELATING TO EAFM (29193)

578 Bohnsack, J. A.; Ault, J. S.; Smith, S. G.; Blondeau, J.: INNOVATIONS AND ADVANCEMENTS OF FISHERY-INDEPENDENT; VISUAL MONITORING OF CORAL REEF FISHERY LANDINGS IN POHNPEI, FEDERATED STATES OF MICRONESIA (28386)


66 HUMAN-NATURAL COUPLED REEF SYSTEMS: INTEGRATING INDIGENOUS AND WESTERN SCIENCES FOR SUSTAINABLE MANAGEMENT SOLUTIONS

Chair(s): Nicole Crane, nicole@cabrillo.edu
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613 Pada, D. N.; Hidayat, N. I.; Ahmadia, G. N.: USING SCIENCE TO INFORM TRADITIONAL MARINE RESOURCE MANAGEMENT (SASH) IN THE BIRD’S HEAD SEASCAPPE MPA NETWORK, RAJA AMPAT, INDONESIA (28300)

614 Pihan, H.: EFFECTS OF CORAL DISEASE ON KRAKATAU ISLANDS, INDONESIA (28897)

69 EVALUATING THE ECOLOGICAL, SOCIAL AND ECONOMIC EFFECTIVENESS OF MPAS.

Chair(s): Gabby Ahmadia, gabby.ahmadia@wwfus.org
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Helen Fox, fox.conservation@gmail.com
Nicolás Pascual, nppacific@gmail.com


635 Simon, A. P.; Sabban, F. B.; Chipeco, C. B.; Ticon, V. S.: TROPHIC SPECTRUM ANALYSIS OF REEF FISHERIES IN TWINROCKS MARINE SANCTUARY, NORTHERN VERDE ISLAND PASSAGE, PHILIPPINES (28639)


638 Peterson, K. A.: Hughes, T. P.: NO-FISHING RESERVES PROTECT CORAL ASSEMBLAGES (27811)

639 Raynal, J. M.; Comeros-Raynal, M. T.; Levine, A. S.: AMERICAN SAMOA’S MARINE MANAGED AREAS: DESIGNING AND ASSESSING MARINE RESOURCE MANAGEMENT IN A MULTI-LEVEL GOVERNANCE SYSTEM (27770)
75 PREVENTION, ASSESSMENT, AND MITIGATION OF CORAL REEF IMPACTS RESULTING FROM PLANNED AND UNPLANNED HUMAN ACTIVITIES

Chair(s): Jocelyn Karazsia, jocelyn.karazsia@noaa.gov
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688 Bourke, R. E.; Aveni-Deforge, K.: QUANTIFYING PROJECT IMPACTS AND MITIGATION OFFSETS BY PARTITIONING ECOSYSTEM FUNCTIONS AND SERVICES (28998)

689 Wehner, D.; Carrubba, L.: COLLABORATION BETWEEN RESOURCE AGENCIES AND DOD FURTHERS UNDERWATER INVESTIGATION AND CLEANUP AT FORMER DEFENSE SITES IN VIEQUES AND CULEBRA, PR (29395)

Bybee, D. R.; Hyde, S. K.; Smith, B. L.: LONG-TERM CORAL REEF MONITORING NEAR A COASTAL TECHNOLOGY PARK IN HAWAII (29270)

Cortes, D.; Anlauf, H.; Kurten, S.; Kattan, Y.; Carvalho, S.: CROSS-SHELF PATTERNS OF CORAL SIZE-FREQUENCY DISTRIBUTIONS AT FARASAN ISLANDS (SOUTHERN RED SEA) AND ITS RELATIONSHIP WITH PREVAILING ENVIRONMENTAL CONDITIONS (28440)

85 HAWAII’S CORAL REEFS IN 2050: THE PATH TO SURVIVAL

Chair(s): Michael Field, mfield@usgs.gov
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Alan Friedlander, friedlan@hawaii.edu


712 Martin, R. A.: THE WEST HAWAI’I CORAL RECRUITMENT PROJECT (28996)


714 Gorospe, K. D.; Williams, J.; Heenan, A.; Sparks, R.; Walsh, B.; Murakawa, P.; Ogawa, T.; Donahue, M.: UNDERSTANDING DRIVERS OF HERBIVORE ABUNDANCE TO SUPPORT RESILIENCE-BASED MANAGEMENT IN HAWAII (29022)
**TUESDAY ORALS**

**03 THE USE OF GENOMIC, PROTEOMIC AND TRANSCRIPTOMIC TECHNIQUES IN CORAL REEF STUDIES**

Chair(s): Christian Voolstra, Christian.voolstra@kaust.edu.sa
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Location: 313 B

09:30

09:45
Helmkampf, M.; Frazier, M.; Bellinger, R.; Takabayashi, M.: HOLOTRANSCRIPTOME ANALYSIS REVEALS SYMBIONDIM CLADE IDENTITY INFLUENCES CORAL HOST GENE EXPRESSION (30010)

10:00
Wessels, W.; Ball, E. E.; Cooke, I.; Shinzato, C.; Hayward, D. C.; Miller, D. J.: UNRAVELING SOFT CORAL EARLY DEVELOPMENT AND ITS MOLECULAR BASES (28789)

10:15
Tresguerres, M.; Pérez, S. O.; Barott, K. L.: CELLULAR LOCALIZATION AND POTENTIAL PHYSIOLOGICAL ROLES OF VACUULAR PROTON ATPASE, SODIUM POTASSIUM ATPASE, SLCA5, AND PLASMA MEMBRANE CALCIUM ATPASE IN CORALS (29734)

10:30
Stuhr, M.; Reymond, C.; Kucera, M.; Blank-Landeshammer, B.; Kollipara, L.; Rieder, V.; Rahnenführer, J.; Sickmann, A.; Westphal, H.: APPLICATION OF MASS SPECTROMETRY-BASED PROTEOMICS TO STUDY LARGER BENTHIC FORAMINIFERA AND THEIR RESPONSES TO ENVIRONMENTAL CHANGES (28735)

10:45
Urrutia-Figueroa, V. E.; Metodiev, M. V.; Wiedenmann, J.; Bibby, T. S.; Suggett, D. J.; Smith, D. J.: ENVIRONMENTAL REGULATION OF THE SYMBIONDIM PROTEOME (29207)

11:00

11:15
Andrade, R., N. A.; Moya, A.; Miller, D. J.: ANALYSIS OF THE COMPETITION BETWEEN LOBOPHYTUM PAUCIFLORUM WITH TWO HARD CORALS (29069)

**04 SPECIATION, HYBRIDIZATION AND SPECIES BOUNDARIES IN CORAL REEF Ecosystems**

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Libby Liggins, l.liggins@massey.ac.nz

Location: 313 B

13:45
Wu, T.; Quattrini, A. M.; McFadden, C. S.: A NEXT-GENERATION APPROACH TO SPECIES DELIMITATION IN THE SPECIES OCTOCORAL GENUS, SINULARIA (28271)

14:00
Wham, D. C.; LaJeunesse, T. C.: NOTHING IN SYMBIONDIM BIOLOGY MAKES SENSE EXCEPT IN THE LIGHT OF CORRECT SPECIES IDENTIFICATION (29684)

14:15
Flot, J. F.: DELIMITING REEF SPECIES USING HETEROYGOZITY (29816)

14:30
Gelin, P.; Fauvelot, C.; Postaire, B.; Magalon, H.: SPECIES DELIMITATION AND CLUSTERING METHODS HELP IN REVEALING CRYPTIC DIVERSITY IN THE POCILLOPORA CORAL GENUS (29728)

14:45
Baird, A. H.; Flot, J. F.; Sinniger, F.; Harii, S.: SPECIES BOUNDARIES IN TABULAR ACROPORA SPECIES IN OKINAWA (29103)

15:00
Sheets, E. A.; Warner, P.; Palumbi, S. R.: CRYPTIC DIVERSITY UNPREDICTABLY AFFECTS MEASUREMENTS OF POPULATION DIFFERENTIATION IN CORALS (28246)

15:15

15:30

16:15
Whitney, J. L.: Karl, S. A.: DIVERGENCE IN A SINGLE TRAIT DRIVES INCipient SYMPATRIC SPECIATION IN CORAL REEF FISH (30117)

16:30

16:45

17:00
Fritts-Penniman, A. L.; Mahardika, G. N.; Barber, P. H.: GENOMIC EVIDENCE FOR ECOLOGICAL SPECIATION IN CORAL ASSOCIATED NUDIBRANCHS (29757)

17:15
Garcia, E.; Giacomo, B.: GENOMIC ANALYSIS OF DISJUNCT PACIFIC AND SEA OF CORTEZ POPULATIONS OF A REEF FISH (GENUS: ANISOTRREMUS) (29954)

17:30

17:45
Fogarty, N. D.; Hightshoe, M. V.; Bock, M. E.; Bux, F.; Baums, I. B.: EXTENSIVE PHENOTYPIC VARIATION IN CARIBBEAN ACROPORID HYBRIDS IS LIKELY A MECHANISM FOR ADAPTATION TO CHANGING ENVIRONMENTS (29469)

18:00

**07 BIODIVERSITY, BIOGEOGRAPHY AND EVOLUTION OF CORAL REEF ORGANISMS**

Chair(s): Danwei Huang, huangdanwei@nus.edu.sg
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James D. Reimer, jreimer@sci.u-ryukyu.ac.jp
Gustav Paulay, paulay@flmnh.ufl.edu

Location: 311

09:30
Cowman, P. F.; Parravicini, V.; Kulbicki, M.; Floeter, S.: TEMPORAL PATTERNS OF ENDEMISM AND PROVINCIALITY IN TROPICAL REEF FISHES (29433)

09:45
Wulandari, R.: POPULATION GENETICS OF HUMPHEAD WRASSE (CHELIUSINUS UNDULATUS) IN ANAMABAS ISLANDS, INDONESIA BASED ON D-LOOP MITOCHONDRIAL DNA (28803)

10:00
Keith, S. A.: CAN COMPETITION MAINTAIN BIOGEOGRAPHIC BORDERS? (28349)

10:15
Hodge, J. R.; Bellwood, D. R.: THE GEOGRAPHY OF SPECIATION IN CORAL REEF FISHES: THE RELATIVE IMPORTANCE OF BIOGEOGRAPHICAL BARRIERS IN SEPARATING SISTER-SPECIES* (28186)
11 ANIMAL-ALGAL SYMBIOSIS: MOLECULAR, PHYSIOLOGICAL AND GENETIC INTERACTIONS, PROCESSES AND ADAPTATIONS

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Location: 313 C

10:00 Guibert, I.; Wecker, P.; Berteaux-Lecellier, V.; Lecellier, G.: A TRANSCRIPTOMIC PIPELINE TO UNDERSTAND THE SYMBIONDUM COMMUNITY CHANGE AND FITNESS IN POCILLOPORA DAMICORNS DURING THERMAL STRESS (29679)
10:30 Ricci, C. A.; Ledbetter, B. E.; Chowdhury, S.; Mydlarz, L.: EXTRACELLULAR PROTEINE RESPONSE OF THERMALLY STRESSED SYMBIODINIUM: IMPLICATIONS FOR SYMBIOSIS BREAKDOWN DURING BLEACHING (28775)
10:45 Dow, E. G.; Rodriguez-Lanetty, M.: A CNIDARIAN-SPECIFIC IONOTROPIC GLUTAMATE RECEPTOR LINEAGE FUNCTIONALLY INVOLVED IN IMMUNITY (28405)
11:45 Cuning, R.; Muller, E. B.; Gates, R. D.; Nisbet, R. M.: SIMPLE DYNAMIC ENERGY BUDGET MODELS FOR CORAL-ALGAL SYMBIOSIS (29000)
12:00 Conti-Jerpe, I. E.; Moynihan, M. A.; Thompson, P. D.; Wong, C. W.; Duprey, N.; Baker, D. M.: NOT ALL CORALS DINE IN: VARIATION IN NICHE PARTITIONING BETWEEN CORALS AND THEIR SYMBIODINIUMINDICATES A RANGE OF SYMBIOSES (29304)


17:15 Ghoshal, A.; Eck, E.; Morse, D. E.: WAVELENGTH-SPECIFIC FORWARD MIE SCATTERING BY BRAGG-REFLECTIVE IRIDOCYTES CONTROLS THE INTERNAL PHOTIC ENVIRONMENT IN GIANT CLAMS (27848)

17:30 Koch, J. C.; Weis, V. M.: CARBONIC ANHYDRASE ACTIVITY IN THE SYMBIOTIC SEA ANEMONE ANTHOPLEURA ELEGANTISSIMA ACROSS A LATITUDDINAL GRADIENT (29551)


18:00 Sabourault, C.; Dani, V.; Priouzeau, F.; Pagnotta, S.; Mondin, M.; Barby, P.; Loubat, A.; Salzet, M.: CHARACTERIZATION OF SYMBIOSOME MEMBRANES IN A CNIDARIAN-DINOFAGELLATE ENDOSYMBIOSIS (29705)

12 THE CORAL REEF MICROBIOME AND REEF MICROBIAL INTERACTIONS AND CHANGES

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Location: 313 A

09:30 Mcllroy, S. E.; terHorst, C. P.; Teee, M.; Coffroth, M. A.: FUNCTIONAL SIGNIFICANCE OF SYMBIOTIC DIVERSITY WITHIN A CORAL-ALGAL ASSOCIATION (29449)

09:45 Miller, D. J.; Mason, B. M.; Shinzato, C.; Augustin, R.; Hayward, D. C.; Ball, E.: MANIPULATION OF THE ASSOCIATED MICROBIAL COMMUNITY BY THE CORAL HOST IN THE ACROPORA MILLEPOLA HOLOBIUM (27917)


11:00 Yang, S. Y.; Reimer, J. D.; Taira, Y.; Yamazaki, T.; Jenko-Kodama, H.: BACTERIAL AND EUKARYOTIC COMMUNITIES ASSOCIATED WITH PALYTHOA TUBERCULOSA – DIVERSITY AND RELATION TO PALYTHOXIN DISTRIBUTION PATTERNS IN JAPAN (29177)


11:45 Bourne, D. G.; Sato, Y.; Rattel, T.; Willis, B. L.: MICROBIAL METABOLIC SHIFTS DURING IN-SITU DEVELOPMENT OF CORAL BLACK BAND DISEASE (29044)

12:00 Waikel, P. A.; Gilleot, P. M.; Richardson, L. L.: POTENTIAL ROLE OF DIMETHYLSULFONIOPROPIONATE IN BLACK BAND DISEASE ETIOLOGY AND PERSISTENCE (29784)

12:15 Bhedi, C. D.; Prevatte, C. W.; Lookadoo, M. S.; Waikel, P. A.; Campagna, S. R.; Richardson, L. L.: INFLUENCE OF TEMPERATURE VARIATION ON QUORUM SENSING SIGNAL PRODUCTION BY BLACK BAND DISEASE HETEROTROPHIC BACTERIA (29578)


12:45 Pratte, Z. A.; Peters, E. C.; Richardson, L. L.: GALL CRABS, CORALS, AND WHITE PLAGUE, HOW ARE THEY ALL CONNECTED? (28480)

13:00 Brumlely, D. R.; Fernandez, V. L.; Garren, M.; Stocker, R.: DIRECT VISUALIZATION OF MOTILE BACTERIAL PATHOGENS TARGETING THEIR CORAL HOST (29744)


13:55 Shiu, J. H.: THE THERMAL TOLERANCE OF CORAL-ASSOCIATED BACTERIAL COMMUNITIES ACCLIMATED TO TEMPERATURE STRESS BASED ON SEASONAL THERMAL HISTORY (28052)


14:30 Carter, A. L.; Smith, J. E.: COMPETITIVE STRATEGIES OF THE CORALLIMORPH RHODACTIS HOWESI: ALLELOPATHIC EFFECTS ON CORAL MICROBIOLOGIES AT PALMYRA ATOLL (29686)

14:45 Rachmawati, R.; Apprill, A.; Barber, P. H.: VARIATIONS IN CORAL MICROBIOLOGIES AMONG INDONESIAN REEFS WITH DIFFERENTIAL LEVELS OF BLEACHING (29884)


* REPRESENTS INVITED PRESENTATIONS
14 REPRODUCTION IN CORALS
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Robert vanWoestik, rvw@ft.edu
Location: 317 A/B
09:45 Schmidt-Roach, S.; Miller, K. J.; Andreaskis, N.: SELFING, OUTCROSSING AND SPERM DISPERSAL IN THE SCLEARTACTINIAN CORAL GONIATREAA FAVULUS (28702)
10:00 Crages, J.; Brett, A.; Guest, J.; Petersen, D.: PROJECT CORAL – DEVELOPING PROTOCOLS FOR PREDICTABLE BROADCAST CORAL SPAWNING IN CAPTIVITY (28671)
10:15 Padilla-Gamino, J. L.: ENVIRONMENTAL EFFECTS ON SEXUAL REPRODUCTION OF REEF BUILDING CORALS FROM HAWAII. (29798)
10:45 Romero-Torres, M.; Acosta, A.; Treml, E.: REPRODUCTIVE PHENOLOGY ALTERS FUNCTIONAL CONNECTIVITY FOR CORALS IN THE EASTERN TROPICAL PACIFIC (29563)
11:00 Bouwmeester, J.; Baird, A. H.; Guest, J. R.; Edwards, A. J.; Bauman, A. G.; Berumen, M. L.: LATITUDDINAL VARIATION IN SPAWNING SYNCHRONY OF ACROPORA CORALS (28955)
14:00 Halan, Z. B.; Saklan, A.; Romero, F. G.; Villanueva, R. D.: REPRODUCTIVE PERIODICITY OF BROODING CORAL SPECIES IN SOUTHERN WESTERN PHILIPPINES (29186)
14:30 Puisy, A.; Fouqueau, L.; Recanzone, T.; Sidobre, C.; Planes, S.; Hedouin, L.: USE OF SEXUAL REPRODUCTION TO ACCLIMATE EARLY LIFE STAGES OF CORALS TO CLIMATE CHANGE: WHAT DOES NOT KILL ME MAKES ME STRONGER? (29780)
15:00 Humanes, A.; Willis, B. L.; Fabricius, K. E.; Negri, A. P.: CUMULATIVE EFFECTS OF SEDIMENTS, ORGANIC NUTRIENT ENRICHMENT AND HIGH TEMPERATURES COMPROMISE THE EARLY LIFE HISTORY STAGES OF THE CORAL ACROPORA TENUIS (28460)
15:15 Miller, M. W.; Bright, A. J.; Cameron, C. M.; Pausch, R. E.; Williams, D. E.: IMPROVING ESTIMATES OF LARVAL PRODUCTION, SURVIVORSHIP, AND COMPETENCY IN TWO IMPERILED CARIBBEAN BROADCASTERS (27895)
16 16 Larval recruitment on coral reefs facing global change
Chair(s): David Lecchini, lecchini@univ-perp.fr
Danielle Dixon, danielle.dixon@gmail.com
Location: 317 A/B
16:45 Simpson, S., D.; et al. (many valued collaborators and students): SOUNDTRACK OF THE ANTHROPOCENE: IMPACTS OF GLOBAL CHANGE ON LARVAL RECRUITMENT IN THE 21ST CENTURY (28690)
17:00 McCormick, M. I.; Chivers, D. P.; Holmes, L.; Simpson, S.; Meekan, M. G.; Ferrari, M. C.: SOUNDS LIKE TROUBLE: ANTHROPOGENIC SOUND IMPACTS FISH REEF DYNAMICS* (27818)
17:15 Spies, N. P.; Murphy, J. W.; Martinez, J.; Seneca, F. O.; Lyman, A.; Richmond, R. H.: REEF SCENT: HOW BROODED CORAL LARVAE FROM A TOUGH CORAL SMELL THEIR WAY TO A NEW HOME* (28404)
17:30 Benkwitt, C. E.; Dixon, M. A.: NON-CONSUMPTIVE EFFECTS OF NATIVE AND INVASIVE PREDATORS ON RECRUITMENT OF CORAL-REEF FISHES (28838)
18:00 Robitach, V.; Lozano-Cortés, D.; Kandler, N. M.; Salas, E.; Berumen, M. L.: PRODUCTIVITY AND SEA SURFACE TEMPERATURE CORRELATE WITH PELAGIC LARVAL DURATIONS OF DAMSELFIshES IN THE RED SEA* (28911)
19 CORAL REEF STRUCTURAL DYNAMICS AND COMPLEXITY: ACCRETION VERSUS BIOEROSION AND DISSOLUTION
Chair(s): Nysa Silbiger, nysa.silbiger@uci.edu
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Renata Ferranti, renata.ferranti@sydney.edu.au
Maria Byrne, maria.byrne@sydney.edu.au
Location: 301 B
09:30 Glynn, P. J.; BLay, W. Rieg: B: INSIGHTS ON THE PERSISTENCE OF THE WELLINGTON REEF IN THE NORTHERN GALAPAGOS ISLANDS: A MODELING PERSPECTIVE (27832)
09:45 Murphy, G. N.; Perry, C. T.; Olynik, J.; Morgan, K. M.: A GEOSPATIAL ASSESSMENT OF COMMUNITY CARBONATE PRODUCTION AND BIOEROSION ON THE SOUTHERN AND WESTERN COASTS OF GRAND CAYMAN (28367)
10:00 Patterson, M. A.; Webster, J. M.; Hutchings, P.; Humblet, M.; Braga, J. C.; Yokoyama, N. G.: A NEW SPATIO-TEMPORAL RECORD OF BIOEROSION IN DEGLACIAL FOSSIL REEF SEQUENCES FROM IODP EXPEDITION 325 CORES, GREAT BARRIER REEF, AUSTRALIA (29133)
10:15 Semkowitz, C. H.; Wishak, M. M.; Kennedy, E. V.: BIOERODING SPONGES ON THE CENTRAL GREAT BARRIER REEF – A LONG-TERM PERSPECTIVE (29190)
10:30 Lubarsky, K.; Donahue, M.; Silbiger, N.: INVESTIGATING THE EFFECTS OF SUBMARINE GROUNDWATER DISCHARGE (SGD) ON CORAL GROWTH AND BIOEROSION ON TWO SHALLOW REEF PLATS IN MAUNALUA BAY, OAHU. (29687)
11:00 Caldwell, I. R.; Rodgers, K. S.; Jokiel, P. L.; Ross, M. C.; Franklin, E. C.: QUANTIFYING THE CONTRIBUTION OF SEA URFINS TO THE BIOEROSION OF HAWAIIAN CORAL REEFS (29777)


14:30 Andersson, A. J.; Cyronak, T.; Eyre, B.: A FUNDAMENTAL PARADIGM FOR CORAL REEF CARBONATE SEDIMENT DISSOLUTION (29975)

14:45 Eyre, B. D.; Cyronak, T.; Andersson, A.; De Carlo, E.; Drupp, P.: GLOBAL RESPONSE OF CORAL REEF BENTHIC CALCIUM CARBONATE DISSOLUTION TO OCEAN ACIDIFICATION (27791)

15:00 Castro-Sanguinetti, C.; Boase, Y. M.; Mumby, P. J.: DYNAMICS OF CARBONATE PRODUCTION OF HALIMEDA ON SHALLOW CORAL REEFS (28428)

15:15 Stoltenberg, L.; Cyronak, T.; Schulz, K. G.; Eyre, B.: TEMPORAL VARIATIONS IN CALCIUM CARBONATE DISSOLUTION RATES UNDER AMBIENT AND ELEVATED PCO2 IN A SHALLOW CORAL REEF LAGOON (28219)

15:30 Enríquez, S.: AN ALLOMETRIC APPROACH TO IDENTIFY THE MAIN CORAL REEF BUILDERS WHILE EXPLAINING THEIR DIFFERENTIAL CONTRIBUTION TO REEF CARBONATE BUDGETS (28721)

16:00 Figueira, W. F.; Renata, F.; Weatherby, E.; Porter, A.; Hawes, S.; Byrne, M.: ACCURACY AND PRECISION OF HABITAT STRUCTURAL COMPLEXITY METRICS DERIVED FROM UNDERWATER PHOTOGRAMMETRY (28126)

16:30 Koblizkowsky-Vidrio, T.; Figueira, W. F.; Byrne, M.; Ferrari, R.: USING PHOTOGRAMMETRY TO QUANTIFY THE CONTRIBUTION OF SIX MORPHOLOGIES OF SCLERACTINIAN CORALS TO THE HABITAT COMPLEXITY IN A REEF: A RUGOSITY INDEX. (28756)


17:00 Burns, J. H.; Delparte, D.; Gates, R. D.; Takabayashi, M.: UTILIZING INNOVATIVE THREE-DIMENSIONAL RECONSTRUCTION TECHNIQUES TO ENHANCE ECOLOGICAL AND BIOLOGICAL STUDIES OF CORAL REEFS (28924)

17:15 Ferrari, R.; Figueira, W. F.; Boube, T.; Adam, A. A.; Byrne, M.: QUANTIFYING ANNUAL CORAL GROWTH AND EROSION USING 3D MODELS (29024)

17:30 Rogers, A.; Mumby, P. J.: THE INFLUENCE OF STRUCTURAL COMPLEXITY ON CORAL REEF PRODUCTIVITY (28040)

17:45 Alvarez-Flip, L.; Horta-Puga, G.; Gonzalez-Posada, A. M.; González-Barrios, F. J.; Carricart-Ganivet, J. P.; Iglesias-Prieto, R.: SHIFTS IN CORAL-ASSEMBLAGE COMPOSITION DO NOT SECURE REEF FUNCTIONING (29735)

18:00 Ticzon, V. S.; Samaniego, B. R.; Mumby, P. J.; David, L. T.: MICROHABITAT USE OF JUVENILE CORAL REEF FISH IN BOLINAO-ANDA REEF COMPLEX (BARC) (29113)

20 REEF FISH ECOLOGY, CONSERVATION, AND FISHERIES: THE SCIENTIFIC LEGACY OF GLENN ALMANY

Chair(s): Mark Hixon, hixonm@hawaii.edu

Geoffrey Jones, geoffreyjones@icu.edu.au

David Feary, david.feary@nottingham.ac.uk

Location: 310 THEATER

09:30 Añonuevo, M. J.; Recamara, D. B.; Arceo, H. O.: ABUNDANCE PATTERNS OF CORAL-DEPENDENT REEF FISHES IN SELECT SITES IN THE PHILIPPINES (29099)


10:00 Boström-Einarsson, L.; Bonin, M. C.; Munday, P. L.; Jones, G. P.: DENSITY DEPENDENT HABITAT SELECTION DICTATES DISTRIBUTION OF REEF FISH FOLLOWING HABITAT LOSS (28497)


11:00 Lamb, R. W.; Aued, A. W.; Smith, F.; Salinas de León, P.; Suarez, J.; Witman, J. D.: DAMSELS IN DISTRESS: WIDESPREAD DISEASE IN GALAPAGOS REEF FISHES (29968)


11:45 Gould, A. L.; Dunlap, V. P.: HOST FISH ECOLOGY INFLUENCES SYMBIOM TRENDS POPULATION STRUCTURE AND SPECIFICITY IN A BIOMIMIC SYMBIOSIS (28063)

12:00 Bruckner, A. W.; Coward, G. K.; Monteiro, J. G.: THE STRUCTURE OF REEF FISH ASSEMBLAGES IN THE LARGEST UNINHABITED AND UNEXPLOITED ARCHIPELAGO IN THE INDIAN OCEAN (28403)


12:45 Moore, B. R.; Fauvelot, C.: SPATIAL PATTERNS IN FISHERIES, POPULATION STRUCTURE AND DEMOGRAPHY OF A HEAVILY EXPLOITED CORAL REEF FISH IN THE TROPICAL PACIFIC (29821)

13:00 Allgeier, J. E.; Valdivia, A.; Cox, C.; Layman, C.: FISHING DOWN NUTRIENTS: SELECTIVE HARVEST REDUCES NUTRIENT CAPACITY IN CORAL REEF ECOSYSTEMS (26597)

**25 INDICATOR TAXA: WHAT CAN THEY TELL US ABOUT THE PAST, PRESENT AND FUTURE FOR CORAL REEFS?**

Chair(s): Pamela Hallock Muller, pmuller@usf.edu
Martina de Freitas Prazeres, m.prazeres@uq.edu.au
Willem Renema, willem.renema@naturalis.nl
Catia F. Barbosa, catia@geoq.uff.br

Location: 303 A/B


16:45 Lozano, D.; Berumen, M.: COLONY SIZE-FREQUENCY DISTRIBUTION OF POCILLOPORID JUVENILE CORALS ALONG A NATURAL ENVIRONMENTAL GRADIENT IN THE RED SEA (28435)

17:00 Schmidt, C.; Morard, R.; Prazeres, M.; Barak, H.; Kucera, M.: RETENTION OF THERMAL TOLERANCE IN THE INVASIVE FORAMINIFERA AMPHISTEGINA LOBIFERA FROM THE EASTERN MEDITERRANEAN AND THE GULF OF AQABA (29314)


17:30 Narayan, G. R.: ARE ZANZIBAR’S REEFS UNDERGOING ECOLOGICAL CHANGE? FORAMINIFERA BIO-INDICATORS FOR MONITORING AND ASSESSMENT OF REEF ECOSYSTEMS IN THE WESTERN INDIAN OCEAN (28602)


18:00 McCutcheon, A. L.; McKenna, S. A.: BENTHIC FORAMINIFERA AND CORALS AS INDICATORS OF WATER QUALITY IN WAR IN THE PACIFIC NATIONAL HISTORICAL PARK. GUAM, USA (28718)

**27 THE ROLE OF MACROINVERTEBRATES ON CORAL REEFS**

Chair(s): Marc Slattery, slattery@olemiss.edu
Georgios Tsounis, georgios.tsounis@csun.edu
Howard R. Lasker, hlasker@buffalo.edu
Deborah Gochfeld, gochfeld@olemiss.edu

Location: 312

09:45 Hamman, E. A.: SPATIAL DISTRIBUTION OF DAMAGE AFFECTS CORAL TISSUE REGENERATION, SKELETAL GROWTH, AND MORPHOLOGY (28732)

10:00 Neo, M. L.; Eckman, W.; Vicentuan, K.; Teo, S.; Ang, A.; Todd, P. A.: MORE THAN JUST A PRETTY MANTLE: THE ECOLOGICAL SIGNIFICANCE OF GIANT CLAMS IN CORAL REEF ECOSYSTEMS (28243)

10:15 Kramer, M. J.; Bellwood, O.; Bellwood, D. R.: WHERE ARE THE CRUSTACEA ON CORAL REEFS, AND DOES IT MATTER? (28503)


10:45 Vidal-Ramirez, F.; Pantos, O.; Tyson, G. W.; Dove, S.: ANNUAL HOLOTHURIAN-MICROORGANISM INTERACTIONS UNDER DIFFERENT IPCC PCO2-TEMPERATURE SCENARIOS (29255)

11:00 deVries, M. S.; Stock, B. C.; Christy, J. H.: A VISCIOUS CORAL REEF PREDATOR: MORPHOLOGICAL SPECIALIZATION BROADENS THE DIET OF A MANTIS SHRIMP (29795)
28B CORAL REEFS IN EXTREME, COMPROMISED AND MARGINAL ENVIRONMENTS, AND THEIR ROLES AS REFUGIA - LOW DIVERSITY, NON-REEF AND HIGH LATITUDE REEF SYSTEMS

Chair(s): Chris Perry, c.perry@exeter.ac.uk
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Ryan P. Moyer, ryan.moyer@myfwc.com
Stephen Lewis, stephen.lewis@jcu.edu.au

Location: 308 A/B

09:30 Yamano, H.: MARGINAL CORAL REEFS AND CORAL COMMUNITIES IN JAPAN (29388)


10:15 Higuchi, T.; Agostini, S.; Yuyama, I.: COLD STRESS RESPONSES OF TEMPERATE ZONE CORALS (28433)

10:30 Ross, C. L.; Schoepf, V.; Falter, J. L.; McCulloch, M. T.: GROWTH AND PHYSIOLOGY OF THE CORAL TUBULARIA RENIFORMIS IN BREMER BAY, WESTERN AUSTRALIA (34.4°S): IMPLICATIONS FOR THE SUITABILITY OF HIGH-LATITUDE REFUGIA (29101)


11:00 Goyen, S. J.; LaJeunesse, T. C.; Fujise, R.; Nitschke, M. R.; Ralph, P. J.; Suggett, D. J.: MOLECULAR AND PHYSIOLOGICAL ACCLIMATISATION REQUIRED FOR CORALS TO THRIVE WITHIN SOUTHERNLY HIGH LATITUDE REEF COMMUNITIES OF EASTERN AUSTRALIA (29779)

11:15 Pearson, D. J.; Schleyer, M. H.: RESPONSES OF COMPLEX VS ROBUST CLADE CORALS FROM HIGH LATITUDE SOUTH AFRICAN REEFS TO WARMING AND ACIDIFICATION. (28634)

29 MESOPOTHIC AND DEEP-SEA CORAL ECOSYSTEMS: A TRIBUTE TO THE PIONEERING EFFORTS OF DR. JOHN ROONEY

Chair(s): Gal Eyal, gal4596@gmail.com
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Richard Appeldoorn, richard.appeldoorn@upr.edu
Heather Spalding, heather@hawaii.edu
Christina A. Kellogg, ckkellogg@uugs.gov

Location: 308 A/B

11:15 Thilakarathna, G. N.; van Keulen, M.; Keesing, J.: ROLE OF SEA URCHIN CENTROSTEPHANUS TENUSIPINUS (CLARK, 1914) AS A BIO-EROADER- IN HALL BANK REEF (32 2.002’S AND 115 42.957’E) WESTERN AUSTRALIA (28715)


15:00 Kane, C. N., Tisot, B. N.: EVALUATING POTENTIAL MECHANISMS UNDERLYING TROPHIC ASSEMBLAGE SHIFTS IN REEF FISHES FROM SHALLOW TO MESOPOTHIC DEPTHS IN HAWAI. (28224)


15:30 Muir, P. R.; Wallace, C. C.; Pichon, M.; Bridge, T. C.; Englebert, N.; Bongaerts, P.: MESOPOTHIC CORALS OF NORTHEAST AUSTRALIA: INITIAL ESTIMATES OF THE POTENTIAL FOR DEEP-REFUGE (28484)

16:15 Sih, T. L.; Cappo, M.; Kingsford, M. J.: DIVING INTO THE DEEP-END: BAITED REMOTE UNDERWATER VIDEO STATIONS (BRUVS) TO STUDY DEEP-REEF FISH IN THE GREAT BARRIER REEF, AUSTRALIA (28024)


17:00 Eyal, G.; Cohen, I.; Eyal-Shaham, L.; Ben-Zvi, O.; Loya, Y.: PHOTOACCLIMATION AND INDUCTION OF LIGHT-ENHANCED CALCIFICATION IN THE MESOPOTHIC CORAL EUPHYLLIA PARADIVISA (28808)


17:30 Sinniger, F.; Prasreta, R.; Harii, S.: HIGH BIODIVERSITY OF MESOPOTHIC CORALS IN OKINAWA AND ITS IMPORTANCE IN A CHANGING WORLD. (29422)

18:00 Prasreta, R.; Sinniger, F.; Yoriifujii, M.; Nakamura, T.; Yuen, Y. S.; Harii, S.: ACCLIMATION OF ADULT AND JUVENILE MESOPOTHIC SERiatOPHORA HYSTRIN TO SHALLOW REEF HABITATS (29381)


* REPRESENTS INVITED PRESENTATIONS
30 CORAL BLEACHING: MONITORING, MANAGEMENT RESPONSES AND RESILIENCE

Chair(s): Keisha Bahr, kbahr@hawaii.edu
Mark Eakin, mark.eakin@noaa.gov
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Kulei Rodgers, kulei@hawaii.edu
Gregor Hodgson, gregor@reefcheck.org
Britt Parker, britt.parker@noaa.gov
Andrea Gomez, magome@gmail.com

Location: 314


10:00 Bahr, K. D.; Jokiel, P. L.; Rodgers, K. S.: CORAL BLEACHING EVENTS IN KANE’OHE BAY, OAHU HI: WHAT HAVE WE LEARNED? (28807)


11:00 Rivera-Sosa, A.; Mutizú-Castillo, A. C.; McField, M.; Arias-González, J. E.: CORAL BLEACHING IN TELA, HONDURAS AND THE Mesoamerican Reef Region (29058)

11:15 Hughes, T.: THE 2016 CORAL BLEACHING EVENT IN AUSTRALIA (30169)


14:30 Fujimura, A. G.; Mitarai, S.: VARIABILITY OF TEMPERATURE-INDUCED BLEACHING WITHIN AND AMONG CORAL COLONIES (28291)

14:45 Ritson-Williams, R.; Gates, R.: PROCESSES DRIVING CORAL RESILIENCE TO BLEACHING (29511)

15:00 Bigot, L.; Obura, D. O.; Nicet, J. B.; Benzoni, F.; Chabanet, P.: ARE WE APPROACHING A LIMIT OF RESILIENCE TO REPEATED BLEACHING OF CORAL COMMUNITIES IN MAYOTTE, SW INDIAN OCEAN? (29252)


16:15 Tremblay, P.; Gori, A.; Maguer, J. F.; Hoogenboom, M.; Ferrier-Pages, C.: HETEROOTROPHY PROMOTES PHOTOSYNTHETIC TABULATION IN A SYMBIOTIC CORAL DURING THERMAL STRESS (28250)

16:45 Burdick, D. R.; Reynolds, T. C.; Houk, P.; Brown, V. A.; Raymundo, L. J.: HOME IS WHERE THE WAVES ARE: CORALS IN GUAM’S EXPOSED REEF FRONTS ARE RESILIENT TO LOCAL STRESSORS BUT VULNERABLE TO REGIONAL WARMING (29170)

17:00 Marcelino, L. A.: CORAL SKELETAL LIGHT SCATTERING AND SUSCEPTIBILITY TO THERMAL BLEACHING (29452)

17:15 Suggett, D. J.; Nitschke, M. R.; Kikuchi, R. K.; Leggat, W.; Smith, D. J.; Voolstra, C. R.; Warner, M. E.: PHOTOPHYSIOLOGICAL TRAITS ARE GLOBALLY DIAGNOSTIC OF REEF CORAL SUSCEPTIBILITY TO THERMALLY INDUCED BLEACHING (28471)


17:45 Lewis, C. L.; Neely, K. L.; Richardson, L. J.; Rodríguez-Lanetty, M.: GREATER DIVERSITY IN SYMBIOTYPES WITHIN FLORIDA DENDROGYRA CYLINDRUS: PERSISTENT SHIFT IN DOMINANT SYMBIOTYPES AND EVIDENCE OF CRYPTIC NOVEL CLADE (29745)

18:00 Swain, T. D.; Backman, V.; Marcelino, L. A.: SYMBIONDIM THERMOTOLERANCE AND CORAL SUSCEPTIBILITY TO BLEACHING (28751)

38 WATERSHED IMPACTS ON CORAL REEFS: LAND BASED SOURCES OF POLLUTION

Chair(s): Celia Smith, celia@hawaii.edu
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Deborah Bass, deb.bass@terrain.org.au
Donna Audas, donna.audas@gbmpa.gov.au

Location: 306 A/B


10:00 Lewis, S.; Dunbar, R.; Mucciarone, D.: CAN CORALS REVEAL LAND-USE CHANGE? TRACER ELEMENT AND ISOTOPE RECORDS SUGGEST PATTERNS OF LAND-USE CHANGE IN THE REPUBLIC OF PALAU. (30078)


10:45 Amato, D. W.; Schuler, C.; Gibson, V.; Baker, L.; Alegado, R. A.; Glenn, C. R.; Dalai, H.; Smith, C. M.: ALGAL BIOASSAYS SHOW LAND-BASED, ANTHROPOGENIC NITROGEN IS DELIVERED TO REEF BIOTA BY GROUNDWATER IN HAWAII AND AMERICAN SAMOA (29691)
14:00 Lewis, S. E.; Bartley, R.; Bainbridge, Z.; Wilkinson, S.; Burton, J.; Bui, E.: DETERMINING THE MOST DETRIMENTAL SEDIMENT ON CORAL REEFS: TRACING THE SEDIMENT ON THE REEF BACK TO A CATCHMENT SOURCE (29308)

14:15 Li, X. B.; Zhou, G. W.; Huang, H.: POTENTIAL MECHANISMS OF INTENSIVE AQUACULTURE EFFLUENTS ON A CORAL REEF IN THE SOUTH CHINA SEA: IN SITU STUDIES (27827)

14:30 Rocker, M. M.; Fabricius, K. E.; Willis, B. L.; Bay, L. K.: TRADE-OFFS AND VARIATION IN INSHORE CORAL HEALTH AND BIOCHEMICAL CONDITION ALONG WATER QUALITY GRADIENTS ON THE GREAT BARRIER REEF, AUSTRALIA (29353)

14:45 Gordon, S. E.; Goatley, C. H.; Tebbett, S. B.; Bellwood, D. R.: THE ROLE OF SEDIMENT CHARACTERISTICS IN HERBIVORE DETERRENCE ON CORAL REEFS (28551)


15:05 Smith, C. M.; Dailey, M. L.; Van Houtan, K. S.: IMPAIRED ALGAL TISSUES REGAIN LOW ARGinine LEVELS AFTER SHORT TIMECOURSE IN LOW NUTRIENT WATERS. (30035)


15:35 Macduff, S. D.; Spies, N.; Murphy, J.; Richmond, R. H.: A NEW WAY OF MEASURING CORAL HEALTH AT LAOLAO BAY, SAIPAN (29860)

15:45 Seneca, F. O.; Richmond, R. H.: GOT BIOMARKERS? TRANSCRIPTOMICS TO RESCUE CORAL HEALTH (29629)

15:50 Kroon, F. J.; Thorburn, P.; Schaffelke, B.; Whitten, S.: TOWARDS PROTECTING THE GREAT BARRIER REEF FROM LAND-BASED POLLUTION (28280)

16:00 Brodie, J. E.: WILL WE MANAGE TERRESTRIAL POLLUTANT RUNOFF SUFFICIENTLY TO SAVE THE GREAT BARRIER REEF IN THE FACE OF CLIMATE CHANGE? (28036)


16:20 Davis, A. M.: THE CHALLENGES OF MANAGING SUGARCANE CULTIVATION IN THE GREAT BARRIER REEF CATCHMENT AREA (28420)


16:45 Fuchs, C. E.; Adam, T. C.; Burton, D. E.; Dun, A.: SEDIMENT REMOVAL INCREASES TURF ALGAE GRAZING AND ALTERS ALGAL COMMUNITY COMPOSITION ON CORAL REEFS (29141)

16:50 Anderson Tagarino, K. L.: A FIVE YEAR ASSESSMENT OF CORAL IN FAGA‘ALU BAY, AMERICAN SAMOA - HAS FIVE YEARS OF MANAGEMENT MADE AN IMPACT? (27999)

17:00 Saunders, B. J.; Parsons, M. J.; Parnum, I. M.: A PASSIVE ACOUSTIC SURVEY OF FISH SOUND PRODUCTION AT RILEY’S HUMP WITHIN TORTUGAS SOUTH ECOLOGICAL RESERVE: IMPLICATIONS REGARDING SPAWNING AND HABITAT USE (27909)

17:10 Boswell, K. M.: EXAMINING THE WIDE BAND FREQUENCY RESPONSES OF COMMON REEF FISHES-COMPARISONS BETWEEN MODELS AND MEASUREMENTS (29418)

17:20 Campanella, F.; Taylor, J. C.: ACOUSTIC DIVERSITY AND BEHAVIOR OF CORAL REEF FISH AGGREGATIONS FROM SONAR SURVEYS (29625)

17:30 Saunders, B. J.; Parsons, M. J.; Parnum, I. M.; Becker, A.; Harvey, E. S.: A TRIAL OF IMAGING SONAR SYSTEMS IN COMBINATION WITH STEREO-VIDEO CAMERAS (29342)
17:45 Hansen, I. M.; Pettersen, R.; Ekehaug, S. O.; Aas, L. M.; Tassara, L.; Geraudie, P.; Byttingvik, J.: UNDERWATER HYPERSONTALIMAGING OF A COLD-WATER CORAL REEF (28373)

18:00 Santos, A. B.; Soriano, M. N.: 3D MAPPING OF SEABED BATHYMETRY USING TEARDROP AND SIDESCAN SONAR (29239)

54 CONSERVATION RESEARCH FOR SMALL-ISLAND NATIONS: CLIMATE CHANGE, FISHERIES, TOURISM AND LAND-USE CHANGE

Chair(s): Takashi Nakamura, takasuke@sci.u-ryukyu.ac.jp
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Peter Houk, peterhouk@gmail.com
Robert Van Woestik, rrw@ftt.edu
Kaoruko Miyakuni, kaorucom@tm.u-ryukyu.ac.jp

Location: 303 A/B

09:30 Nakamura, T.; Yuen, Y.; Goueoz, M.; Golbou, Y.: CHALLENGES FOR CONSERVING PALAUS CORAL COMMUNITIES BY P-CORIE (28123)


10:00 Kurihara, H.; Takashi, K.; Himura, I.; Hongo, C.; Watanabe, A.; Otto, E.; Golbou, Y.; Mabilleau, Y.: SOCIO-ECOLOGICAL IMPLICATION OF HUMAN MULTI-IMPACTS ON CORAL REEF ECOSYSTEM AND PALAU AS A CASE STUDY* (29885)


10:30 Yuen, Y. S.; Nakamura, T.; Rengil, G.: TEMPERATURE VARIATION AND CORAL COMMUNITY STRUCTURE OF MESOPHOTIC REEF ECOSYSTEM IN PALAU (28514)

10:45 Kimura, T.; Rengil, G.; Sam, K.; Goueoz, M.; Golbou, Y.: PROTECTED AREAS NETWORK (PAN) – NATIONAL SYSTEM FOR THE PROTECTION OF THE CORAL REEF ECOSYSTEMS IN PALAU (28772)

11:00 Guldberg, M.; Garm, A. L.; Arvedlund, M.: LONG-TERM MONITORING OF AN ASSEMBLAGE OF THE HOST ACTINIAN, HETERACTIS MAGNIFICA, IN RAS MOHAMMAD NATIONAL PARK, SOUTH SINAI, EGYPT (28680)

11:15 Kramer, T. L.; Knowles, J.; Roth, L.; Constantine, S.: SCALING UP CONSERVATION AND MANAGEMENT OF SMALL ISLAND NATIONS THROUGH SCIENCE-BASED LEARNING NETWORKS AND DATA PLATFORMS (30076)

67 INFORMING MANAGEMENT DECISIONS FOR CORAL REEFS IN A WORLD OF RISK AND UNCERTAINTY

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Aaron MacNeil, macneil@glau.ca

Location: 305 A/B

09:30 Anthony, K. R.; MacNeil, M. A.; Walsh, T.: SUPPORTING SMART CHOICES FOR CORAL REEF MANAGEMENT AND POLICY IN A CHANGING WORLD (28870)

10:00 Hoegh-Guldberg, O.; Dow, S. G.: RISK AND RESILIENCE: COP21 CORAL REEFS AND THE NEXT FEW DECADES* (29345)

10:15 Reichelt, R. E.: PROTECTING THE GREAT BARRIER REEF IN THE 21ST CENTURY: MANAGING COMPLEXITY AND RISK IN UNCERTAINTY* (28848)

10:30 McLeod, E.; Parker, B. A.: CHALLENGES AND GUIDANCE INTEGRATING CLIMATE CHANGE INTO CORAL REEF PLANNING AND MANAGEMENT* (28890)

10:45 Salm, R. V.: ADDRESSING UNCERTAINTY: ENABLING APPLICATION OF SCIENCE TO CORAL REEF CONSERVATION POLICY AND PRACTICE* (28234)

11:00 Harris, J. L.: Maynard, J. A.; Estradivari, S.; Ahmadia, G.: PLANNING FOR THE FUTURE: INCORPORATING GLOBAL AND LOCAL SCALE DATA TO HELP MANAGERS PRIORITIZE CONSERVATION EFFORTS (28623)


11:30 Kareiva, P. M.: Marvier, M.: SHOULD ENVIRONMENTAL POLICY AND ADVOCACY FOCUS ON THRESHOLDS OR DEGRADATION? (29148)

14:00 Pandolfi, J. M.: IMPROVING SCIENTIFIC INPUT INTO CORAL REEF MANAGEMENT AND POLICY (28906)


14:30 Obura, D. O.: INVESTING IN CAPITAL – CONVERGING ON A DECISION-SUPPORT APPROACH FOR RESOURCE-POOR AND RESOURCE-RICH CONTEXTS (29635)


14:50 Oleson, K. L.; Falinski, K.; Leckey, J.; Rowe, C.; White, C.: PREDICTIVE MODELS AND TRADE-OFF ANALYSIS FOR GUIDING COST-EFFECTIVE LAND-BASED MANAGEMENT ACTIONS FOR CONSERVING CORAL REEFS (28872)

15:00 Barnes, M. D.; Oleson, K.; Haynes, M.: IDENTIFYING COST EFFECTIVE ACTIONS TO MITIGATE LAND-BASED SOURCES OF POLLUTION IN WEST MAUI THROUGH DECISION MODELS (28555)


16:30 Thompson, A. A.; Logan, M.: ASSESSING AND COMMUNICATING THE STATUS OF CORAL COMMUNITIES USING A CONDITION INDEX BASED ON MULTIPLE INDICATORS RELEVANT TO WATER QUALITY (28902)


17:30 Foster, K. B.: CONSERVING HAWAIIAN COMMERCIAL HARBOR CORAL REEF RESOURCES IN A S.M.A.R.T. WORLD BY KEVIN B. FOSTER (28913)

Burdick, D.; Houk, P.; Miller, R.: LET THE REEF BE YOUR GUIDE: AN ADAPTIVE APPROACH TO MONITORING ON GUAM (29106)
17:45  Gilby, B. L.; Olds, A. D.; Stevens, T.; Connolly, R. M.; Tibbetts, I. R.; Schlacher, T. A.: QUANTIFYING AND OPTIMISING MANAGEMENT OUTCOMES FOR INSHORE REEFS (28227)


68 MPAS AND OTHER TOOLS FOR SCIENTIFICALLY SOUND PLACE-BASED MANAGEMENT

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Jennifer O’Leary, jkoleary@calpoly.edu

Location: 302 A/B


10:00  Diorio, M.: PARTICIPATORY MAPPING: TOOLS FOR INTEGRATING LOCAL KNOWLEDGE INTO MARINE PLANNING (28072)


10:30  Morton, S.; Dieveney, B.: SCIENCE FOR STAKEHOLDERS IN MPA DEVELOPMENT AND MANAGEMENT (28394)

10:45  McKenna, S.; Carter, A.; Bryant, C.; Jarvis, J.; Rasheed, M.: ESTABLISHING INDICATORS FOR A REPORT CARD IN A COMPLEX MARINE ECOSYSTEM. (27804)

11:00  O’Leary, J. K.; Tuda, A.: ADAPTIVELY MANAGING MARINE PROTECTED AREAS FOR RESILIENCE THROUGH COLLABORATIVE LEARNING AND RESEARCH PARTNERSHIPS (27855)

11:15  Horta e Costa, B.; Claudet, J.; Franco, G.; Erzini, K.; Caro, A.; Gonçalves, E. J.: A NEW CLASSIFICATION SYSTEM FOR MARINE PROTECTED AREAS (20150)

70 DESIGN OF MPA NETWORKS FOR FISHERIES AND ECOSYSTEM MANAGEMENT

Chair(s): Vera Herigue, vera.herigue@googlemail.com
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Location: 302 A/B

13:45  Krück, N. C.; Ahmadia, G. N.; Possingham, H. P.; Riginos, C.; Treml, E. A.; Mumby, P. J.: GLOBAL TARGETS FOR MARINE RESERVE COVERAGE ON UNREGULATED CORAL REEFS (27886)

14:00  White, J. W.; Nickols, K. J.; Largier, J. L.; Botsford, L. W.; Drake, P. T.; Edwards, C. A.; Mitarai, S.; Siegel, D. A.: EVALUATING METAPOPULATION PATCH VALUE IN A MULTISPECIES CONTEXT FOR MARINE RESERVE DESIGN* (29701)


15:00  Magris, R. A.; Pressley, R. L.; Floeter, S.; Vila-Novas, D.: INTEGRATION OF MULTIPLE CONSERVATION OBJECTIVES IN MARINE PLANNING FOR CORAL REEFS (27773)

15:15  Brock, R. J.: ASSESSING REPRESENTATIVENESS OF MARINE PROTECTED AREAS OF THE UNITED STATES: USING THIS TO DESIGN EFFECTIVE MPA NETWORKS (28752)


16:00  Espana, N. B.; Hilomen, V. V.; Lim, M. S.; Tena, G. A.; Arocho-De Vera, E. L.; Colarita, C. B.: STRENGTHENING MARINE PROTECTED AREAS TO CONSERVE MARINE KEY BIODIVERSITY AREAS IN THE PHILIPPINES – THE MKBA PROJECT* (28547)


16:45  Leary, S. M.; Russ, G. R.; Abesamis, R. A.: QUALITY OVER QUANTITY: HABITAT CONDITION IS A STRONGER DRIVER OF FISH BIOMASS ON CORAL REEFS THAN HABITAT SPATIAL EXTENT AND CONNECTEDNESS IN THE PHILIPPINES (28973)

17:15  Chollett, I.; Garavelli, L.; Cherubin, L.; Matthews, T. R.; Mumby, P. J.; Box, S. J.: RESERVE NETWORK DESIGN TO DELIVER REAL-WORLD CONSERVATION AND FISHERIES BENEFITS (28823)

17:30  Joseph, O.; Barriteau, M.; Doyle, E.; Phillips, M.: TRANSBOUNDARY CORAL REEF MONITORING FOR THE GRENADES NETWORK OF MARINE PROTECTED AREAS (28356)

17:45  Feeley, M. W.; Atkinson, A. J.; Bryan, D. R.; Bohnsack, J. A.; Ault, J. S.: MONITORING AND CONSERVATION OF REEF FISH POPULATIONS IN SOUTH FLORIDA NATIONAL PARKS (29775)


18:30  Clements, C. S.; Hay, M. E.: SEA STAR PREDATION THREATENS CORAL PERSISTENCE IN SMALL RESERVES (27847)
**TUESDAY POSTERS**

Poster sessions take place in the Kamehameha Exhibit Hall 1.

**04 SPECIATION, HYBRIDIZATION AND SPECIES BOUNDARIES IN CORAL REEF ECOSYSTEMS**

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Naoko Isomura, iso@okinawa-ct.ac.jp

53 Chapina, R. J.; Ramos, J. C.; Sikkel, P. C.; Walsh, E. J.: GENETIC VARIATION IN POPULATIONS OF A TROPICAL MYSID, MYSIDUUM GRACILE (30093)


34 Horricks, R. A.; Herbinger, C. M.; Lumsden, J. S.: MACROSCOPIC AND MOLECULAR ASPECTS OF REGENERATION IN THE CARIBBEAN STAR CORAL, MONTASTRAEÀ CAVERNOSA (28877)

35 Hobbs, J. A.; Sinclair-Taylor, T. H.; DiBattista, J. D.: UNDERSTANDING THE MAINTENANCE OF SPECIES BOUNDARIES BY EXAMINING HYBRIDISATION IN CORAL REEF FISHES (28592)

36 He, S.; Berumen, M. L.: POTENTIAL DIAGNOSTIC MARKERS FOR SEVERAL FISH HYBRIDIZATION CASES (28640)


**07 BIODIVERSITY, BIOGEOGRAPHY AND EVOLUTION OF CORAL REEF ORGANISMS**

Chair(s): Danwei Huang, huangdanwei@nus.edu.sg
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50 Simeon, A. E.; Schül, T.: MONITORING ALGAL DIVERSITY IN THE WESTERN PACIFIC: A CASE STUDY ON ACTINOTRICHIA (29886)

51 Kitano, Y. F.; Iguchi, A.; Uneo, M.; Nagai, S.; Yasuda, N.: SPECIES AND GENOTYPE DISTRIBUTION OF POCILLOPORA DAMICORNIS-LIKE CORAL ACROSS SUBTROPICAL TO TEMPERATE REGION IN JAPAN (29997)

52 Niartningsih, A.; Jompa, J.; Syafuddin, S.; Yasuf, S.: BIODIVERSITY OF GIANT CLAMS (TRIDACINIDAE) IN THE SPERMONDE ARCHIPELAGO, SOUTH SULAWESI, INDONESIA (29738)


54 Jarrett, J. N.; Dean, N. A.: MOLECULAR PHYLOGEOGRAPHY AND POPULATION STRUCTURE OF BELIZEAN SEA CUCUMBERS (29693)

55 Rivera, F. E.; Martínez, P. C.: LA PLATA ISLAND ECUADOR: REFUGE OF CORAL RESILIENCE (30121)

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Jaramillo, K. B.; Guillem, P.; Thomas, O. P.; Rodriguez, J. A.; Mccormack, G.; Sinner, F.: AN ASSESSMENT OF THE DIVERSITY OF ZOANTHARIES FROM ECUADOR USING AN INTEGRATIVE APPROACH. (29442)

Reardon, K. G.; Timmers, M. A.; Oliver, T. A.; Paulay, G.; Godwin, L. S.: EXAMINING PATTERNS OF BRACHYURAN CRAB DIVERSITY ACROSS US PACIFIC CORAL REEFS USING AUTONOMOUS REEF MONITORING STRUCTURES (29515)


Kunihiro, S.; Reimer, J. D.: THE GENUS WAMINOA ASSOCIATED WITH PALYTHOA HELIODISCUS (29553)

Lei, X. M.; Huang, H.: THE DYNAMIC CHANGES OF REEF CORALS IN THE XUWEN CORAL REEF RESERVE AREA DURING THE PAST TEN YEARS (29123)

Kushida, Y.; Reimer, J. D.: PHYLOGENY AND DIVERSITY OF SEA PENS IN SOUTHWEST JAPAN (29358)

Kim, H. J.; Cho, I. Y.; Moon, H. W.: JEJU ISLAND, SOUTH KOREA SOFT CORAL COMMUNITY STRUCTURE ANALYSIS (29331)

Ivanesko, V. N.; Mudrova, S. V.; Nikitin, M. A.; Hoeksema, B.; Fontenot, D.; Berumen, M. L.: DIFFERENCES IN CRYPTIC DIVERSITY AND HOST SPECIFICITY OF COPEPODS ASSOCIATED WITH STONY CORALS IN THE RED SEA (29154)

Menezes, N. M.; Peres, E.; Scuferini, V. N.: A PHYLOGENETIC APPROACH TO STUDY CORAL REEF REFUGES IN SOUTHWEST ATLANTIC (29031)

Kawamura, I.; Reimer, J. D.: A COMPARATIVE STUDY OF MOLECULAR PHYLOGENY AND SEXUAL REPRODUCTIVE CHARACTERISTICS IN ZOANTHUS KYUSHIO (HEXACORALLIA, ZOANTHARIA, ZOANTHIDAE) (28757)

Madduppa, H.; Schupp, P. J.; Thoms, C.: PERSISTING TERTIOS HOSHINOTA OUTBREAKS IN INDIANEN REEF - PROLIFERATION, INVASION OR TRANSITION? (28472)


Koido, T.; Fukami, H.: MOLECULAR PHYLOGENETIC ANALYSIS OF THE SOFT CORAL FAMILY XENIIDAE (OCTOCORALLIA, ALCYONACEA) IN JAPAN AND TAIWAN (28322)


Tan, S. L.; Goh, B.: MAPPING SCLERACTINIAN CORAL COMMUNITIES OF SINGAPORE USING THE GEOGRAPHICAL INFORMATION SYSTEM (GIS) (27919)
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15 CONNECTIVITY, RECRUITMENT AND ISOLATION AMONG CORAL REEF POPULATIONS

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Abdelgawad, A. A.; Abouzaid, M. M.: DIFFERENT GROWTH STRATEGIES FOR THE CORAL SPECIES SETTLED ON NEW MODEL MANUFACTURED OF SEMI-ARTIFICIAL SUBSTRATES, RED SEA, EGYPT (28593)


Nakajima, Y.; Zayasu, Y.; Shinzato, C.; Wepler, P. H.; Satoh, N.; Mitarai, S.: POPULATION GENETIC ANALYSIS AT VARIOUS SPATIAL SCALES OF THE BROADCAST-SPAWNING CORAL, GALAXEA FASCICULARIS, IN THE NANSEI ISLANDS, JAPAN (28277)

Doe, J.: PREFERENCE ABSTRACT (28177)

Wong, K. H.; Reich, H. G.; Goodbody-Gringley, G.: EVIDENCE OF REPRODUCTIVE PLASTICITY OF PORITES ASTREOIDES ACROSS A DEPTH GRADIENT IN BERMUDA (28378)


Bernal, L. F.; Otero, M. B.; Salarda, K. N.; Cabasa, J. P.; Nanola, C. L.: MORPHOMETRIC AND GENETIC DIFFERENTIATION OF ACANTHOMORIS POLYACANTHUS IN THE PHILIPPINES (22920)


Sponaugle, S.; Goldstein, E.; D’Alessandro, E. K.: HABITAT AVAILABILITY AND DEPTH-DRIVEN POPULATION DEMOGRAPHICS REGULATE REGIONAL REPRODUCTIVE OUTPUT OF A COMMON CORAL REEF FISH (29645)

Mader, C.; Perez, J.; Scott, C.; Norris, T.; Datar, N.: THE PULLE RIDGE INTERACTIVE DECISION SUPPORT RESOURCE (DSR) (29536)

Arredondo Sániz, J. A.; Rivera Madrid, R.; Guzman Mendez, I. A.; Pérez España, H.; Arias González, J. E.: GENETIC STRUCTURE OF BICOLOR DAMSELFISH IN CAMPECHE BANK CORAL REEFS (MEXICO) (29063)

Strader, M. E.; Matz, M. V.: RNA-SEQ AND FUNCTIONAL EXPERIMENTS IDENTIFY KEY RECEPTORS INVOLVED IN LARVAL COMPETENCY (29809)

Paradela, M. C.; Nanola, C. L.: RECRUITMENT PULSES OF A BROODER DAMSELFISH, ACANTHOMORIS POLYACANTHUS IN PUADA BAY, PHILIPPINES (29999)

16 Larval Recruitment on Coral Reefs Facing Global Change

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Simancas, S. M.; Smyth, C.; Forero, A. M.; Sanchez, J A.: LARVAL DEVELOPMENT AND RECRUITMENT IN PTEROGORIA GUADALUPENSIS UNDER ACIDIFICATION CONDITIONS (29960)

Speare, K. E.; Fachs, C.; Duran, A.; Burkepale, D. E.: INTERACTIONS OF CORAL RECRUITS AND JUVENILE CORALS WITH SEDIMENT AND ALGAE ON REEFS IN THE FLORIDA KEYS (30110)

Benjamin, B. M.; Tran, C.; Pringle, J. R.: PROGRESS TOWARD ACHIEVING SETTLEMENT AND METAMORPHOSIS OF Aiptasia Larvae in the Laboratory (28961)

Cespedes-Rodriguez, E. C.; Zapata, F. A.: SEXUAL AND ASEXUAL RECRUITMENT OF POCILLOPOID CORALS ON AN EQUATORIAL EASTERN PACIFIC REEF FLAT (28493)


de Putron, S. J.; Thomas, M. S.; Wong, K.: DIFFERENTIAL EFFECTS OF LIGHT AND FEEDING ON NEW RECRUITS OF PORITES ASTREOIDES FROM TWO REEF SITES WITHIN BERMUDA (29522)

17 Coral Reef Ecosystem Dynamics: Instabilities, Invasions, Transitions, and Reorganization

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Cannon, S. E.; Donner, S.: CLIMATE VARIABILITY AND THE RESILIENCE OF LOW DIVERSITY CORAL COMMUNITIES TO BLEACHING IN THE GILBERT ISLANDS, KIRIBATI (28273)

Messmer, V.; Caballes, C. F.; Green, E.; Buck, A.; Pratchett, M. S.: THE ROLE OF LETHAL AND SUBLETHAL PREDATION ON CROWN-OF-THORNS STARFISH POPULATIONS (29081)

Sari, N. P.: CORAL REEF RECOVERY 2015: A DECADE AFTER AN EARTHQUAKE ON NIAS ISLAND, NORTH SUMATERA, INDONESIA, AFTER THE 1997 MASSIVE CORAL DIE OFF (28173)


Matthews, S. A.: RECONSTRUCTING AND FORECASTING OUTBREAKS OF CROWN-OF-THORNS STARFISH ON THE GREAT BARRIER REEF: SPECIES DISTRIBUTION AND POPULATION MODELLING APPROACHES (28267)
213 Ikeuchi, E.; Nakamura, T.; Iguchi, A.: DENSE FISH SCARS AS AN INDICATOR OF PHYSIOLOGICAL VARIATION AMONG MASSIVE PORITES COLONIES (28295)

215 Tsai, C.; Sweatman, H.; Connolly, S.: DRIVERS OF RELATIVE SPECIES ABUNDANCES REGULATE THE DIVERSITY-STABILITY RELATIONSHIP OF CORAL REEF FISHES (28527)


218 Kasai, S.; Nakatomi, N.; Yamamoto, S.: CHARACTERIZING CHEMICAL COMPOSITION OF SIZE-FRACTIONATED PARTICULATE ORGANIC MATTER IN A FRINGING CORAL REEF OF MALAYSIA (29146)

219 Cho, I.; Yi, C.; Kim, H.; Moon, H.; Kim, M.: IMPACT OF EXOTIC SPECIES (BANTARELLA BOCKII) ON GORGONIAN AND BLACK CORAL AT JEJU ISLAND IN KOREA (29148)


224 Roa, P. B.; Roa-Quiaoit, H. A.: EFFECTS OF SEDIMENTATION ON SCLERACTINIAN CORAL SPECIES COMPOSITION ALONG A RIVER GRADIENT IN MACAJALAR BAY, NORTHERN MINDANAO, PHILIPPINES (29336)


228 Núñez-Inzunza, R. A.; Hernández-Landa, R. C.; Arias-González, J. E.: TEMPORAL DISTRIBUTION ANALYSIS OF PARROT FISH AND SURGEON FISH IN “PARQUE NACIONAL ARRECIFES DE COZUMEL” MEXICO (29815)

19 CORAL REEF STRUCTURAL DYNAMICS AND COMPLEXITY: ACCRETION VERSUS BIOEROSION AND DISSOLUTION

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237 Porter, A. G.; Figueira, W. F.; Coleman, R. A.; Ferrari, R.: MAPPING EFFECTS OF 3D HABITAT STRUCTURAL COMPLEXITY AND ORIGIN ON FISH ASSEMBLAGES (28098)


240 Bolden, I. W.; Brandkamp, L. K.; Gregersen, J. A.; Gagnon, A. C.; Sachs, J. P.: QUANTIFYING CHEMICAL CHANGES IN THE “HEARTBEAT” OF A CORAL REEF ON TETIAROA ATOLL, FRENCH POLYNESIA (28577)


243 Chippeco, C. B.; Ticzon, V. S.; Simon, A. P.; Sabban, F. B.: EFFECT OF MONSOON ON THE ASSOCIATION BETWEEN REEF FISH RECRUIT AND BENTHIC STRUCTURAL COMPONENTS (29043)

244 Maher, R. L.; Johnston, M. A.; Correa, A. M.: ASSESSMENT OF A BARNACLE BIOERODER AND ITS IMPACT ON A DOMINANT REEF-BUILDING CORAL FROM A HIGH CORAL COVER REEF (29765)

245 Marulanda-Gonzalez, A.; Lopez-Victoria, M.; Zea, S.: CORAL TAKEOVER BY THE ENCRUSTING EXCAVATING CARIBBEAN SPONGE Cliona TENUSIUS HAS REACHED A STANDSTILL IN COLOMBIAN CORAL REEFS (29785)

23 GLOBAL CHANGE IMPACTS ON CORAL REEF SEaweeds

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Bittick, S. J.; Clausing, R. J.; Fong, C. R.; Fong, P.: BOLSTERED PHYSICAL DEFENSES UNDER NUTRIENT ENRICHED CONDITIONS MAY FACILITATE A MACROALGAL SPECIES IN THE SOUTH PACIFIC (29862)


283 Vásquez-Elizondo, R. M.; Enriquez, S.: A MORPHO-FUNCTIONAL APPROACH IN CORALLINE ALGAE (RHODOPHYTA) TO UNDERSTAND NICHE PARTITIONING AND THEIR DIFFERENTIAL SENSITIVITY TO GLOBAL CHANGE (29512)

284 Sura, S. A.; Feng, P.: HERBIVOROUS FISH SELECT MACROALGAE ON FRINGING REEFS IN MO’OREA, FRENCH POLYNESIA (29845)

284 Zweng, R. C.; Koch, M.: EFFECTS OF ELEVATED PCO2 ON PHOTOSYNTHESES IN TROPICAL MACROALGAE (29736)

25 INDICATOR TAXA: WHAT CAN THEY TELL US ABOUT THE PAST, PRESENT AND FUTURE FOR CORAL REEFS?

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Catia F. Barbosa, catia@geoq.uff.br

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285 Tewfik, A.: THE CONTRIBUTION OF LARGE DECAPODS TO MAINTENANCE OF CORAL REEF COMMUNITY INTEGRITY (29543)

286 Mendez-Ferrer, N.; Hallock, P.: TEMPORAL VARIATIONS IN PHOTOCHEMICAL EFFICIENCIES OF ALGAL SYMBIOTLS IN BENTHIC FORAMINIFERA AND ANTHOZOANS IN THE FLORIDA KEYS (29591)


291 Rathod, P.; Yadav, S.; Arthur, R.; Atcoverro, T.: HERBIVORE DISTRIBUTIONS MAY NOT ACCURATELY REFLECT HERBIVORY PATTERNS IN RECOVERING REEFS (28619)

292 Hallock, P.; Mateu-Vicens, G.; Pomar, L.: WHY DO CORAL REEFS THRIVE IN ICEHOUSE WORLD CLIMATES? CLUES FROM LARGER BENTHIC FORAMINIFERS (28698)

293 Schizas, N. V.; Appeldoorn, R.; Nadathur, G.: COMPARISON OF BACTERIAL COMMUNITIES ASSOCIATED FROM LARGER BENTHIC FORAMINIFERS (28698)

294 Morgan, N. B.; Baco, A. R.; Roark, E. B.: AN EXAMINATION OF VARIATION IN BENTHIC MEGAFUANAL COMMUNITY STRUCTURE WITH DEPTH AND SIDE OF A SEAMOUNT (30025)


301 Dueñas, L. F.; Ardila, N. E.; Kahng, S. E.; Crawford, A. J.; Sanchez, J. A.: EVALUATING PATTERNS OF GENE FLOW IN THE PRECIOUS CORALS HEMICORALLUM IMPERIALE/ LLALENSE ACROSS THE PACIFIC OCEAN (28804)

302 Polinski, J. M.; Voss, J. D.: EVIDENCE OF ADAPTATION IN A CORAL-ALGAL SYMBIOSIS AT MESOPHOTIC DEPTHS IN THE NORTHWEST GULF OF MEXICO (28846)

303 Goodbody-Gringley, G.; Marchini, C.; Chequer, A. D.; Goffredo, S.: POPULATION STRUCTURE OF MONTASTREA CAVERNOSE ON SHALLOW VERSUS MESOPHOTIC REEFS IN BERMUDA (29464)

304 Brandtner, V. W.; Groves, S. H.; Holstein, D. M.; Brandt, M. E.; Smith, T. B.: DEEP ON THE CHEAP: ACCESSIBLE AND COST-EFFECTIVE METHODS FOR QUANTITATIVELY SURVEYING MESOPHOTIC CORAL REEF ECOSYSTEMS (29665)

305 Barrios, L. M.; Ballesteros-Contreras, D.; Roberts, J. M.; Preziosi, R.: DEVELOPMENT OF MICROSATELLITE PROTOCOLS FOR DEEP CORAL LOPHELIA PERTUSA (28097)

306 Hammerman, N. M.; Schizas, N. V.; Alfaro, P.: POPULATION STRUCTURE OF THE CORAL AGARICIA LAMARCKI FROM SW PUERTO RICO AND U.S. VIRGIN ISLANDS (27774)


308 Watanabe, T. K.; Watanabe, T.; Eyal, G.: Loya, Y.: GROWTH HISTORY RECORDED IN SKELETAL STABLE ISOTOPES IN THE MESOPHOTIC PORITES CORAL FROM THE GULF OF ELAT, RED SEA (28673)


311 38 WATERSHED IMPACTS ON CORAL REEFS: LAND BASED SOURCES OF POLLUTION

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439 Cerovski-Darriau, C., Crile, W.: WEST MAUI COMMUNITY-BASED STREAM RESTORATION: SOLUTIONS TO PREVENT SEDIMENT FROM REACHING THE NEARSHORE ENVIRONMENT (29163)

* REPRESENTS INVITED PRESENTATIONS


46 TRAIT-BASED APPROACHES IN CORAL REEF ECOLOGY: FROM FUNCTIONAL ECOLOGY TO MANAGEMENT

Chair(s): Sebastian Ferse, sebastian.ferse@zmt-bremen.de
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Sonja Bejarano, sonja.bejarano@leibniz-zmt.de

503 Lagras, G.; Loiseau, N.; Poggiale, J.; Mazouni, N.; Kulbicki, M.; Gaertner, J.: INFLUENCE OF FUNCTIONAL TRAITS ON THE PERCEPTION OF CORAL REEF FISH BIODIVERSITY PATTERNS. (28077)


505 Nowicki, J. P.; Pratchett, M. S.; Walker, S. P.; Coker, D. J.; O’Connell, L. A.: THE NEURAL CIRCUITRY OF PAIR BONDING IN A COMMON BUTTERFLYFISH, CHAETODON LUNULATUS (27772)

506 Ganase, A.; González-Rivero, M.; Chollett, I.; Dove, S.; Mumby, P. J.: ENVIRONMENTAL DRIVERS OF BROAD-SCALE DISTRIBUTION OF SPONGE COMMUNITIES ON THE MESOAMERICAN BARRIER REEF (29375)

507 Villégé, S.; Maire, E.; Mouillot, D.: ASSESSING FUNCTIONAL DIVERSITY: FROM TRAITS TO MULTIDIMENSIONAL INDICES (28555)

508 Denis, V.; Chen, J. W.: FUNCTIONAL DIVERSITY OF THE REEF FISH FAUNA ALONG THE LATITUDINAL GRADIENT OF TAIWAN (28296)

509 Dornelas, M.; Madin, J. S.; Baird, A. H.; Connolly, S. R.: PREDICTING CORAL GROWTH (29283)


514 Chartrand, K. M.; Rasheed, M. A.; Ralph, P. J.: UNDER PRESSURE – HOW SEED BANKS PROVIDE A FUNCTIONAL CLUE INTO DEEPWATER SEAGRASS SUCCESS (28881)

48 ACOUSTIC, OPTICAL, AND CHEMICAL SEASCAPES AND THEIR APPLICATION TO RESTORATION AND MANAGEMENT

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522 Gammaru, A. A.; Villanoy, C. L.; Solera, L. A.: REEF-Scale STUDIES OF BOUNDARY LAYER FLOWS AT DIFFERENT BOTTOM TYPES (29335)

49 UNMANNED SYSTEMS FOR CORAL REEF RESEARCH, MANAGEMENT AND CONSERVATION

Chair(s): Phil McCallivary, philip.a.mccallivary@usgs.gov
Oscar Pizarro, o.pizarro@noc.acf.gov.au

523 Contreras-Silva, A. J.; Mott, C.; Cerdeira-Estrada, S.; Wild, C.: DEVELOPING A CONCEPTUAL MODEL FOR CORAL REEF MONITORING IN THE MEXICAN MESOAMERICAN BARRIER REEF SYSTEM (28967)

51 REMOTE SENSING OF CORAL REEFS: TRANSITIONING FROM DEVELOPMENTAL TO OPERATIONAL

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Chris Roelfsema, c.roelfsema@uq.edu.au


540 Parado-Urrutia, F. J.; Martinez-Clorio, M. I.; Cerdeira-Estrada, S.; Rosique, L. O.; Alvarez-Filip, L.: FINDING POTENTIALLY USEFUL REMOTE SENSING VARIABLES FOR A. PALMATA COVER PREDICTION (30082)

541 Iovon, C.: POTENTIAL AND BOTTLENECKS OF MONITORING CORAL REEFS FROM SENTINEL 2 IMAGERY (30056)

63 INNOVATIONS IN SOCIO-ECOLOGICAL RESEARCH FOR RESILIENCE BASED MANAGEMENT

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1 T REPRESENTS TUTORIAL PRESENTATIONS
65 IMPROVING THE UNDERSTANDING AND MANAGEMENT OF CORAL REEF SOCIO-ECOLOGICAL SYSTEMS THROUGH COMMUNITY AND STAKEHOLDER ENGAGEMENT

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Murray, J.: SUPPORTING COASTAL COMMUNITIES TO ACHIEVE A SUSTAINABLE AQUARIUM TRADE (29739)

Ingram, R. J.; Oleson, K. L.; Gove, J.: USING CONCEPTUAL ECOSYSTEM MODELING TO SUPPORT ECOSYSTEM-BASED MANAGEMENT IN WEST HAWAI‘I (29542)

González-Cano, J. M.: MUESO SUBACUÁTICO DE ARTE (MUSA) AN EFFECTIVE PROJECT TO REDIRECT AND CONTROL VISITORS IN THE NATIONAL PARK OF CANCÚN – ISLA MUJERES, MEXICO (29444)

64 SOCIAL SCIENCE APPLICATIONS TO CORAL REEF MANAGEMENT: HUMAN AND SOCIAL DIMENSIONS AND THE LINK TO REEF HEALTH AND ECOLOGICAL CHANGE

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Theresa Geodeke, Theresa.Goedeke@noaa.gov

Costareggi, A. R.; Waters, L.; Cumming, K.; Walker, B. K.: THROUGH VULNERABILITY ANALYSIS: AN APPLIED CASE STUDY INTO RECREATIONAL ACTIVITIES AT CORAL REEFS IN PUERTO RICO (29683)


Ferre, S. C.; Chong, C.; Aswari, S.: CHANGING LOCAL ECOLOGICAL KNOWLEDGE IN THE SOLOMON ISLANDS: APPLYING AN INDEX OF TAXONOMIC DISTINCTNESS TO FOLK TAXONOMY (28325)

Cumming, G. S.: HETERARCHIES: CONNECTING HIERARCHIES AND NETWORKS FOR MARINE PROTECTED AREAS (27850)

Beyerl, K.; Breckwoldt, A.: PERCEPTIONS IN SMALL ISLAND MARINE RESOURCE MANAGEMENT (28003)

Huang, Y.; Coelho, V. R.: SUSTAINABILITY PERFORMANCE ASSESSMENT FOCUSING ON CORAL REEF PROTECTION BY THE TOURISM INDUSTRY IN THE CORAL TRIANGLE REGION (28086)

Lecky, J.; Oleson, K. L.; Wedding, L.; Falinski, K.; McCoy, C.; Kappel, C.; Selkoe, K.: ECOSYSTEM VULNERABILITY AND CUMULATIVE IMPACTS ON HAWAIIAN REEFS (29168)

67 INFORMING MANAGEMENT DECISIONS FOR CORAL REEFS IN A WORLD OF RISK AND UNCERTAINTY

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616 Bradley, P.; Santavy, D.; Fisher, W.; Gerritsen, J.: USING BIOCRITERIA AND THE BIOLOGICAL CONDITION GRADIENT TO PROTECT CORAL REEF ECOSYSTEMS (28688)

617 Susanto, H. A.; Yulianda, F.; Yunitsa, I.: MARINE TOURISM IMPACT ON CORAL REEFS IN SERIBU ISLANDS NATIONAL PARK, INDONESIA (27943)

618 Gulkos, D. A.: THE ICRF GLOBAL CORAL ECOLOGICAL SERVICES AND FUNCTIONS VALUATION TOOL (28144)

619 De La Cour, J. L.; Eakin, C. M.; Liu, G.; Geiger, E. F.; Heron, S. F.; Skirving, W. J.; Tirak, K. V.; Gomez, A. M.; Strong, A.: APPLICATION OF NOAA CORAL REEF WATCH’S NEAR-REAL-TIME SATELLITE AND MODEL-BASED DECISION SUPPORT SYSTEM TO LOCAL CORAL REEF MANAGEMENT (27989)


621 Kuo, J. C.; Kuo, J. C.: USING POLICY AND CORAL RESTORATION ACTION TO MITIGATE AND PREVENT INFESTATIONS BY AQUATIC ALIENS ON HAWAII’S CORAL REEFS (28949)

622 Westcott, D.; Fletcher, C.; Plaganyi-Lloyd, E.; Babcock, R.; CoTs Working Group.: TOWARDS AN INTEGRATED APPROACH TO CROWN-OF-THORNS STARFISH MANAGEMENT AND RESEARCH ON THE GREAT BARRIER REEF (28993)

623 Obura, D.: REVIEW OF CORAL CLASSIFICATION STATUS: A CASE STUDY OF KIUNGA MARINE NATIONAL RESERVE, NORTH COAST KENYA (29461)

624 Sherry, L.; Norville, J. J.: DESIGNING INTERVENTIONS TO IMPROVE MARINE AREA MANAGEMENT (29638)


68 MPAS AND OTHER TOOLS FOR SCIENTIFICALLY SOUND PLACE-BASED MANAGEMENT

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627 Musembi, P. M.; Cowburn, B. D.; Katello, J.; Sluka, R. D.; Obura, D.: CORAL DIVERSITY AND THREATS IN THE INTERTIDAL ZONE OF WATAMU MARINE NATIONAL PARK, KENYA (29205)

628 den Haring, S. D.: SELF-REPORTED BEHAVIOR, INTENTIONS AND CONTROL MEASURES OF SNORKELERS IN THE MOMBASA MARINE PARK-DO SNORKELERS DO WHAT THEY INTEND TO DO, AND SAY THEY DO? (29166)

629 Beatty, D. S.; Clements, C. S.; Stewart, F. J.; Hay, M. E.: NO-TAKE MARINE PROTECTED AREAS ALTER BENTHIC COMMUNITIES WITH CASCADING POSITIVE EFFECTS ON CORAL SETTLEMENT AND LARVAL AND RECRUIT SURVIVORSHIP (28202)

630 Henderson, C. J.; Stevens, T. F.; Gilby, B. L.; Olds, A. D.; Lee, S. Y.: INCORPORATING THE MANAGEMENT OF CRITICAL ECOCLOGICAL PROCESSES FROM SEAGRASS ECOSYSTEMS INTO THE SPATIAL MANAGEMENT IN A HIGHLY IMPACTED COASTAL SYSTEM (28515)


632 Alvear Rodriguez, E. M.: SCIENCE-INFORMED CONSULTATION, PUBLIC INVOLVEMENT, AND MANAGEMENT DECISIONS: PLANNING A MARINE RESERVE IN BISCAYNE NATIONAL PARK, USA (28418)


70 DESIGN OF MPAs FOR FISHERIES AND ECOSYSTEM MANAGEMENT

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645 Kockel, A.; Dearden, P.: BRIDGING THE DIVIDE BETWEEN SYSTEMATIC CONSERVATION PLANNING AND COMMUNITY-BASED CONSERVATION: A PHILIPPINES CASE STUDY (20119)

646 Lim, M. S.; Mendoza, M. M.; Baling, N. S.; Daclan, M. A.; Miclet, E. B.; Kern, L. K.: TOWARDS NETWORKING OF NATIONAL PROTECTED AREAS FOR THE CONSERVATION OF CRITICAL HABITATS OF GREEN SEA TURTLE POPULATIONS IN THE PHILIPPINES (29264)

647 Ramos Álvarez, A.; Jeffrey, C. F.; Pittman, S. J.; Canals Silander, M. F.: FIVE MPAS, ONE NETWORK: DESIGNING PUERTO RICO’S NORTHEAST MARINE CORRIDOR (29571)

648 Manopawirat, P.; Dearden, P.; True, J.; Phongsuwan, N.; Plog-Ngan, P.: DESIGNING TRANSBOUNDARY MARINE PROTECTED AREA NETWORK BETWEEN THAILAND AND MYANMAR TO BUILD ECOSYSTEM RESILIENCE AND IMPROVE CORAL REEF CONSERVATION (29423)


651 Takashina, N.: SIMPLE RULES FOR ESTABLISHMENT OF EFFECTIVE MARINE RESERVES (28056)

71 DESIGNING MARINE MANAGED AREAS FOR FISHERIES MANAGEMENT AND BIODIVERSITY CONSERVATION: BRIDGING SCIENCE AND POLICY

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Rebecca Weeks, rebecca.weeks@jcu.edu.au

653 Pawlik, J. R.: WHAT IS THE BEST SCIENTIFIC JUSTIFICATION FOR MPAS ON CARIBBEAN REEFS? (27853)

654 de la Guardia, E.; Hernández, Z.; Espinosa, L.; González-Díaz, F.; Angulo, J.; Arias-González, J. E.: MANAGEMENT IN SAN FELIPE KEY, A CUBAN NATIONAL PARK, BASED ON ASSESSING CORAL REEF CONDITION AND FISHERIES. (29812)

656 Iwanicki, L. S.; Hidayat, N. I.; Purwanto, P.; Pada, D.; Ahmadia, G. N.; Decker, M. B.: LINKING MANAGEMENT PERFORMANCE TO POSITIVE ECOCLOGICAL OUTCOMES IN THE RAJA AMPAT MARINE PROTECTED AREAS, INDONESIA (29730)
**TUESDAY**

**72 MARINE RESOURCE SUSTAINABILITY, CONSERVATION AND MANAGEMENT IN THE CORAL TRIANGLE & SOUTHEAST ASIA**

**Chair(s):** Thamasak Yeemin, thamasakyeeemin@yahoo.com  
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Vo Si Tuan, vosituan@gmail.com

**Distribution of Porites cylindrica in an off-shore Philippine reef**  
Valino, D. M.; Arceo, H. O.: SIZE FREQUENCY DISTRIBUTION OF PORITES CYLINDRICA IN AN OFF-SHORE PHILIPPINE REEF (29869)

**Marine habitat conservation through social marketing campaign in Papua, Indonesia**  
Afianto, M. Y.: MARINE HABITAT CONSERVATION THROUGH SOCIAL MARKETING CAMPAIGN IN PAPUA, INDONESIA (30158)

**The status of reef fish assemblages around the urbanized, small islands at the center of the Coral Triangle**  

**Nematodes distribution and community structure in Rhizophora mucronata forest, Mida Creek- Kenya**  
Waweru, B. W.; Muthumbi, A. W.: NEMATODES DISTRIBUTION AND COMMUNITY STRUCTURE IN RHIZOPHORA MUCRONATA FOREST, MIDA CREEK- KENYA (29416)

**Vertical distribution of meiofauna in the nearshore non-reef interstitial environment Gulf of Kuchchh Gujarat India**  
Santoshkumar Singh, S. K.; Sanagoudra, S. N.: VERTICAL DISTRIBUTION OF MEIOFAUNA IN THE NEARSHORE NON-REEF INTERSTITIAL ENVIRONMENT GULF OF KUCHCHH GUJARAT INDIA (29431)

**Long-term changes and restoration measures of soft corals (Dendronephthya spp.) at Mu Ko Similan National Park, the Andaman Sea**  
Puthayakool, J.; Plangngan, P.; Yeemin, T.; Klinthong, W.; Suthacheep, M.; Chatchawal, C.: POPULATION DENSITY OF CROWN OF THORNS STARFISH IN DIVE SITES OF THAILAND (28669)

**Community participation in the marine protected area (MPA) establishment process in Indonesia: its opportunities and challenges**  
Baitoningsih, W.: COMMUNITY PARTICIPATION IN THE MARINE PROTECTED AREA (MPA) ESTABLISHMENT PROCESS IN INDONESIA: ITS OPPORTUNITIES AND CHALLENGES (27874)

**Managing recreational diving in temporary closures following the 2010 Coral Bleaching event in the Andaman Sea**  

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*Represents invited presentations*
**WEDNESDAY ORALS**

**04 SPECIATION, HYBRIDIZATION AND SPECIES BOUNDARIES IN CORAL REEF ECOSYSTEMS**

**Chair(s):** Jean-François Flot, jflot@ubc.ca, Andrew Baird, andrew.baird@jcu.edu.au, Nicole Fogarty, nf121@nova.edu  
Naoko Isomura, iso@okinawa-ct.ac.jp

**Location:** 313 B  
**09:30**  
Fernandez-Silva, I.; Hobbs, J. P.; Coleman, R. R.; DiBattista, J. D.; Bowden, B. W.; Posada, D.; Rocha, L. A.: EVALUATION OF RETICULATE EVOLUTION IN CORAL REEF FISHES USING GENOME SEQUENCING (30115)

**09:45**  

**10:00**  

**10:15**  

**10:30**  
Schweinsberg, M.; Tollrian, R.; Lampert, K. P.: INTRACOLONIAL GENOMIC VARIABILITY IN ACROPODA HYACINTHUS (29258)

**10:45**  
Lovenburg, V.; Roterman, C. N.; Taylor, M. L.; Rogers, A. D.: HIGHEST SPECIES DIVERSITY OF OCTOCORALS FOUND IN CARIBBEAN AND A NEW VARIABLE NUCLEAR MARKER FOR THE OCTOCORALLIA? (28728)

**11:00**  

**11:15**  

**05 ACCLIMATIZATION AND ADAPTATION IN REEF ORGANISMS**

**Chair(s):** Mikhail V. Matz, matz@ualberta.ca  
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Manuel Aranda Lastra, manuel.aranda@kaust.edu.sa  
Sylvain Forest, sylvain.forest@anu.edu.au

**Location:** 313 B  
**13:45**  
Courtail, L.; Picco, V.; Grover, R.; Rottier, C.; Cormerais, Y.; Pages, G.; Ferrier-Pages, C.: MAPK SIGNALING IN CORAL STRESS RESPONSE (27820)

**14:00**  
Sindorf, V. L.; Richmond, R. H.: DETECTION OF MOLECULAR STRESS RESPONSE IN CORALS EXPERIENCING CHRONIC CONTACT WITH INVASIVE ALGAE MATS (29794)

**14:15**  

**14:30**  

**14:45**  
Kleypas, J. A.; Thompson, D. M.; Castruccio, F. S.; Chichetier, E. N.; Pinsky, M.; Watson, J. R.: POTENTIAL ROLE OF LARVAL CONNECTIVITY IN CORAL TEMPERATURE THRESHOLDS (28407)

**15:00**  

**15:15**  

**15:30**  
Jurriaans, S.; Hoogenboom, M.: SEASONAL VARIATION IN CORAL THERMAL PERFORMANCE ON THE GREAT BARRIER REEF (28957)

**15:45**  
Schnett, M.; Banasak, A. T.: SUSCEPTIBILITY OF ACROPODA PALLMATA PATCHES TO THERMAL STRESS (28185)

**16:00**  

**16:15**  
Ainsworth, T. D.; Heron, S. F; Ortiz, J. C.; Mumby, P. J; Grech, A.; Ogawa, D.; Eakin, C. M.; Leggat, W.: THE GREAT BARRIER REEF IS AT RISK OF LOSING THERMAL TOLERANCE (29279)

**16:30**  

**16:45**  
Morikawa, M. K.; Palumbi, S. R.: IMPROVING CORAL RESTORATION THROUGH PRIOR KNOWLEDGE OF ACCLIMATION OR ADAPTATION TO LOCAL ENVIRONMENT: A COMMON GARDEN EXPERIMENT IN A NATURAL BLEACHING EVENT (30157)

**17:00**  
Kliep, C. N.; Barshis, D. J.: THE TIMELINE OF THERMAL ACCLIMATIZATION IN AMERICAN SAMOAN CORALS: HOW LONG DOES IT TAKE TO GAIN BLEACHING RESISTANCE? (28559)

**17:15**  
Hancock, H. A.; Barshis, D. J.: DO SMALL SCALES MAKE A BIG DIFFERENCE? UNRAVELING THE INFLUENCE OF RECENT THERMAL HISTORY ON CORAL BLEACHING SUSCEPTIBILITY AT DAILY AND WEEKLY TIME-SCALES (29582)
07 BIODIVERSITY, BIOGEOGRAPHY AND EVOLUTION OF CORAL REEF ORGANISMS

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Location: 311

09:30 Timmers, M. A.: Paulay, G.; Reardon, K.; Donahue, M.; Oliver, T.; Toonen, R.; Brainard, R.; EXPLORING ENVIRONMENTAL AND GEOGRAPHIC PATTERNS OF CORAL REEF CRYPTOFaUNA COMMUNITIES (28725)

09:45 Saavedra-Sotoelo, N. C.; Rocha-Olivares, A.; Paz-Garcia, D. A.; Reyes-Bonilla, H.; Calderon-Aguilera, L. E.; Lopez-Perez, R. A.; Cupul-Magatha, A.; Cruz-Barreza, J. A.; GENETIC SEASCAPe REVEALS THAT ECOLOGICAL-EVOLUTIONARY PATTERNS IN PORITES PANAMENsIS CONFORM TO RELAXED VERSION OF THE ABUNDANT CENTRAL HYPOTHESIS (28734)

10:00 Ransome, E. J.; Timmers, M.; Belcald, M.; Collins, A.; Meyer, C.; Brainard, R.; CRYPTOc REEF DIVERSITY AND FUNCTION ACROSS THE PACIFIC ASSESSED USING AUTONOMOUS REEF MONITORING STRUCTURES (ARMS) AND METAGENOMIC METHODS* (29942)


11:00 Michonneau, F.; Maray, M.; Lasley, R. M.; Rotjan, R.; Paulay, G.; Knowton, N.; BIODIVERSITY ESTIMATION FROM INDIVIDUAL SAMPLES AND METABARCODED COMMUNITY SAMPLES (28851)

11:15 Coker, D. J.; DiBattista, J. D.; Sinclair-Taylor, T. H.; Berumen, M. L.; VARIATION IN BIODIVERSITY OF CRYPTOc FISHES ALONG A RED SEA ENVIRONMENTAL GRADIENT (28628)

13:45 Fisco, D. P.; Kilfoyle, A. K.; Smith, S. G.; Spieler, R.; Walker, B. K.; REEF FISH SPACE DISTRIBUTION AND BENTHIC HABITAT ASSOCIATIONS ON THE NORTHERN FLORIDA REEF TRACT (27957)

14:00 Arceo, H. O.; Nanola, C. L.; Recamara, D. B.; Alino, P. M.; UNDERSTANDING PHILIPPINE REEF FISH DIVERSITY AMIDST RISING THREATS AND MANAGEMENT EFFORTS (29458)

14:15 Loiseau, N.; Legras, G.; Mazouni, N.; Gaerster, J. C.; ASSESSMENT OF CORAL REEF FISH BIODIVERSITY: HOW TO CHOOSE THE RIGHT INDICES (28096)

14:30 Byron, G.; Paulay, G.; Berumen, M. L.; PHYLOGENETIC DIVERSITY OF CEPHALOPODA (ANIMALIA:MOLLUSCA) WITHIN THE RED SEA (29076)

14:45 Alvarez-Noriega, M.; Madin, J. S.; Baird, A. H.; Dornelas, M.; Connolly, S. R.; THE MAINTENANCE OF CORAL BIODIVERSITY VIA RELATIVE NONLINEARITY OF COMPETITION (28929)

15:00 Roberts, T. E.; Bridge, T. C.; Caley, M. J.; Baird, A. H.; REVISITING DEPTH-DIVERSITY GRADIENTS IN REEF-BUILDING CORALS (28264)

15:15 Richards, Z. T.; HIGH CRYPTOc DIVERSITY, TAXONOMIC UNCERTAINTY AND THE RISK OF SILENT EXTINCTIONS IN CORALS (29247)


16:15 Glynn, P. W.; Bisewar, R.; Mate, J.; CORAL REEF ECCHURANS: AN UNDERSITUATED CRYPTOc FAUNA (27821)

16:30 Wulf, J.; SPONGE DIVERSITY ON CORAL REFS: PHYLOGENETIC SIGNAL IN RESPONSES TO PROCESSES THAT DRIVE DIVERSITY PATTERNS (30071)

16:45 Cordeiro, C. A.; Ferreira, C. E.; Kulkicki, M.; MACROECOLOGICAL PATTERNS OF SEA URCHINS SPECIES IN SHALLOW REEF ENVIRONMENTS (28724)

17:00 Bock, P.; BRYODIVERSITY IN REEFAL ENVIRONMENTS - WHAT CAN WE EXPECT THE FUTURE TO HOLD? (28809)

17:15 Head, C. E.; Bonsall, M. B.; Koldewey, H.; Pratchett, M. S.; Speight, M.; Rogers, A. D.; COMMUNITY STRUCTURE OF CORAL-ASSOCIATED FAUNA ON REEFS IN THE CHAGOS ARCHIPELAGO, CENTRAL INDIAN OCEAN (29539)

17:30 Counsell, C. W.; Hixon, M. A.; Franklin, E. C.; Donahue, M. J.; SPATIAL AND TEMPORAL PATTERNS IN BIODIVERSITY: A LOOK AT CRYPTOc CORAL REEF COMMUNITIES ACROSS THE HAWAIIAN ARCHIPELAGO* (29530)

11 ANIMAL-ALGAL SYMBIOSES: MOLECULAR, PHYLOGENICAL AND GENETIC INTERACTIONS, PROCESSES AND ADAPTATIONS

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Location: 313 C


09:45 Ramsby, B. D.; Iglesias-Prieto, R.; Goulet, T. L.; BRIAREUM ASBESTINIUM: A TALE OF ONE HOST WITH TWO MORPHOLOGIES AND SYMBIODINUM (28299)

10:00 Xiang, T.; Tolleter, D.; Tran, C.; Krediet, C.; Onishi, M.; Clowez, S.; Fluthong, W.; Pringle, J.; Grossman, A.; SWITCH FROM AUTOOTROPHY TO MIXOTROPHY IN SYMBIODINUM ASBESTINUM: A TALE OF ONE HOST WITH TWO MORPHOLOGIES AND SYMBIODINUM (28299)


10:30 Lin, X.; SYMBIODINUM KAWAGUTII GENOME ILLUMINATES DINOFLAGELLATE GENE EXPRESSION AND CORAL SYMBIOSIS (29965)

10:45 Wong, C. Y.; Baker, D. M.; EFFECT OF COMPETITION ON GROWTH AND FITNESS OF SYMBIODINUM POPULATIONS IN CULTURE (29175)

* REPRESENTS INVITED PRESENTATIONS
11:00 Fujise, L.; Nitschke, M. R.; Goyen, S. J.; Frommlet, J. C.; Seroődio, J.; Ralph, P. J.; Suggrett, D. J.: SYMBIODINIUM CELL CYCLE CONTROL BY CORAL HOSTS (28965)

11:15 Zahrn, N. I.; Chen, J. E.; Aranda, M.: CHARACTERIZATION OF AMMONIUM TRANSPORTERS IN SYMBIODINIUM MICROADRIATICUM (29069)


14:00 Kenkel, C. D.; Bay, L. K.: REEF-BUILDING CORALS AS A NATURAL MODEL FOR EVOLUTIONARY TRANSITIONS IN SYMBIOTIC TRANSMISSION MODE (28904)

14:15 Coffroth, M. A.: Page, C. A.; McIroy, S. E.; Miller, M. W.; Valint, D. J.: EARLY SYMBIOT ACQUISITION WITHIN ACROPORA PALMATA AND ORICELLA FAVEOLATA RECRUITS (29009)

14:30 Gabay, Y.; Weis, V. M.; Davy, S. K.: THE EFFECT OF SYMBIOT DIVERSITY ON INFECTION PATTERN, SYMBIOT CELL PROLIFERATION AND PHYSIOLOGICAL STATE IN A MODEL CNIDARIAN-DINOFLAGELLATE SYMBIOSIS (29118)


15:15 Levy, O.; Sorek, M.: ‘MASTER-SLAVE’ OSCILLATOR RELATIONSHIP IN SYMBIOTIC AIPATSA (28565)


16:30 Nitschke, M. R.; Suggett, D. J.: A RESEARCH FRAMEWORK FOR RESOLVING NICH DIFFERENTIATION AND SPECIALIZATION IN SYMBIODINIUM (28879)

16:45 Lewis, A. M.; LaJeunesse, T. C.: ECOLOGICAL SPECIALIZATION AND SPECIES DIVERSIFICATION OF SHALLOW WATER CORAL ENDOSYMBIOTANTS IN THE WESTERN ATLANTIC (29427)


17:30 Epstein, H.; van Oppen, M.; Torda, G.; Cantin, N.; Munday, P.: LONG-TERM VARIATION IN CORAL-ASSOCIATED MICROBIAL SYMBIOTANTS (28265)


18:00 Ramsby, B. D.; Hoogenboom, M. O.; Whalan, S.; Sheaves, M.; Webster, N. S.: THE EFFECTS OF A CHANGING MARINE ENVIRONMENT ON THE BIOERODING SPONGE Cliona ORIENTALIS (28862)

15 CONNECTIVITY, RECRUITMENT AND ISOLATION AMONG CORAL REEF POPULATIONS

Chair(s): Kimberly A. Selkoe, selkoe@nceas.ucsb.edu
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Peter B. Ortner, ortner@rsmas.miami.edu
Shirley Pomponi, spomponi@hboi.fau.edu

Location: 317 A/B


16:30 Takao, S.; Fuji, M.; Kuroda, H.; Yamano, H.; Yamakaka, Y.: POTENTIAL CHANGES IN CORAL DISPERSAL AND CONNECTIVITY IN THE EAST CHINA SEA UNDER FUTURE CLIMATE SCENARIOS (28691)


17:00 Coelho, M.; Lasker, H.: LARVAL BIOLOGY OF THE CARIBBEAN OCTOCORAL ANTILLOGORGIA AMERICANA AND ITS IMPLICATIONS FOR DISPERSAL (30118)

17:15 Poti, M. D.; Kendall, M. S.: MACROPLANKTON, MICRONESIA, AND MESOSCALE MOVEMENT MODELS: QUANTIFYING LARVAL TRANSPORT PATHWAYS AROUND THE MARIANA ARCHIPELAGO (28981)

17:30 Dubé, C. E.; Boissen, E.; Planes, S.: CLONALITY AND LOCAL DISPERSAL: MAJOR COMPONENTS IN POPULATION MAINTENANCE OF FIRE CORALS IN MOOREA REEFS (28586)

17:45 Gomez Campo, K. J.; Banaszak, A. T.; Baums, I. B.: GENETIC DIVERSITY RELATED TO HABITAT IN THE REEF BUILDING CORAL ACROPORA PALMATA (28426)

18:00 Ordonez, A.; Diaz-Pulido, G.: SPATIAL AND TEMPORAL PATTERNS OF RECRUITMENT AND REPRODUCTION, AND STOCK-RECRUITMENT RELATIONSHIP OF CRUSTOSE CORALLINE ALGAE ON HERON ISLAND- GBR (28042)
11:15  Baria, M. B.; Guest, J. R.; Alino, P. M.; Gomez, E. D.: SPATIAL AND TEMPORAL SETTLEMENT PATTERNS OF SCLERACTINIAN AND BLUE CORALS IN NORTHWESTERN PHILIPPINES* (29523)


14:15  Lecointe, A.; Domart-Coulon, I.; Paris, A.; Meibom, A.: CELL PROLIFERATION AND TURNOVER IN EARLY LIFE STAGES OF A SYMBIOTIC SCLERACTINIAN CORAL* (28687)

14:30  Koeihi, M.; Murphy, E.; Hadfield, M.: EFFECTS OF ALGAL OVERGROWTH ON WATER FLOW INTO AND OUT OF CORAL REEFS* (28905)


15:00  Kobayashi, D. R.: CORAL REEF ECOSYSTEM PROPAGULE RETENTION AND EXPORT UNDER SCENARIOS OF CLIMATE CHANGE (2006-2100)* (30060)

15:15  Quibilan, M. C.; Doropoulos, C.; Martinez, R. S.; Panga, F. M.; Deocadez, M. R.; Mummy, P. J.; Alino, P. M.: VARYING LEVELS OF HERBIVORY AND NUTRIENT CONDITION MEDIATE CORAL REEF SETTLEMENT SUCCESS* (29266)


17 CORAL REEF ECOSYSTEM DYNAMICS: INSTABILITIES, INVASIONS, TRANSITIONS AND REORGANIZATION

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Maria Byrne, mbyrne@anatomy.usyd.edu.au

Location: 313 A

09:30  Rippe, J. P.; De Leener, D. N.; Aichelman, H. E.; Baumann, J. H.; Davies, S. W.; Bove, C. B.; Fieseler, C. M.; Castillo, K. D.: SKELETAL GROWTH TRENDS OF TWO MASSIVE REEF-BUILDING CORALS ON THE FLORIDA REEF TRACT: ARE INSHORE CORALS BETTER OFF IN A WARMING OCEAN? (28785)

09:45  Bosserelle, P.; Pichon, M.; Chancerelle, Y.: THE SCLERACTINIAN CORAL FAUNA OF MOOREA (FRENCH POLYNESIA): STABILITY OVER TIME VERSUS ENVIRONMENTAL DISTURBANCES? (28532)

10:00  Edward Patterson, J. K.; Mathews, G.; Raj, K. D.; Deepak Bilgi, S.; Wilkinson, D.; Malleshappa, H.: DECADAL TRANSITION IN CORAL REEF STATUS, DISTRIBUTION, ISSUES AND CONSERVATION INITIATIVES IN GULF OF MANNAR, SOUTHEASTERN INDIA (29198)

10:15  Tordá, G.; Sambrook, K.; Sato, Y.; Luskochev, V.; Willis, B. L.: WINNERS AND LOSERS OF CYCLES AND BLEACHING: BENTHIC COMMUNITY CHANGES AFTER MULTIPLE DISTURBANCES (28022)


11:00  Fox, M. D.; Williams, G. J.; Rohwer, F.; Sandin, S. A.; Smith, J. E.: REGIONAL-SCALE OCEANOGRAPHY INFLUENCES BENTHIC CORAL REEF COMMUNITY STRUCTURE IN THE REMOTE CENTRAL PACIFIC (29881)


12:00  Lewis, L. S.; Smith, J. E.; Price, N. N.: COMPARATIVE EXPERIMENTS ON 8 NEARSHORE HAWAIIAN CORAL REEFS: SPATIAL VARIATION IN THE ENVIRONMENTAL DRIVERS OF REEF DEVELOPMENT (30044)


12:30  Paddock, M. J.; Crane, N. L.; Bernardi, G.; Nelson, P.: IMPACTS & DYNAMICS OF AN OUTBREAK SPECIES OF CORAL ON A REMOTE ATOLL BEFORE AND AFTER A SUPER-TYPHOON (28030)

12:45  Puotinen, M. L.; Maynard, J.; Williams, G.; Beeden, R.; Radford, B.: A ROBUST METHOD FOR PREDICTING WHERE TROPICAL CYCLONES DAMAGE REEFS (29174)

13:00  Williams, G. J.; Gove, J. M.; Sandin, S. A.: PRODUCTIVITY-DRIVEN SHIFTS IN CORAL REEF BENTHIC COMMUNITIES: WHEN IS THERE TOO MUCH OF A GOOD THING? (28863)


13:45  Eynaud, Y.; Williams, G. J.; McNamara, D. E.; Sandin, S. A.: HOW MORTALITY PATTERNS INFLUENCE THE COMPOSITION OF SCLERACTINIAN CORAL COMMUNITIES (29931)

13:45  Rajesh, S.; Mathews, G.; Diraiyia Raj, K.; Dinesh Kumar, P.; Selva Bharath, M.; Patterson Edward, J. K.: SIGNIFICANT INCREASE OF ALCYONACEANS IN VILANGUCHALLI REMOTE ATOLL BEFORE AND AFTER A SUPER-TYPHOON (28863)

13:45  Roth, F.; Stuhldreier, I.; Sanchez-Noguera, C.; Morales-Ramirez, A.; Wild, C.: SIMULATED OVERFISHING PROMOTES RAPID SPREADING OF ASCIDIANS IN AN UPWELLING-INFLUENCED CORAL REEF AT THE PACIFIC COAST OF COSTA RICA (27915)
18 GEOLOGY AND PALEOECOLOGY AS TOOLS TO DECIPHER THE MODERN CORAL-REEF CRISIS

Chair(s):

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Lauren T. Toth, ltoth@usgs.gov

Location: 301 B

09:30


10:00


10:45


11:45

Eggersoten, L. M.; Berkstrom, C.; Gullstrom, M.; Ferreira, C. E.: REEF FISH AS POTENTIAL LINKS ACROSS HABITATS IN A BRAZILIAN TROPICAL SEASCAPE (28754)

12:15

Sambrook, K.; Jones, G. P.; Bonin, M. C.: LIFE ON THE EDGE: CORAL REEF FISHES EXHIBIT STRONG BIDIRECTIONAL RESPONSES TO EDGE HABITAT (29924)

20 REEF FISH ECOLOGY, CONSERVATION, AND FISHERIES: THE SCIENTIFIC LEGACY OF GLENN ALMANY

Chair(s):

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Geoffrey Jones, geoffreyjones@icu.edu
David Feary, david.feary@nottingham.ac.uk

Location: 310 THEATER

09:30


09:45

Nemeth, R. S.; Jossart, J.; Biggs, C.; Ruffo, A.; Kadison, E.: APPLICATION OF ACOUSTIC TELEMETRY TO ADVANCE SCIENTIFIC UNDERSTANDING AND INFORM MANAGEMENT OF SPECIES THAT FORM SPAWNING AGGREGATIONS IN THE US VIRGIN ISLANDS (29527)

10:00

Poblenz, D. C.; Howard, K. G.: COMPARATIVE AGGRESSIVE ASCIDIANS DIDEMNUM SP. OVERGROWS ITS TAIL AND ITS CONSEQUENCES ON CHANGING CARIBBEAN CORAL REEF ECOSYSTEMS (29627)

10:45


11:15

Hamilton, R. J.; Almany, G. R.; Hamilton, R. J.; Walde, P.: WHEN MISMATCHES DON'T MATTER: THE EFFECTS OF DIVERGENT ECOLOGICAL AND ECONOMIC SCALES IN COASTAL FISHERIES. (28668)
10:00 Budke, J. R.; Kramer, L. K.; Takabayashi, M.: CORRELATING SYMBIODINIUM DENSITY AGAINST THE FIELD BLEACHING ASSESSMENT SCALE TO QUANTIFY REDUCTION IN SYMBIODINIUM ABUNDANCE ON REEFS OF HAWAII ISLAND (28484)


10:30 Zahir, H.: PREDICTED RESPONSES OF CORAL REEFS TO THERMAL STRESS AND ITS APPLICATION TO CORAL REEF MANAGEMENT (29190)

10:45 Pomeroy, N. V.; Oliver, T. A.; Vargas-Angel, B.: TOWED-DIVER SURVEYS OF THE 2015 CORAL BLEACHING EVENT IN HAWAI‘I: AN EFFICIENT METHOD FOR BROADSCALE ASSESSMENT OF BLEACHING IMPACTS (28991)

11:00 Gintert, B. E.; Carlton, R.; Kolodziej, G.; Jones, P.; Enochs, I.; Gleason, A. C.; Gracias, N.; Reid, R. P.; Manzello, D.: IMAGE MOSAICS BEFORE, DURING, AND AFTER THE 2014 MASS CORAL BLEACHING AT CHEECA ROCKS, FLORIDA KEYS REVEAL HIGH RESILIENCE OF A CARIBBEAN CORAL REEF (29758)

11:15 Rosinski, A. E.; Birkeland, C.; Williams, I. D.; Goropese, K. D.; Oliver, T. A.; Gove, J. M.; Preskitt, L. B.; Conklin, E.; White, D. J.; Walsh, W. J.: DEVELOPING PRACTICAL MANAGEMENT STRATEGIES TO PROMOTE CORAL RECOVERY FOLLOWING A SEVERE BLEACHING EVENT IN HAWAI‘I (28213)

32 OCEAN ACIDIFICATION: MEASURING AND SCALING IMPACTS ACROSS MULTIPLE SCALES

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Location: 314

13:45 Watanabe, A.; Kurihara, H.; Mimura, I.; Kawai, T.; Hongo, C.; Golbuu, Y.: OCEAN ACIDIFICATION AND ITS IMPACT ON ECOSYSTEM PRODUCTION IN LAGOON AND OFFSHORE WATERS OF PALAU (29429)

14:00 Kennedy, E. V.; Perry, C. T.; Mumber, P. J.; Díaz-Pulido, G.: REEF CARBONATE BUDGET RESPONSES TO CLIMATE CHANGE AND THE USE OF CORAL-ALINE ALGAE AS A RESILIENCE INDICATOR FOR OCEAN ACIDIFICATION (28963)

14:15 DeCarlo, T. M.; Cohen, A. L.; Wong, G. T.; Shiah, F. K.; Lentz, S. J.; Shamberger, K. E.; Davis, K. A.: INTERACTION BETWEEN COMMUNITY METABOLISM AND REEF WATER PH ON A CORAL ATOLL IN THE SOUTH CHINA SEA (28930)

14:30 Shaw, E.; Edmunds, P.; Lantz, C.; Carpenter, R.: EFFECTS OF CARBONATE CHEMISTRY ON METABOLISM OF AN EXPERIMENTAL CORAL REEF COMMUNITY (28568)


15:00 Enochs, I. C.; Manzello, D. P.; Kolodziej, G.; Noonan, S.; Valentino, L.; Fabricius, K.: MICRO-CT ANALYSIS REVEALS DEPRESSED NET CALCIFICATION DUE TO ENHANCED BIOEROSION AND REDUCED ACCRETION OF REEF SUBSTRATA AT CO2 SEEPS (27953)

15:15 Smith, J. N.; Glenn, D.; Cornils, A.; Richter, C.; Fabricius, K. E.: OCEAN ACIDIFICATION CAUSES ABUNDANCE LOSS OF ZOOPLANKTON LIVING RESIDENTIAL TO CORAL REEFS (28486)

15:30 Plaisance, L.; Fabricius, K.; Ransome, E.; Knowlton, N.: CORAL REEF ASSOCIATED CRYPTOPLANKTON DIVERSITY PATTERNS ALONG A NATURAL pH GRADIENT (28856)

16:15 Potts, D. C.; Cooper, H.; Crook, E. D.; Martinez Fernández, A.; Barshis, D. J.; Robello-Vieyra, M.; Hernández Terrones, L. M.; Paytan, A.: A DIFFERENT KIND OF OCEAN ACIDIFICATION AND ANOTHER REFUGIUM FOR PH-TOLERANT ORGANISMS (30053)


17:00 Foster, T.; Faler, J. L.; McColloch, M. T.; Clode, P. L.: OCEAN ACIDIFICATION CAUSES STRUCTURAL DEFORMITIES IN JUVENILE CORAL SKELETONS (28101)

17:15 Ivandsen, N. R.; Bozez, Y. M.; Edmunds, P. J.; Mumber, P. J.: QUANTIFYING THE EFFECTS OF OCEAN ACIDIFICATION ON THE RECOVERY OF CORAL COMMUNITIES (28421)

17:30 Nakamura, T.; Nadaoka, K.; Watanabe, A.; Yamamoto, T.: REEF-SCALE MODEL SYSTEM FOR EVALUATING AND PREDICTING CORAL RESPONSES TO OCEAN ACIDIFICATION AND SEA-LEVEL RISE (29282)


18:00 Oliver, T. A.; Young, C. W.; Misa, P.; Clark, J. S.; Pomeroy, N. V.; Vargas-Angel, B.; Brainard, R. E.: OBSERVING PROCESS IN THE CARBONATE SYSTEM OF PACIFIC REEFS: NATIONAL CORAL REEF MONITORING PROGRAM IN THE PACIFIC (29562)

36 ASSESSING AND ADDRESSING THE EFFECTS OF MULTIPLE STRESSORS ON CORAL REEFS TOWARDS DEVELOPING EFFECTIVE MANAGEMENT AND POLICY RESPONSES

Chair(s): David I. Kline, dkline@ucsd.edu
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Location: 306 A/B


16:30 Dove, S. G.; Van Den Heuvel, A.; Hoegh-Guldberg, O.: INSIGHTS INTO THE EFFECTS OF TEMPERATURE AND/or ACIDIFICATION ON CORAL REEF ECOSYSTEMS (28119)

16:45 Kornder, N. A.; Figueiredo, J.: USING REGRESSION-BASED EFFECT SIZE META-ANALYSIS TO INVESTIGATE CORAL RESPONSES TO CLIMATE CHANGE (28422)

17:00 Green, T. K.; Cole, C.; Allison, N.; Burdett, H. L.; Finch, A.: THE COMBINED EFFECTS OF CHANGES IN TEMPERATURE AND PCO2 ON PRODUCTION OF DIMETHYLSULPHONIOPROPIONATE IN MASSIVE PORITES CORAL SPECIES (28783)

17:30 ALLAN, B. J.; Domenici, P.; Watson, S. A.; Munday, P. L.; McCormack, M. J.: DIFFERENTIAL EFFECTS OF CO2 AND WARMING ON PREDATOR-PREY INTERACTIONS IN CORAL REEF FISH (27925)

17:45 Lee, K.; Ko, Y.; Noh, J.; Lee, C. M.; Kleypas, J.; INFLUENCE OF CLIMATE VARIATIONS ON CORAL REEF (CHUUK ATOLL) ACIDIFICATION IN THE WESTERN PACIFIC OCEAN (27944)

18:00 Halpern, B. S.; Garcia Molinos, J.; Schoeman, D. S.; Brown, C. J.; Kessling, W.; Moore, P. I.; Pandolfi, J. M.; Poloczanska, E. S.; Richardson, A. J.; Barrowes, M.; RESHUFFLING OF GLOBAL MARINE BIODIVERSITY UNDER CLIMATE CHANGE (27993)

39 RIDGE TO REEF MANAGEMENT APPROACHES
Chair(s): Curt Storlazzi, cstorlazzi@usgs.gov
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Edwin A. Hernandez-Delgado, coral_giac@yahoo.com

Location: 306 A/B

09:30 Rodgers, K. S.; Franklin, E. C.; Jokiel, P. L.; Kapur, M.; Kidoo M. H.; USE OF INTEGRATED LANDSCAPE INDICATORS TO EVALUATE THE CONDITION OF “RIDGE TO REEF” SYSTEMS AND PRIORITIZE WATERSHEDS FOR RESTORATION IN THE HAWAIIAN ISLANDS. (27998)

09:45 Comeros, M. T.; Lawrence, A. K.; Sudek, M.; Houk, P. A FRAMEWORK TO ASSESS RIDGE TO REEF ECOSYSTEM HEALTH IN AMERICAN SAMOA (29509)

10:00 Brown, C. J.; Jupiter, S. D.; Klein, C. J.; TRACING THE IMPACTS OF LAND-USE CHANGE TO CORAL REEF FISHERIES (29108)

10:15 Whitall, D. R.; QUANTIFICATION OF LAND BASED SOURCES OF POLLUTION IN SUPPORT OF CORAL REEF MANAGEMENT: CASE STUDIES FROM TWO U.S. CORAL REEF TASK FORCE PRIORITY WATERSHEDS (27984)

10:30 Schaeffelke, B.; Logan, M.; Lamborg, C.; Thompson, A.; REGIONAL-SCALE EVALUATIONS OF WATER QUALITY AND CORAL REEF CONDITION IN THE INNER GREAT BARRIER REEF HIGHLIGHT CHALLENGES FOR ADAPTIVE COASTAL ZONE MANAGEMENT (29325)

10:45 Vargas-Angel, B.; Storlazzi, C.; White, D. J.; Callender, T.; DETERMINING THE EFFECTIVENESS OF WATERSHED MANAGEMENT ACTIVITIES TO REDUCE LAND-BASED POLLUTION ON WEST MAUI (28118)

11:00 Tulloch, V. J.; Brown, C.; Posinghham, H.; Jupiter, S.; Maina, J.; Klein, C.; IMPROVING CONSERVATION OUTCOMES FOR DATA-POOR CORAL REEFS AFFECTED BY FUTURE OIL PALM DEVELOPMENT IN PAPUA NEW GUINEA (28473)


11:30 Falinski, K. A.; Oleson, K. L.; Lecky, J.; Hamel, P.; Yost, R. S.; Sutherland, R.; DEVELOPMENT OF A SUBTROPICAL VOLCANIC GEOLOGY-SPECIFIC MODEL FOR SEDIMENT DELIVERY IN THE HAWAIIAN ISLANDS (29609)

14:00 Carino-Valdez, B. B.; Villanoy, C. L.; Horigue, V.; Gammaru, A. A.; Solera, L. A.; Alino, P. M.; Rollon, R. N.; INTEGRATING WATERSHED AND HYDRODYNAMICS MODELS TO QUANTIFY LAND-DERIVED SEDIMENTATION ON REEFs (29256)

14:15 Takeseu, R. K.; Swarzenski, P. W.; Stender, Y.; Storlazzi, C. D.; HISTORICAL RUNOFF SOURCES TO PELEKANE BAY, SOUTH KOHALA, HAWAI’I: IMPLICATIONS FOR REEF HEALTH (29829)

14:30 Carilli, J. E.; McNally, S. P.; Gray, S. C.: ASSESSING MITIGATION EFFORTS TO REDUCE SEDIMENT RUNOFF ON CORAL REEFS IN ST. JOHN USVI USING CORAL GEOCHEMICAL PROXIES (28376)

14:45 Savage, C.; Miller, E.; Rundgren, C. D.: SEABIRD NUTRIENTS PROMOTE GROWTH AND RESILIENCE OF CORALS: IMPLICATIONS FOR Ecosystem MANAGEMENT (29014)

15:00 Vandiver, L.; Moore, T. D.; Sturm, P.; Ortiz, S.: DEVELOPING COST EFFECTIVE METHODS FOR QUANTIFYING THE HABITAT BENEFIT OF WATERSHED RESTORATION (29440)


42A PROPAGATION AND ACTIVE REEF RESTORATION—TECHNIQUES AND CONSIDERATIONS FOR THE PRODUCTION OF CORALS AND PROPAGULES AND TRANSPANTATION ONTO DEGRADED REEFS
Chair(s): Tom Moore, tom.moore@noaa.gov
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Claude Reveret, claudereve@yahoo.fr
Edwin A. Hernandez-Delgado, coral_giac@yahoo.com

Location: 301 B

13:45 Ross, A. M.; THE EFFICACY OF NURSERY HEAD-STARTING IN THE CULTURE AND RESTORATION OF ACROPORA CERVICORNIS (28842)

14:00 Hernandez-Delgado, E. A.; Mercado-Molina. A. E.; Suleiman-Ramos, S. E.: THE UNLIKELY PERSISTENCE OF RESTORED STAGHORN CORAL (ACROPORA CERVICORNIS) POPULATIONS IN A WARMING WORLD: LESSONS LEARNED FROM A MODELLING APPROACH (28802)


14:30 Lohr, K. E.; Patterson, J. T.: VARIATION IN GROWTH, BRANCHING, AND BLEACHING AMONG NURSERY-READED STAGHORN CORAL ACROPORA CERVICORNIS GENOTYPES (28398)

14:45 Goerger, E. A.; Gilliam, D. S.; OPTIMIZING OUTPLANT SUCCESS FOR ACROPORA CERVICORNIS: AN ASSESSMENT OF VARYING COLONY DENSITY, SIZE AND ATTACHMENT TECHNIQUES (28404)

15:00 Goerger, E. A.; Gilliam, D. S.: A COMPARISON OF DISEASE PREVALENCE IN WILD AND OUTPLANTED ACROPORA CERVICORNIS COLONIES ALONG THE FLORIDA REEF TRACT (29027)

15:15 Griffin, S. P.; Moore, T. D.; Nemeth, M. I.; Gleason, A.; Gintert, B.; USING TIME LAPSE PHOTOMAPS TO MONITOR GROWTH AND EXPANSION OF ACROPORA CERVICORNIS THICKETS CREATED BY OUTPLANTING NURSERY GROWN CORALS (29006)

15:30 Nedimyer, K. N.; Levy, J.; Ripple, K.: REEF RESTORATION FOUNDATION: A 15 YEAR STUDY IN BUILDING A LARGE SCALE, REPLICABLE RESTORATION MODEL (29957)

* REPRESENTS INVITED PRESENTATIONS
51 REMOTE SENSING OF CORAL REEFS: TRANSITIONING FROM DEVELOPMENTAL TO OPERATIONAL

Chair(s): Eric J. Hochberg, eric.hochberg@bios.edu
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Chris Roelfsema, c.roelfsema@uq.edu.au

Location: 312

13:45 Hochberg, E. J.: SEEING THE REEF FOR THE CORALS: A QUANTITATIVE CASE FOR REMOTE SENSING (28749)


14:30 Russell, B. J.; Dierssen, H. M.; LaJeunesse, T. C.; Hoadley, K. D.; Warner, M. E.; Kemp, D. W.; Bateman, T. G.: SPECTRAL REFLECTANCE OF PALUAN REEF-BUILDING CORAL WITH DIFFERENT SYMBIOTIC IN RESPONSE TO ELEVATED TEMPERATURE (27958)


15:00 Gao, B.; Li, R.: ATMOSPHERIC CORRECTION OF PRISM AIRBORNE IMAGING SPECTROMETER DATA FOR SUPPORTING CORAL REEF RESEARCH (28081)

15:15 Garcia, R. A.; Lee, Z.: EXPLORING THE ISSUE OF BOTTOM REFLECTANCE PARAMETERISATION IN SHALLOW WATER INVERSION MODELS (29261)


16:30 Li, M.; Lou, Q.; Chen, X.; Xie, J.: MONITORING AND SPATIAL-TEMPORAL ANALYSIS OF CORAL REEF BASED ON MULTI-DATA (29372)


17:00 Sheall, D. A.; Wiedermann, J.: D’Angelo, C.; Amos, C.: LOCAL BLEACHING THRESHOLDS ESTABLISHED BY REMOTE SENSING TECHNIQUES VARY AMONG REEFS WITH DEVIATING BLEACHING PATTERNS (27889)

17:15 Gholzlow, M. M.: A NEW IMAGE CLASSIFICATION APPROACH FOR MAPPING CORAL DENSITY IN KUWAIT USING HIGH RESOLUTION SATELLITE IMAGES (27845)


18:00 Ben-Romdhane, H.; Ahmed, M. A.; Marpu, P. R.; Ouarda, T.; Sanchez, S.; Ghedira, H.: CHANGE DETECTION IN A CORAL REEF ENVIRONMENT IN THE ARABIAN GULF USING MULTISPECTRAL REMOTE SENSING (28583)

**63 INNOVATIONS IN SOCIO-ECOLOGICAL RESEARCH FOR RESILIENCE BASED MANAGEMENT**

Chair(s): Elizabeth McLeod, emcleod@tnc.org
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Nadine Marshall, Nadine.Marshall@csiro.au

Location: 305 A/B

09:30 Parker, B. A.; Beeden, R.; Maynard, J. A.; McLeod, E.; Tamelander, J.: RESILIENCE-BASED MANAGEMENT OF CORAL REEF ECOSYSTEMS: PAST, PRESENT AND FUTURE (28797)


10:15 Johnson, J. E.; Bell, J. D.; Sen Gupta, A.; Moore, T.: VULNERABILITY OF PACIFIC REEF-DEPENDENT COMMUNITIES TO OCEAN ACIDIFICATION: FOOD SECURITY AND LIVELIHOOD IMPLICATIONS (28429)

10:30 Thiault, L.; Collin, A.; Chlous, F.; Claudet, J.: PLACE-BASED OPERATIONALIZATION OF THE SOCIO-ECOLOGICAL VULNERABILITY FRAMEWORK TO FOSTER SOCIAL-ECOLOGICAL RESILIENCE (28191)

10:45 Heron, S. F.; Maynard, J. A.; Eakin, C. M.; De La Cour, J. L.; Liu, G.; Geiger, E. F.; Gomez, A. M.; Skirving, W. J.; Strong, A. E.; Tirak, K. V.: THE INFLUENCE OF THERMAL HISTORY ON CORAL BLEACHING RESPONSE DURING HIGH TEMPERATURE STRESS (28253)


11:15 van Hooidonk, R.; Maynard, J.; Tamelander, J.; Gove, J.; Ahmadia, G.; Raymundo, L.; Williams, G.; Heron, S.: DOWNSCALED PROJECTIONS OF CORAL BLEACHING CONDITIONS THAT CAN INFORM CONSERVATION PLANNING (29484)


14:30 Abal, E.; Rodgers, M.: TOWARDS DEVELOPING A FRAMEWORK FOR REEF RESILIENCE: A GREAT BARRIER REEF CASE STUDY (29211)


15:00 Agardy, T.; Hicks, F.; Grimsditch, G.; Abdulla, A.; Nishihara, F.: INCORPORATING ECOSYSTEM SERVICES VALUES IN RESILIENCE-BASED MANAGEMENT: THE CASE STUDY OF A REMOTE INDIAN OCEAN ATOLL (29349)


15:30 Cvitanovic, C.; Hobday, A.; McDonald, J.; Waples, K.; Barnes, P.: PRINCIPLES FOR IMPROVING KNOWLEDGE EXCHANGE AMONG SCIENTISTS AND DECISION-MAKERS TO FACILITATE THE RESILIENCE-BASED MANAGEMENT OF CORAL REEFS (29107)

**64 SOCIAL SCIENCE APPLICATIONS TO CORAL REEF MANAGEMENT: HUMAN AND SOCIAL DIMENSIONS AND THE LINK TO REEF HEALTH AND ECOLOGICAL CHANGE**

Chair(s): Peter Edwards, peter.edwards@noaa.gov
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Arielle Levine, Arielle.levine@noaa.gov
Theresa Geodeke, Theresa.Geodeke@noaa.gov

Location: 305 A/B

16:30 Goodell, W.; Ferreira, C. E.: SOCIAL AND ECOLOGICAL CONSIDERATIONS IN RESOURCE CONSERVATION: GEOSPATIAL PRIORITIZATION FOR SUSTAINABLE FISHERY MANAGEMENT IN SOUTHEAST BRAZIL (29546)

16:45 Sauahea-Le’au, F.; Levine, A.: COMMUNITY-BASED RESILIENCE AND ADAPTATION TO CLIMATE CHANGE: USING PLA TOOLS TO FACILITATE VILLAGE CLIMATE RESILIENCE IN AMERICAN SAMOA (29506)

17:00 Koshiba, S. D.; McNamara, K. E.; Otto, E. I.; Gouezo, M.; Golbuu, Y.: THE IMPORTANCE OF SOCIO-ECONOMIC INFORMATION FOR EFFECTIVE MANAGEMENT OF PROTECTED AREAS IN SIX STATES IN PALAU (28574)


17:30 Hoon, V.; Mariraja, T.: USING SOCMON TO ADDRESS SOCIO-ECOLOGICAL MANAGEMENT IN THE GULF OF MANNAR (COM) AND PALKBAY: MARINE ECOSYSTEMS SHARED BY INDIA AND SRILANKA (27986)

17:45 Pido, M. D.; Pontillas, M. S.; Ponce de Leon, E. D.: THE APPLICATION OF SOCIOECONOMIC MONITORING (SOCMON) METHODOLOGY IN ASSESSING BETWEEN TWO TIME PERIODS BINDUJAY MARINE PROTECTED AREA IN PALAWAN, PHILIPPINES (29489)

18:00 Pena, M. A.: SOCMON CARIBBEAN AND COMPREHENSIVE INTEGRATED MONITORING (27955)
72 MARINE RESOURCE SUSTAINABILITY, CONSERVATION AND MANAGEMENT IN THE CORAL TRIANGLE & SOUTHEAST ASIA

Chair(s): Thamasak Yeemin, thamasakyeemin@yahoo.com
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Eleanor Carter, ecarter.conservation@gmail.com

Location: 302 A/B
09:30 Pratikto, W. A.; Lukman, M.: BOOSTING CORAL REEF CONSERVATION THROUGH REGIONAL COLLABORATION: A LESSON LEARNED FROM REGIONAL CTI-CFF PARTNERSHIP (27851)
10:00 Lowe, J.: DIVE TOURISM AND ITS IMPACT ON INTEGRATED COASTAL MANAGEMENT AND LIVELIHOODS FOR ARTISANAL FISHERS (27903)
11:00 Gregory, C.: MARINE CONSERVATION THROUGH ART (28071)
11:15 Yin, X. Y.; Teh, L.; Cheung, W.; Sumala, R.: CURRENT STATE AND FUTURE PROSPECTS OF CORAL REEF FISHERIES IN THE SOUTH CHINA SEA (28091)
13:45 Hugua, H.; Subijanto, J.; Budaiatuti, T. I.; Yunita, R.; CORAL TRIANGLE INITIATIVE ON CORAL REEFS, FISHERIES, AND FOOD SECURITY MARITIME LOCAL GOVERNMENT NETWORK: TO IMPROVE COASTAL AND MARINE RESOURCE GOVERNANCE (28133)
14:00 Subijanto, J.; Hugua, H.; Budaiatuti, T. I.; Yunita, R.; Amin, M. I.; Santadij, V.: STRENGTHENING THE MARITIME LOCAL GOVERNMENT NETWORK TOWARD A SELF-RELIANT MARITIME LOCAL GOVERNMENT NETWORK TO SUPPORT CTI-CFF RPOA AND NPOA IMPLEMENTATION (28141)
14:15 Asaad, I.; Lundquist, C. J.; Erdmann, M. V.; Costello, M. J.: DELINEATING PRIORITIZATION AREAS FOR MARINE BIODIVERSITY CONSERVATION IN THE CORAL TRIANGLE. (28278)
14:45 Muhammad Khurshid, -. -.; Pulakesh Mondal, -. -.: CORAL REEF CONSERVATION AND MANAGEMENT CHALLENGES IN SOUTH ASIA (28521)
15:15 dela Rosa, G. E.; Fajaro, M. G.; Lavides, M. N.: SUSTAINING STAKEHOLDER PARTICIPATION IN MARINE PROTECTED AREA NETWORKS IN LANUZA BAY, SOUTHEASTERN PHILIPPINES (28567)

15:30 Yeemin, T.; Suebpana, W.; Sutthacheep, M.: EFFORTS OF SMALL-SCALE FISHERS IN CORAL REEF CONSERVATION: CASE ILLUSTRATIONS FROM THAILAND (28621)
16:45 De Jesus, D. O.; Abrina, T. S.; Arceo, H. O.; Alino, P. M.: RECOGNIZING BEST PRACTICES IN MPA AND MPA NETWORK MANAGEMENT IN THE PHILIPPINES: THE PARA EL MAR (MPA AWARDS AND RECOGNITION) (29276)
17:15 Lalas, J. A.; Mamanau, S. C.; Jacinto, M. R.; Cabral, R. B.; Deocadez, M. K.; Martinez, R. S.; Muallil, R. N.; Alino, P. M.: EFFECT OF MANGROVE FOREST DISTANCE AND FISHING ON THE ASSEMBLAGE OF TARGETED NURSERY REEF FISHES (29287)
17:45 Dunstan, A. J.: GREEN TURTLE REPRODUCTIVE FAILURE AND MANAGEMENT INTERVENTION AT RAINE ISLAND, GREAT BARRIER REEF (20153)
18:00 Nanola, C. L.; Muallil, R. N.: REEF FISH ASSEMBLAGES IN FISHED AREAS WITH MPAS IN TOURIST AND NON-TOURIST DESTINATION SITES IN SOUTHERN MINDANAO, PHILIPPINES (29450)

73A CO-MANAGEMENT: PARTNERSHIPS FOR ACHIEVING EFFECTIVE RESOURCE OUTCOMES ON CORAL REEFS - PARTNERSHIPS ACROSS AGENCIES AND ORGANIZATIONS

Chair(s): Paulo Maurin, paulo.maurin@noaa.gov
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Mike Lameier, michael.lameier@Noaa.gov
Wendy Q. Luna, Waddell, J.: COOPERATIVE PARTNERSHIP FOR CORAL REEF CONSERVATION (29807)
14:00 Byrne, J.: THE FLORIDA REEF RESILIENCE PROGRAM, 10 YEARS OF A PUBLIC-PRIVATE PARTNERSHIP ON THE FLORIDA REEF TRACT (29858)
14:15 Lewis, K.: THE VIRGIN ISLANDS REEF RESILIENCE PLAN: A MULTI-FACETED APPROACH TO CORAL REEF CONSERVATION IN THE US VIRGIN ISLANDS. (29673)

15:15 Widayanti, H.: SUSTAINABLE FINANCING FOR THE BIRD’S HEAD SEASCAPE AREA IN WEST PAPUA (29379)

15:30 Constantine, S. L.: Cross, L. H.; Knowles, J.: FORGING PARTNERSHIPS TO LAY A FOUNDATION FOR ENVIRONMENTAL SUCCESS (29626)

16:15 Brown, V. A.; Burdick, D. R.; Cruz, J.: AN OUNCE OF PREVENTION: BUILDING RAPID RESPONSE CAPACITY TO MINIMIZE IMPACTS OF ACUTE REEF IMPACTS ON GUAM (29119)

16:45 Kekoa, E. L.: `IKE KAI: AN INNOVATIVE AND ENGAGING CURRICULUM FOR THE DIVISION OF AQUATIC RESOURCES (29885)

17:00 Slay, J. H.; Holst, S.; Wilse, W.; Ferguson, R.: UNITED STATES CORAL REEF TASK FORCE WATERSHED PARTNERSHIP INITIATIVE (29646)

17:15 Callender, T. A.; Kloster, C.; Foote, E.; Slay, H.; Storlazzi, C.: PILOTING A WATERSHED-SCALE MODEL FOR COLLABORATIVELY ADDRESSING LBSP STRESSORS ON CORAL REEFS IN WEST MAUI, HAWAII, USA (28492)


17:45 Edwards, K. F.; Clark, R.; Hile, S. D.: IMPLEMENTATION OF LARGE SCALE MONITORING PROGRAMS AS A PLATFORM FOR TERRITORIAL CONSERVATION AND MANAGEMENT (28356)

18:00 Wegmann, A. S.; Kropidowski, S.; Conklin, E. J.; Pollock, A.; Flint, E. N.; Hum, K.; White, S.: PALMYRA ATOLL RESEARCH STATION: UNDERSTANDING A NEAR PRISTINE MARINE ENVIRONMENT TO BETTER PROTECT MARINE ECOSYSTEMS GLOBALLY (30091)

73B CO-MANAGEMENT: PARTNERSHIPS FOR ACHIEVING EFFECTIVE RESOURCE OUTCOMES ON CORAL REEFS - PARTNERSHIPS WITH AND AMONG COMMUNITIES AND STAKEHOLDERS

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Paulo Maurin, paulo.maurin@noaa.gov
Anne Kitchell, akitchell@horsleywitten.com

Location: 303 A/B

09:30 Loerzel, A. M.: MANELL-GEUS: A MODEL FOR FOSTERING MULTI-AGENCY COLLABORATION (28432)

09:45 Wusinich-Mendez, D.; Walczak, J.: THE OUR FLORIDA REEFS COMMUNITY PLANNING PROCESS: COLLABORATIVE MANAGEMENT ACTION DESIGN TO INFORM THE CONSERVATION OF SOUTHEAST FLORIDA'S CORAL REEF ECOSYSTEM (28859)

10:00 Patterson, J., Wilhelmsnsson, D.; Edward Patterson, J. K.: CO-MANAGEMENT TO ADDRESS LIVELIHOOD LINKED THREATS TO CORAL REEFS – CASE STUDY FROM GULF OF MANNAR, SOUTHEASTERN INDIA (29116)

10:15 Hattori, H.: CURBING SEDIMENTATION OF CORAL REEFS THROUGH COMPREHENSIVE STAKEHOLDER ENGAGEMENT: A CASE STUDY FROM PAGA'ALLI, AMERICAN SAMOA (2912)

10:30 Muthiga, N. A.; McClanahan, T. R.; Abunge, C.; Mueni, E.: COMMUNITY FISHERS' FORUM AS A MEANS TO FACILITATE THE UPTAKE OF SCIENCE INTO SMALL-SCALE FISHERIES CO-MANAGEMENT (29965)


11:00 Kitchell, A.: FAILURE TO SPAWN: A SELF-CRITIQUE OF PARTNERSHIP SUCCESSES AND SINKHOLE (29537)

11:15 Viqueira-Rios, R. A.: INTEGRATED WATERSHED MANAGEMENT AND GREEN INFRASTRUCTURE IN PUERTO RICO (29400)
**13TH INTERNATIONAL CORAL REEF SYMPOSIUM**

**WEDNESDAY POSTERS**
Poster sessions take place in the Kamehameha Exhibit Hall 1.

**05 ACCLIMATIZATION AND ADAPTATION IN REEF ORGANISMS**
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Sylvain Foret, sylvain.foret@anu.edu.au

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**39**
Doo, S. S.; Gnbse-Landry, A.; Leplatrier, A.; Byrne, M.: CONTRASTING EFFECTS OF EPIDPHYES ON CALCIFYING VS. NON-CALCIFYING ALGAE IN CLIMATE CHANGE SCENARIOS (29159)

**41**
Jury, C. P.; Delano, M. N.; Toonen, R. J.: THE HERITABILITY OF CORAL TOLERANCES TO OCEAN ACIDIFICATION (29299)

**42**
Padera, O. T.: MORPHOLOGICAL VARIATION IN THE COLONIES OF THE HARD ACROPORA HYACINTHUS IN SHELTERED AND EXPOSED CONDITIONS (29420)

**43**
Chinfak, N.: Chavanich, S.; Viyakarn, V.: EFFECTS OF TEMPERATURE AND SALINITY ON THE OXYGEN CONSUMPTION RATES AND BEHAVIORS OF THE NUDIBRANCH, JORUNNA FUNEIRIS (KELAART; 1858) (29636)

**45**

**46**
Stefaniak, L. M.; Schutter, M.; Gleason, D. F.; Medina-Rosas, P.; Carpioz-Toaturet, E.; Banaszak, A.: ULTRAVIOLET RADIATION AND CORAL EMBRYOS: DNA DAMAGE, SURVIVAL, AND DEVELOPMENT (29715)

**47**
Genovese, C. B.; Moran, A. L.: PLASTICITY IN THERMAL TOLERANCE WINDOWS OF EARLY LIFE HISTORY STAGES (30005)

**48**
Escandón, N.; Enriquez, S.: PHOTOPROTECTION AND PHOTOSYSTEM II REPAIR OF SYMBIODINIUM IN CORAL EMBRYOS: DNA DAMAGE, SURVIVAL, AND PLASTICITY (29637)

**49**
Muller, R.; Zaneveld, J.; Campbell, A. M.; Vega-Thurber, R.; Lopez, J. V.: MICROBIAL COMMUNITIES ASSOCIATED WITH SPONGE ORANGE BAND DISEASE IN THE GIANT BARREL SPONGE, XESTOSPONGIA MUTA (27928)

**52**
Freckelton, M.; Bowden, B.; Hoj, L.: SOFT CORALS AS QUORUM SENSING MIMICS? NEW PERSPECTIVES ON WELL-KNOWN COMPOUNDS (30168)

**53**

**54**
Montilla, L. M.; Ascanio-Moreno, A.; Croquer, A.: A NETWORK APPROACH TO IDENTIFY SUCCESS AND GAPS IN CORAL DISEASE SCIENCE OVER FIVE DECADES OF RESEARCH (28165)

**55**
Yamashiro, H.: DAILY FLUORESCENT BAND RECORDED BEHIND BLACK BAND DISEASE (28107)

**56**

**57**
Kim, C. J.; Roelfsema, C.; Hoegh-Guldberg, O.; Dive, S.: CORAL HEALTH & DISEASE IN URBAN VERSUS RURAL AREAS OF TIMOR-LESTE (28046)

**58**
Kobumura, T.; Reimer, J. D.: INCIDENCE AND CAUSE OF PINK/PURPLE PIGMENTATION SYNDROME IN GENUS PORITES IN OKINAWA ISLAND (28549)

**59**

**60**

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**64**
Yusuf, S.: RAPID ASSESSMENT FOR CORAL DISEASE IN SAWU SEA MARINE NATIONAL PARK, INDONESIA (29464)

**65**
Burger, A. H.; Ushijima, B.; Videoe, P. J.; Aebi, G. S.; Callahan, S. M.: THE ROLE OF QUORUM SENSING IN THE PATHOGENESIS OF THE CORAL PATHOGEN VIBRIO CORALLILYTICUS STRAIN OCN008 (29870)
18 GEOLOGY AND PALEOECOLOGY AS TOOLS TO DECIPHER THE MODERN CORAL-REEF CRISIS

Chair(s): Ilsa B. Kuffner, ikuffner@usgs.gov
Lauren T. Toth, ltoth@usgs.gov

230 Hodges, M. S.; Stanley, Jr., D. G.: NEW EVIDENCE OF CORAL RECOVERY IN EASTERN PANTHALASSA AFTER THE END-TRIASSIC MASS EXTINCTION (29177)

231 Gladwin Gnana Asir, N.; Mathews, G.; Diraviya Raj, K.; Patterson Edward, J. K.; Ramasamy, S.: COMPARISON OF PRESENT DAY CORAL REEF DISTRIBUTION WITH THE EXPOSED HOLOCENE REEF IN RAMESHWARAM ISLAND, GULF OF MANNAR, INDIA – INFERENCES FOR PALEOECOLOGY (29236)

232 Shigaki, M.; Odo, A.; Fujimura, H.; Asami, R.: FAST WATER ENVIRONMENT OF KABIRA BAY RECORDED BY ISOTOPES AND TRACE ELEMENTS OF CORAL SKELETON (29217)

233 Soja, C. M.; White, B.; Capodiferro, C. J.; Riefler, J. P.: THE RISE OF SLIME IN SILURIAN CORAL-SPONGE-MICROBIAL REEFS IN ALASKA’S ALEXANDER TERRANE: INSIGHTS FROM ECOLOGICAL TRANSITIONS AFFECTING MODERN CORAL REEFS (28377)

234 Razak, T. B.; Mummy, P. J.; Nguyen, A. D.; Zhao, J. X.; Lough, J. M.; Cantin, N. E.; Roff, G.: SEASONAL PATTERNS OF GROWTH IN THE ROBUST BRANCHING CORAL ISOPORA PALIFERA FROM THE CENTRAL GREAT BARRIER REEF, AUSTRALIA (28526)

235 Zapalski, M. K.: BLEACHING IN PALEOZOIC CORAL? (27867)

21 ACHIEVING SUSTAINABLE CORAL REEF FISHERIES: POLICY DEVELOPMENT, IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT

Chair(s): Lida Teneva, l.teneva@conservation.org
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265 Bevilacqua, A. H.; Carvalho, A.; Pennino, M. G.; Sumaila, R.; WHICH FACTORS DRIVE CORAL REEF FISHERIES: ECONOMICS, ENVIRONMENT OR RANDOMNESS? (28104)

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696 Lopez Padriena, M.; Gilliam, D. S.; Walker, B. K.: DISTRIBUTION OF THREATENED CORAL SPECIES IN THE PARQUE NACIONAL SISTEMA ARRECIFAL VERACRUZANO, VERACRÚZ, MEXICO (29677)


698 Lopez Padriena, M.; Gilliam, D. S.; Walker, B. K.: DISTRIBUTION OF THREATENED CORAL SPECIES IN THE PARQUE NACIONAL SISTEMA ARRECIFAL VERACRUZANO, VERACRÚZ, MEXICO (29677)

700 Lybolt, M.; Garcia, R.; Soucier, C.: INTEGRATING CORAL LARVAE INTO POLICY COMPLIANCE USING BULK PLANKTONIC SAMPLES FOUND PEAK LARVAL DENSITY OF 600 PER CUBIC METER, 9 DAYS AFTER THE FULL MOON (29892)

702 Andreas Dietzel, A.: QUANTITY, NOT QUALITY – FIRST LARGE-SCALE CENSUS OF INDO-PACIFIC SCLERACTINIAN CORALS (30102)

80 OFFSHORE CORAL REEFS IN THE SOUTH CHINA SEA: SCIENCE, PROBLEMS AND SOLUTIONS

Chair(s): John W. McManus, mcmanus@hawaii.edu, Kwang-Tao Shao, zsokt@gate.sinica.edu.tw

703 Young, A. H.; Baker, D. M.: A TURNAROUND AT SANYA NATIONAL CORAL REEF NATURE RESERVE? (28163)


82 INNOVATIONS IN THE USE OF DIGITAL TOOLS AND THE MEDIA FOR COMMUNICATION, OUTREACH AND EDUCATION IN SUPPORT OF CORAL REEF PROTECTION

Chair(s): Mark Heckman, mheckman@hawaii.edu, Kathryn Furby, kfurb@ucsd.edu, Christie Wilcox, wilcoxci@hawaii.edu, Carlie Wiener, cwieiner@schmidt ocean.org, Simon Brandl, simonbrandl@gmail.com, Jennifer J. Barrett, mail@enbarrett.net, James Foley, foleyj@hawaii.edu, Liz Foote, lfoote@hawaii.rr.com

705 Hufnagel, A. S.; Lemus, J. D.: TEACHING STYLES IMPACTS STUDENT ACHIEVEMENT IN A RESEARCH-BASED UNDERGRADUATE SCIENCE COURSE (28370)


707 Leal, J. D.: SEAHARMONY: AN INNOVATIVE FORUM FOR COLLABORATIVE NETWORKING (28033)


709 Weaver, L. A.; Ching, C. M.; Heckman, M. B.: WORKING WITH COMMUNICATION AND MESSAGING FOR VOLUNTEERS OLD, MIDDLE OLD, YOUNG AND YOUNGER (28986)

87 FUNDING AND FINANCE IN SUPPORT OF CORAL REEF RESEARCH, CONSERVATION AND EDUCATION - BUILDING LOCAL AND GLOBAL CAPACITY TO REVERSE CORAL REEF DECLINE

Chair(s): Melissa Walsh, melissasa@marineconservationfinance.com, Jason Vasquez, jvasquez@coral.org, Sean Marrs, smarrs@tnc.org, Christopher LaFranchi, chris@onereef.org, Jean Tanimoto, jean.tanimoto@noaa.gov, Madhavi Colton, mcolton@coral.org, Manuel Mejía, mmejia@tnc.org, Christopher Filardi, filardi@arenah.org, Brad Wong, bwong@tnc.org


716 Heckman, M. B., Ching, C.: CONNECTING A RESEARCH INSTITUTION TO THE PUBLIC, BUILDING ON A 5 YEAR TIMELINE WHILE THINKING 7 GENERATIONS OUT (29180)

718 Rivera, M.; Manning, M. M.; Ambrosino, C. M.: EXPERIMENTAL COURSES FOR HIGH SCHOOL STUDENTS AT THE HAWAII INSTITUTE OF MARINE BIOLOGY (29598)

88 CITIZEN SCIENCE IN SUPPORT OF CORAL REEF PROTECTION AND SUSTAINABILITY

Chair(s): Karsten Shein, Karsten.Shein@noaa.gov, David Bourne, d.bourne@aims.gov.au, James Hendee, Jim.Hendee@noaa.gov, Yoshimi Suzuki, seysuzu@ipc.shizuoka.ac.jp, Carrie Manfrino, manfrino@reefresearch.org, David Smith, djsmitc@essex.ac.uk, Pamela Fletcher, Pannela.Fletcher@noaa.gov, Jenny Cousins, jcouins@earthwatch.org.au

721 Pattengill-Semmens, C. V.: LESSONS LEARNED FROM A QUARTER CENTURY OF A SUCCESSFUL MARINE CITIZEN SCIENCE PROGRAM (30027)


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<td>Participatory Fisheries Monitoring Programs to Support Local Management</td>
<td>Schemmel, E.; Friedlander, A.; Kittinger, J.</td>
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<td>729</td>
<td>Coral Reef Health Monitoring by Community Volunteers at War in the Pacific National Historical Park, Guam</td>
<td>Gawel, M. J.; Miller, A. K.; Sortor, T. T.; Lewis, K. G.</td>
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<td>731</td>
<td>Citizen Science to Improve Community Engagement: Considerations, Challenges, and Recommendations from the Guam Community Coral Reef Monitoring Program</td>
<td>Brown, V. A.; Quinata, M. R.</td>
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THURSDAY ORALS

05 ACCLIMATIZATION AND ADAPTATION IN REEF ORGANISMS

Chair(s): Mikhail V. Matz, matz@utexas.edu
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Mikhail V. Matz, matz@utexas.edu

Location: 313 B

09:30 Winter, R. N., Kushlan, P. F., Baker, A. C.: ENVIRONMENTAL DRIVERS OF ACCLIMATIZATION: EFFECTS OF GRADUAL WARMING VS. REPEATED THERMAL STRESS ON SYMBIOTIC COMMUNITY STRUCTURE AND FUNCTION IN REEF CORALS (29555)

09:45 Scheufen, T., Enriquez, S.: VARIATION OF SYMBIONT DENSITY OR CELL PIGMENTATION OF SYMBIODINIUM CAUSES DIFFERENT EFFECT ON HOLOBIOTON RESILIENCE AND ON ITS SENSITIVITY TO CORAL BLEACHING (28400)

10:00 Lichtenberg, M., Larkum, A. W., Kuhl, M.: TISSUE LIGHT GRADIENTS SHAPE PHOTOSYNTHETIC ACCLIMATION IN CORAL SYMBIONS (28307)

10:15 Sweet, M. T., Brown, B., Williams, A., Patchin, L.: DYNAMIC CHANGES IN THE CORAL MICROBIOME WITH COLONY AGE: IMPLICATIONS FOR ACCLIMATISATION AND ADAPTATION (28068)

10:30 Baker, A. C., Jones, P. R., Winter, R. N., Silverstein, R. N., Cuning, R.: MANIPULATION, INTRODUCTION, AND FATE OF THERMOTOLERANT ALGAL SYMBIONS IN REEF-BUILDING CORALS (30023)

10:45 Kushlan, P. F., Baker, A. C.: MANIPULATING CORAL-ALGAL SYMBIOSES TO ASSESS THE RELATIVE CONTRIBUTION OF SYMBIONT IDENTITY VS. HOST ACCLIMATIZATION IN DETERMINING HOLOBIOTON THERMOTOLERANCE. (29607)

11:00 terHorst, C. P., Bayliss, S. L., Fowler, M. D., Von Vreckin, S., Coffroth, M. A.: GENETIC VARIATION IN TRAITS OF SYMBIODINIUM: POTENTIAL FOR EVOLUTIONARY RESCUE VIA SYMBIONT ADAPTATION (29841)


14:15 Davies, S. W., Marchetti, A., Ries, J., Castillo, K. D.: ACCLIMATION CAPACITY OF A CORAL-ALGAL SYMBIOTIC PARTNERSHIP TO LONG-TERM WARMING AND ACIDIFICATION (28017)

14:30 Barshis, D. J., Maxie, B. K., Rosen, F., Jones, D. D.: VERY LOCAL ADAPTATION IN CORAL THERMAL TOLERANCE LIMITS: EVIDENCE FROM 2.5 COUNTRIES, 2 OCEANS, AND 2 SPECIES (29704)

15:00 Bay, L. K., Bongaerts, P.; van Oppen, M. J.: GENOMIC SIGNATURES OF HABITAT ADAPTATION ARE MIRRORED BY PHENOTYPIC DIFFERENCES IN THE CORAL POCILLOPODA DAMICORNIS (28959)

15:15 Rowley, S. J.: ACCLIMATORY CAPACITY OF THE GORGONIAN ISIS HIPPURIS LINNAEUS 1758 TO ENVIRONMENTAL CHANGE IN SE SULAWESI, INDONESIA (28541)


16:45 Baums, I. B., Durante, M., Fogarty, N., Kitchen, S.: GENETIC DATA INDICATES THAT HYBRIDIZATION BETWEEN CARIBBEAN ELKHORN AND STAGHORN CORALS IS A LIKELY MECHANISM FOR RAPID ADAPTATION (28347)

17:00 Tisthammer, K. H., Seneca, F. O., Richmond, R. H.: UNDERSTANDING CORAL’S SHORT-TERM ADAPTIVE ABILITY TO WATER POLLUTION USING GENETICS AND PROTEOMICS (28208)

17:15 Ky, C. L., Lo, C., Planes, S.: SHELL AND PEARL CHROMATIC VARIATION IN PUNCTICATA MARGARITIFERA AMONG CORAL REEF ENVIRONMENTS IN FRENCH POLYNESIA (27862)


17:45 Mallien, C., Aubin, E., Christen, R., Furla, P., Foracioli, D.: GENETICS OF ADAPTATION IN A TEMPERATE SEA ANEMONE: SEARCH FOR SELECTION AMONG ECOCOLOGICALLY AND MORPHOLOGICALLY DIFFERENTIATED POPULATIONS USING NGS DATA (29401)


08 INCORPORATING MECHANISTIC PROCESSES IN SPATIAL DECISION SCIENCE: DISPERSAL, MOVEMENT, FUNCTIONAL GROUPS, EVOLUTION AND RANGE SHIFTS

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Location: 311


09:45 Khalil, M. T., Beger, M., Berumen, M. L.: MARINE PROTECTED AREA PRIORITY SITES FOR FISHERIES AND BIODIVERSITY OBJECTIVES IN THE CENTRAL SAUDI ARABIAN RED SEA (28607)

10:00 Yamakita, T., Yasuda, N., Tsujino, M., Kumagai, N. H., Yamano, H.: GAPS BETWEEN FUTURE DISTRIBUTION OF CORALS AND MARINE USE/ SPATIAL PLANNING AROUND JAPANESE ARCHIPELAGO. (28499)


14:15  Hase, C. C.: A RAPID, SIMPLE TEST FOR THE CORAL PATHOGEN VIBRIO CORALLIILYTICUS USING A SENSITIVE LATERAL FLOW "DIPSTICK" IMMUNOASSAY (28781)

14:30  Certoer, R. H.; Vollmer, S. V.: ATTENUATION OF WHITE BAND DISEASE TRANSMISSION IN ACROPORA CERVICORNIS BY A QUORUM SENSING INHIBITOR (28059)

14:45  Muchlisin, S. I.; Sabdono, A.; Wijayanti, D. P.: ANTI-PATHOGENIC ACTIVITY OF CORAL BACTERIA AGAINST WHITE PLAQUE DISEASE OF CORAL FAVIA SP. FROM TENGAH ISLAND KARIMUNJAWA INDONESIA (29447)

15:00  Paul, V. J.; Gunasekera, S. P.; Meyer, J. L.; Houk, L. J.; Scott, R. M.; Teplitzki, M.: DECIPHERING CHEMICAL SIGNALING IN BLACK BAND DISEASE (29919)

15:15  Gochfeld, D. J.; Olson, J. B.; Eason, C. G.: BIOCHEMICAL AND BACTERIAL COMMUNITY CHANGES DURING THE COURSE OF PATHOGENESIS IN THE SPONGE DISEASE ALPSYNA RED BAND SYNDROME (28441)

15:30  Gourier, T. C.; Pilla, F.; Vollmer, S. V.: CORAL GENETIC DIVERSITY AND DISEASE DYNAMICS (28528)

16:15  Muller, E. M.; Bartels, E.: THERMAL STRESS CAUSES A SIX-FOLD INCREASE IN THE RISK OF DISEASE INFECTION IN ACROPORA CERVICORNIS* (27830)


17:00  Work, T. M.; Aebi, G. S.: LOOKING THROUGH A MICROSCOPE BRIGHTLY! TISSUE CHANGES SHED LIGHT INTO PATHOGENESIS OF DISEASE AND ECOLOGICAL PROCESSES IN CORAL REEFS. (28218)

17:15  Rodriguez-Villalobos, J. C.; Work, T. M.; Calderon-Aguilara, L. E.: MICROSCOPICAL DIFFERENTIATION BETWEEN REGENERATION AND DEGENERATION OF TISSUES IN PICCILLOPORA (28460)

17:30  Wijayanti, D. P.; Hidaka, M.; Sabdono, A.: BIODIVERSITY OF CULTURABLE BACTERIAL COMMUNITY ASSOCIATED WITH THE DISEASED CORALS FROM NORTH JAVA SEA COASTAL WATERS INDONESIA (28917)


18:00  Deignan, L. K.; Pawlik, J. R.: CARIBBEAN SPONGE PATHOLOGY – THE DIAGNOSIS IS NOT ALWAYS SIMPLE (28815)

15: CONNECTIVITY, RECRUITMENT AND ISOLATION AMONG CORAL REEF POPULATIONS

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Location: 317 A/B

THURSDAY
17:15 Guzman Mendez, I. A.; Rivera Madrid, R.; Planes, S.; Croquer, A.; Perez España, H.; Gonzalez Gandara, C.; Agudo, E.; Arias Gonzalez, J. E.: USING PTEROIS VOLITANS INVASION TO DESCRIBE CONNECTIVITY IN MARINE PROTECTED AREAS IN THE GULF OF MEXICO AND CARIBBEAN (28883)


17 CORAL REEF ECOSYSTEM DYNAMICS: INSTABILITIES, INVASIONS, TRANSITIONS AND REORIENTATION

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21 ACHIEVING SUSTAINABLE CORAL REEF FISHERIES: POLICY DEVELOPMENT, IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT

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Annie You, annie.yau@noaa.gov

Location: 310 THEATER

09:30 Sadowsky de Mitcheson, Y.; Fox, M. I.; Baribasaga, A.; Jupiter, S.: EXPORTING FIJI'S NATURAL CAPITAL: CHALLENGES FOR THE SUSTAINABLE MANAGEMENT AND INTERNATIONAL TRADE OF INSHORE RESOURCES IN THE PACIFIC (28223)
09:45 Barnes, M. L.: Cinner, J. E.: INEQUITY IN CO-MANAGEMENT OF CORAL REEFS (28240)
10:15 Bennett, B. S.; Bird, C. E.: MODEL FOR SUSTAINABLE HARVEST TO ASSIST COMMUNITY-BASED RESOURCE MANAGEMENT (29698)
10:45 Jonathan, A.: ENHANCING MULTI-STAKEHOLDER FISHERIES MANAGEMENT IN POHNPEI, FSM (30131)
11:00 Claydon, J. A.; Calosco, M. C.: REEF FISHERIES MAY NOT ALWAYS BENEFIT FROM TRANSITION OF LOCAL FISHERS INTO TOURISM: A SIMULATION STUDY (30630)
11:15 Purcell, S. W.; Ngaluafe, P.; Tamuera Aram, K.; Lalavanua, W.: MULTI-FACTOR VARIATION IN ARTISANAL SEA CUCUMBER FISHERIES IN OCEANIA (30149)
14:00 McClanahan, T. R.: FUNCTION-BASED MANAGEMENT OF MULTISPECIES REEF FISHERIES (28319)
14:45 Zgliczynski, B. J.; Sandin, S. A.: SIZE-STRUCTURAL SHIFTS REVEAL INTENSITY OF EXPLOITATION IN CORAL REEF FISHERIES (29832)
15:00 Hill, R. L.; Doer, J. C.; Olsen, D. A.: REDUCING ECOSYSTEM EFFECTS OF COMMERCIAL FISH TRAP FISHING (29977)
15:30 Yau, A. J.; Lenihan, H. S.; Kendall, B. E.: CONSERVING SMALL-SCALE FISHERIES UNDER UNCERTAINTY IN SELF-RECRUITMENT USING SIZE LIMITS (29976)
16:30 Fraser, R. A.; Adams, V. M.; Pressey, R. L.; Pandolfi, J. M.: PUTTING MARINE POLICY INTO PRACTICE: THE USE OF POLICY IN MARINE PROTECTED AREA MANAGEMENT (27869)

17:00 Mabrouk, A. M.; Taylor, W. W.: THE EFFECTIVENESS OF MARINE PROTECTED AREAS ON CONSERVING THE FISH POPULATION IN THE GULF OF AQABA, EGYPT (28539)

17:15 Ramirez, J. G.; Puentes, G. M.; Reyes, F. J.: COASTAL MULTISPECIES SMALL-SCALE FISHING: INTERACTION AMONG CORAL REEF, SEAGRASS AND ARTIFICIAL REEFS (29729)


17:45 Doerr, J. C.; Hill, R. L.: INFLUENCE OF ECOSYSTEM COMPONENTS ON QUEEN CONCH POPULATION DENSITIES IN A MARINE PROTECTED AREA IN ST. CROIX, U.S. VIRGIN ISLANDS (29788)

18:00 Foley, J. R.: SIZE-MATURITY INDICATORS IN QUEEN CONCH OF PORT HONDURAS MARINE RESERVE, BELIZE: STRENGTHENING MANAGEMENT FOR IMPROVED FISHERIES SUSTAINABILITY (28736)

32 OCEAN ACIDIFICATION: MEASURING AND SCALING IMPACTS ACROSS MULTIPLE SCALES

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Location: 314


09:45 Drake, J. L.; Schaller, M. F.; Mass, T.; Fu, M.; Sherrell, R. M.; Rosenthal, Y.; Falkowski, P. G.: THE INFLUENCE OF CO2 ON CALCIFICATION IN CORAL CELL CULTURES (29534)

10:00 Yuan, X. C.: VERTICAL PROFILES OF CALCIUM AND PH IN THE CORAL GASTRIC CAVITY: IMPLICATIONS FOR OCEAN ACIDICATION (28222)


11:00 Allison, N.: UP-REGULATION OF CALCIFICATION FLUID PH IN MASSIVE PORITSES SPP. CORALS: A RESPONSE TO COMPENSATE FOR OCEAN ACIDIFICATION EFFECTS (29293)

11:15 Gizzarelli, F.; de Mas, L.; Ari, V.; Caroselli, E.; Prada, F.; Capacciioni, B.; Levy, O.; Falini, G.; Dubinsky, Z.; Goffredo, S.: SHORT-TERM EXPOSURE AT CO2 VENT AFFECTS SPERMATOGENESIS IN A TEMPERATURE NON-ZOOXANTHELLATE CORAL (29470)


Brown, D. J.; Igleias-Prieto, R.: OCEAN ACIDIFICATION HAS NO EFFECT ON CORAL BLEACHING OR RECOVERY FOR SCLERACTINIAN CORALS (28729)


Cobleigh, K. A.; Fougue, A.; Roycroft, M.; Armstrong, P.; Davies, S. W.; Ries, J. B.; Castilho, K. D.: WARMING AND ACIDIFICATION ALTER SKELETAL MORPHOLOGY OF THE REEF-BUILDING CORAL SIDERASTREA SIDEREAS (28336)


Bove, C. B.; Ries, J. B.; Davies, S. W.; Westfield, I. T.; Castilho, K. D.: EFFECTS OF OCEAN WARMING AND CO2-INDUCED ACIDIFICATION ON CALCIFICATION OF FOUR CARIBBEAN REEF-BUILDING CORALS (28700)


Wall, C. B.; Ellis, W.; Mason, R.; Cunning, R.; Gates, R.: COMBINED EFFECTS OF PCO2 AND IRADIANCE ON THE ENERGY RESERVES AND CALCIFICATION OF A REEF BUILDING CORAL (29018)


Liu, P. J.; Chang, H. F.; Lin, H. J.: EFFECTS OF OCEAN WARMING AND ACIDIFICATION ON THE SEAGRASS THALASSIA HEMPRICHII FROM CORAL REEFS OF KENTING, TAIWAN (28666)

Briggs, A. A.; Carpenter, R. C.: LIGHT MEDIATES THE PHOTOSYNTHETIC RESPONSE OF A CRUSTOSE CORALLINE ALGA TO OCEAN ACIDIFICATION, AND CONSEQUENCES FOR OTHER PHYSIOLOGICAL PROCESSES (29777)

Le Moullac, G.; Soyez, C.; Vidal-Dupiol, J.; Latchere, O.; Belliard, C.; Fievet, J.; Sham-Koua, M.; Gueguen, Y.: HIGH PCO2 AND WARMING ARE THREATS FOR THE PEARL OYSTER Pinctada Margaritifera AND THE PEARL FARMING. (28220)


14:15  Humbert, M.; Webster, J. M.: CORAL SUCCESIONS IN THE GREAT BARRIER REEF DURING GLACIAL-INTERGLACIAL CYCLES (28440)


14:45  Bufarale, G.; O’Leary, M. J.; Collins, L. B.; Stevens, A. M.; Kordi, M. N.; Solihuddin, T.: GEOMORPHOLOGY AND HOLOCENE EVOLUTION OF KIMBERLEY CORAL REFS (27916)


16:15  Hughes, K.; Faragher, H.; Gonzalez, P.; Siciliano, D.; Ossolinski, J.; Bretos, F.: PALEOTEMPERATURE RECORDS FROM CUBAN CORALS (20141)


17:15  Jones, G. B.: THE REEF SULPHUR CYCLE: INFLUENCE ON CLIMATE AND ECOSYSTEM SERVICES (27784)


36 ASSESSING AND ADDRESSING THE EFFECTS OF MULTIPLE STRESSORS ON CORAL REEFS TOWARDS DEVELOPING EFFECTIVE MANAGEMENT AND POLICY RESPONSES

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Keisha Bahr, kdbahr@hawaii.edu
14:45  Cowburn, B.; Obura, D.: INVESTIGATING MULTIPLE CORAL REEF STRESSORS ON A SHOE-STRING (29324)

15:00  Baula, I. U.; Lee, A. C.; Sin, T. M.: THE IMPORTANCE OF STRESSOR INTERACTIONS ON MACROALGAE IN URBAN ENVIRONMENTS WITH COMPLEX REGIMES OF MULTIPLE DISTURBANCES (28596)


16:30  McGillis, W. R.; Manzello, D. P.; Takeshita, Y.; Smith, T. B.; Martz, T.; Fong, P.; Smith, J. E.; Baker, A.; Glynn, P.; Price, N.; Mate, J. L.; Brandneris, V. W.; Haseh, Y.; Palacio, A.; Markowitz, M.; Donbarn, E.: IN SITU METABOLISM, SOLAR HEATING, AND CONVECTIVE COOLING OF CORALS IN REEF ENVIRONMENTS (30002)

16:45  Fournier, F. E., Figueiredo, J.: NATURAL VS. ANTHROPOGENIC SEDIMENTATION: DOES REDUCING A LOCAL STRESSOR INCREASE CORAL RESILIENCE TO CLIMATE CHANGE? (28236)

17:00  Sikoki, F. D.; Babatunde, B. B.: MONITORING SEDIMENTATION AND SEDIMENT ACCUMULATION RATES FOR PROTECTION OF CORAL REEFS IN COASTAL WATERS (28798)


17:30  Baumann, J. H.; Townsend, J. E.; Courtney, T.; Aichelman, H. E.; Davies, S. W.; Watkins, J.; Lima, F. P.; Castillo, K. D.: INFLUENCE OF THERMAL HISTORY AND NUTRIENT ENRICHMENT ON CORAL AND SYMBIOTIC COMMUNITY STRUCTURE ON LAGOONAL REEFS ON THE BELIZE Mesoamerican Barrier Reef (28070)

17:45  Aichelman, H. E.; Townsend, J. E.; Courtney, T.; Baumann, J. H.; Davies, S. W.; Castillo, K. D.: THE TEMPERATE CORAL OCULINA ARBUSCULA EXHIBITS A HETEROTROPHIC RESCUE EFFECT TO TEMPERATURE STRESS (28217)

18:00  Wright, N. H.; Wright, H. E.: DEALING WITH CORAL REEFS RISK AND DECISION MAKING IN THE FACE OF CLIMATE CHANGE AND DEVELOPMENT NEEDS (29465)

**42B PROPAGATION AND ACTIVE REEF RESTORATION - DISTRIBUTION, TRANSPLANTATION, MONITORING AND EVALUATION OF RESTORATION ACTIVITIES**

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Zac Forsman, zac@hawaii.edu

**Location:** 301 B

09:30  Hein, M. Y.; Willis, B. L.; Birleson, R. A.; Beeden, R.: CHARACTERISING CORAL REESTABLISHMENT EFFECTIVENESS: A REVIEW OF CURRENT LIMITATIONS AND CHALLENGES AT A SOCIO-ECOLOGICAL SCALE (28268)

09:45  Banaszak, A. T.; Gomez Campo, K. J.; Baums, I. B.: IMPORTANCE OF SYMBIOTIC GENETIC STRUCTURE IN RESTORATION OF CORAL POPULATIONS (28916)

10:00  Zayasu, Y.; Nakajima, Y.; Satoh, N.; Shinzato, C.: CONSERVATION GENETICS APPROACHES TO ASEXUAL CORAL RESTORATION ACTIVITIES (27914)

10:15  Carne, L. B.; Kaufman, I.: DEFINING SUCCESS IN ACTIVE CARIBBEAN ACROPORID POPULATION REPLENISHMENT EFFORTS: RESULTS FROM OVER NINE YEARS OF WORK IN SOUTHERN BELIZE (27909)

10:30  Calle-Triviño, J.; Arias-González, J. E.; Sellares, R.: ACROPORA CERVOCIRIS SEXUAL CORAL REPRODUCTION TO COMPLEMENT THE RESTORATION PROGRAM IN NURSERIES IN THE DOMINICAN REPUBLIC (28385)

10:45  Page, C. A.; Muller, E. M.; Vaughan, D. E.: MICROFRAAGMENTING FOR THE SUCCESSFUL PROPAGATION AND RESTORATION OF SLOW GROWING BOULDER CORALS (28710)


11:30  Cook, N.: ACTIVE REEF RESTORATION: IMPROVING THE OUTCOME FOR DEGRADED REEFS IN THAILAND (27783)


12:30  Harrison, P. L.; dela Cruz, D. W.; Cameron, K. A.; Cabaitan, P. C.; Alino, P. M.: LARGE-SCALE MASS CORAL LARVAL RESEEDING ENHANCES CORAL RECRUITMENT FOR REEF RESTORATION (28587)


* REPRESENTS INVITED PRESENTATIONS
16:45 Satyanarayana, C.; Chandran, R.; Chandra, K.; Tikadar, S.; Yogesh Kumar, J. S.: RESTORATION OF EXTRAPARED SCLERACTINIAN CORALS IN TURBID ENVIRONMENT AT GULF OF KACHCHH, INDIA – A SUCCESS STORY (28656)

17:00 ter Hofste, R.; Finney, C.; Miller, A.; van Koningveld, M.; Smolders, T.: MONITORING AND EVALUATION OF CORAL TRANSPLANTATION TO MITIGATE DREDGING WORKS (28695)


17:30 Nemeth, M.; Griffin, S.; Moore, T.; Meehan, S.: THE STRUCTURE OF FISH ASSEMBLAGES ON RESTORED AND UN-RESTORED CORAL REEF HABITATS IMPACTED BY SHIP GROUNDINGS (29929)

17:45 Bowden-Kerby, A.: ACROPORA CERVICORNIS TRANSPLANTS AS FISH HABITAT AND AS A POSITIVE INFLUENCE TO FISH RECRUITMENT ON CARIBBEAN REEFS (30139)

45 FLUORESCENCE ON CORAL REEFS: FROM BIOLOGY TO TECHNOLOGY

Chair(s): Tali Treibitz, ttreibitz@univ.haifa.ac.il
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David Gruber, davidgruber@gmail.com
Cecilia D’Angelo, c.dangelo@soc.soton.ac.uk

Location: 308 A/B

09:30 Salih, A.; Digman, M. A.; Cutrale, F.; Gery, D.; Nedbal, L.; Gratton, E.: FLUORESCENT PATTERNS IN CORALS FUNCTION IN SOLAR ENERGY MODULATION (30135)

09:45 Bollati, E.; D’Angelo, C.; Eyal, G.; Wiedenmann, J.: PHOTOCONVERTIBLE CORAL FLUORESCENT PROTEINS: AN ADAPTATION TO THE LIGHT CLIMATE AT MEISOPHOTIC DEPTHS? (28591)

10:00 Ben-Zvi, O.; Eyal, G.; Loya, Y.: THE EFFECT OF FLUORESCENT PIGMENTS DIVERSITY ON UV INDUCED DAMAGES IN HERTAMYTIC CORALS (28654)


11:15 Szabo, M.; Larkum, A. W.; Suggett, D. J.; Vass, I.; Ralph, P. J.; Chow, W. S.: NON-INTRUSIVE P700 REDOX KINETICS PROBE TO DETERMINE THE FUNCTIONALITY OF BOTH PHOTOSYSTEM II AND PHOTOSYSTEM I IN WHOLE CORAL TISSUES (28231)

46 TRAIT-BASED APPROACHES IN CORAL REEF ECOLOGY: FROM FUNCTIONAL ECOLOGY TO MANAGEMENT

Chair(s): Sebastian Ferse, sebastian.ferse@zmt-bremen.de
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Jeremiah Plass-Johnson, jglass72@yahoo.com
Sebastien Villeger, svillege@univ-montp2.fr
Sonia Bejarano, sonia.bejarano@leibniz-zmt.de

Location: 308 A/B

16:15 Bender, M. G.; Floeter, S. R.; Kubicki, M.; Mouliot, D.; Oliveira-Santos, L. G.; Parravincini, V.: GLOBAL PATTERNS OF FUNCTIONAL RARITY IN REEF FISH COMMUNITIES (29630)


17:00 Bejarano, S.; Joffray, J. B.; Chollett, I.; Allen, R.; Roff, G.; Steneck, R.; Ferse, S.; Mumby, P.: FILTERING OF CORAL REEF FISH HERBIVORY ALONG A GRADIENT OF WAVE EXPOSURE (28012)

17:15 Brandl, S. J.; Bellwood, D. R.: HERBIVOROUS GRAZING IN A NEW DIMENSION: THE IMPORTANCE OF MICRO-TOPOGRAPHIC COMPLEXITY (27994)


17:45 Richardson, L. E.; Graham, N. A.; Pratchett, M. S.; Hoey, A. S.: STRUCTURAL COMPLEXITY MEDIATES FUNCTIONAL STRUCTURE OF REEF FISH ASSEMBLAGES AMONG CORAL HABITATS (27817)

47 MOVEMENT ECOLOGY ON CORAL REEFS

Chair(s): Michael Berumen, michael.berumen@kaust.edu.sa
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Kelton McMahon, kemcmaho@usc.edu
Simon Thorrold, sthorrold@woai.edu
Joseph DiBattista, joey.dibattista@curtin.edu.au
Pablo Saenz, pablo.saenzagudelo@gmail.com

Location: 308 A/B


14:00 Scott, M. E.: EFFECTS OF TEMPERATURE ON IN SITU BEHAVIOUR AND ACTIVITY OF CORAL TROUT, PLECTROPOMUS LEOPARDUS, ON THE GREAT BARRIER REEF, AUSTRALIA (28493)


15:00 Foretich, M. A.; Chaput, R.; Farías, C. B.: LARVAL REEF FISH RESPOND TO DIMETHYL SULFIDE AND HOME TO ITS SOURCE (28203)


### 50 Modeling and Computational Tools for Coral Reef Management and Conservation

**Chair(s):** James Hendee, jim.hendee@noaa.gov  
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Charles D. Beekler, cheekler@indiana.edu  
Carrie Manfrino, manfrino@reefresearch.org  
Peter J. Mumbey, pjm.mumbey@noaa.gov  

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<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>13:45</td>
<td>Logan, C. A.; Dunne, J. P.; Donner, S. D.</td>
<td>Global Projections of Coral Bleaching Under Warming and Ocean Acidification Using a Mechanistic Modelling Approach (29099)</td>
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<tr>
<td>14:00</td>
<td>Cheek, J.; Pressley, R. L.; Weeks, R.; VanDerWal, J.; Andrufouet, S.</td>
<td>Simulating the Dynamic Transition from Regional Designs to Local Actions (28670)</td>
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<tr>
<td>14:15</td>
<td>Kramer, L. J.; Hendee, J. C.; Thompson, N. B.; Fletcher, P.</td>
<td>Better Living through Physics: Mapping Reef Resilience with Site-Specific Ecological Forecasts for Coral Thermal Stress (29628)</td>
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<td>14:30</td>
<td>Green, R.; Lowe, R.; Roelvink, D.; Reyna, J.</td>
<td>Modelling the Circulation of a Semi-Enclosed Isolated Coral Reef atoll (28633)</td>
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<td>15:00</td>
<td>Milt-Allen, K.; Furnas, M. J.; Mongin, M.; Baird, M.; Serrratt, J.; Robson, B.;</td>
<td>Nutrient Supply to the Great Barrier Reef (29846)</td>
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<td>Nutrient Supply to the Great Barrier Reef (28980)</td>
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<td>15:15</td>
<td>Hanert, E.; Thomas, C. J.; Wolter, J.; Grech, A.; Bridge, T. C.; Figueiredo, J.;</td>
<td>High-Resolution Multi-Purpose Dispersal Modeling Tool for the Great Barrier Reef (28320)</td>
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<td>Coles, R.; SLIM: A High-Resolution Multi-Purpose Dispersal Modeling Tool for the Great Barrier Reef (28320)</td>
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<td>15:30</td>
<td>Lai, C. S.; Fedensen, C.</td>
<td>Agent-Based Modelling as a Tool to Manage Dredging Impact on Coral Spawning (28614)</td>
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<td>16:15</td>
<td>Delevaux, J. M.; Starnoullis, K. A.; Donovan, M. K.; Poti, M.; Kendall, M.;</td>
<td>Targeted Reef Fish Spawners and Juveniles: Support for Archipelago Scale Management of the Main Hawaiian Islands (28480)</td>
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<td>Friedlander, A. M.; Knudby, A.; Toonen, R.; Garrod, P.; Costa, B.;</td>
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<td>Contrasting Habitat Utilization of Targeted Reef Fish Spawners and Juveniles: Support for Archipelago Scale Management of the Main Hawaiian Islands (28480)</td>
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<td>16:30</td>
<td>Comoros-Raynal, M.; Predictors of Extinction Risk in Sea Breams and Foramichaea (27787)</td>
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<td>17:00</td>
<td>Carturan, B. S.; Parrott, L.; Pitler, J.; Identifying Sources of Resilience in Coral Communities Using a Spatial Agent-Based Model (28449)</td>
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<tr>
<td>17:15</td>
<td>Jenne, M. J.; Dalkilic, M. M.; Johnson, C. C.; Employing Software Engineering Principles to Enhance Analysis of Coral Reef Databases (29768)</td>
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<td>17:30</td>
<td>Medeiros, T. A.; Seoane, J. C.; Nolasco, M. C.; Spectral Signatures of Brazilian Coral Reefs (29664)</td>
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<td>17:45</td>
<td>Chindapol, A.; A Computational Model of the Impact of Unidirectional Flow on Colony Symmetry of Branching Scleractinian Corals (30132)</td>
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### 52 Big Data: Using Open Access, Evolving Platforms and the Emerging Field of Data Science to Improve Resource Management

**Chair(s):** Stuart Phinn, s.phinn@uq.edu.au  
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Julie Belmont, julie.belmont.carpsaw@guadeloupe-parcnational.fr  

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<th>Speaker(s)</th>
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<tr>
<td>18:00</td>
<td>David, P. A.; Madin, J.</td>
<td>Quantifying Damage to Coral Colonies by Waterborne Debris During Hydrodynamic Disturbances (29085)</td>
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### 57 Capacity Building in Ocean Governance and Coral Reef Ecosystem Management: Equipping Leaders, Practitioners, and Institutions to Sustain Healthy Ecosystems

**Chair(s):** Janna Shackero, Theisen, jannahack@gmail.com  
Jason Philibotte, jason.philibotte@noaa.gov  
Kristen Maize, Kmaize@tnc.org  

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<th>Time</th>
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<tr>
<td>13:45</td>
<td>Shackero, J. M.; Transformative Agendas Require Transformed Institutions: Lessons Learned in Capacity Building for Oceans Governance (28697)</td>
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<td>14:00</td>
<td>Lameier, M. J.; Building Capacity for Protected Area Management in the Pacific (27790)</td>
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<tr>
<td>14:15</td>
<td>Doyle, E.; Wuisnich-Mendez, D.; Building Marine Protected Area Management Capacity at Priority Coral Reef Sites in the Caribbean Region (28559)</td>
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<tr>
<td>14:30</td>
<td>Mejia, M. N.; Carpio, J.; Fielding, E. J.; Crawford, S.; Lindsey, E.; Lind, W. L.; Poepeo, K.; Kaho’o alahalaha, S.; Learning Networks as a Powerful Tool for Increasing Effectiveness of Coral Reef Conservation (30116)</td>
<td></td>
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14:45 Guilbeaux, M.: IMPROVING CAPACITY FOR CORAL REEF FISHERIES MANAGEMENT IN MICRONESIA THROUGH SOCIAL MARKETING CAMPAIGNS (30136)

15:00 Ayers, A. L.: LEADERSHIP IN HAWAII CORAL REEF FISHERIES (29901)

15:15 Maize, K.: THE REEF RESILIENCE NETWORK: CHALLENGES, LESSONS LEARNED, AND CAPACITY BUILDING RECOMMENDATIONS FOR IMPROVED GLOBAL CORAL HEALTH. (30084)


17:00 Osorio, R. E.; Mancao, R. H.; Amolo, R. C.; Rojas, P. T.; Cadiz, F. T.: THE FISHMARK TOOL FOR BENCHMARKING FISHERIES MANAGEMENT IN URBAN WATERS (29439)

17:15 Song, A. M.: MULTI-SCALAR INTERACTIONS OF A LOCAL ISLAND FISHERIES: SPATIAL MANAGEMENT AND GEOGRAPHICAL CONSIDERATIONS (28453)

17:30 Morrison, T. H.; Cohen, P. J.: THE META-GOVERNANCE OF CORAL REEFS (28029)


18:00 Chisholm, L. A.: THE ROLE OF OPTICAL SPECTROSCOPY DATABASE SYSTEMS FOR MARINE CONSERVATION EFFORTS – WORKING TOWARDS INTERNATIONAL CAPACITY BUILDING (29943)

64 SOCIAL SCIENCE APPLICATIONS TO CORAL REEF MANAGEMENT: HUMAN AND SOCIAL DIMENSIONS AND THE LINK TO REEF HEALTH AND ECOLOGICAL CHANGE

Chair(s): Peter Edwards, peter.edwards@noaa.gov
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Arielle Levine, Arielle.levine@noaa.gov
Theresa Geodeke, Theresa Geodeke@noaa.gov
Location: 305 A/B


10:30 Williams, A. N.; Raymundo, L. J.: DO CONSERVATION-FOCUSED DIVE BRIEFINGS REDUCE DIVER DAMAGE TO CORALS? (29940)


11:00 Chaigneau, T.; Brown, K.: PATHWAYS TO WELLBEING: THE MISSING LINK TO COASTAL RESOURCE MANAGEMENT (28708)

65 IMPROVING THE UNDERSTANDING AND MANAGEMENT OF CORAL REEF SOCIO-ECOLOGICAL SYSTEMS THROUGH COMMUNITY AND STAKEHOLDER ENGAGEMENT

Chair(s): Jeremy Jackson, jeremyb.jackson@gmail.com
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Adam Ayers, alayers@hawaii.edu
Alan Friedlander, friedIan@hawaii.edu
John N. Kittinger, jkittinger@conservation.org

Location: 305 A/B


14:15 Belmont, J. R.; Edwards, P.; McDonald Gayle, K.: IMPROVING LONG-TERM CORAL REEF MONITORING IN THE WIDER CARIBBEAN REGION: INITIAL GCRMN-CARIBBEAN ACCOMPLISHMENTS (28385)

14:30 McField, M. D.; Kramer, P. R.; Drysdale, I.; Rueda, M.; Port, R.; Giro, A.: MONITORING AND REPORTING ON REEF HEALTH AND MANAGEMENT IN THE Mesoamerican Reef (29806)

14:45 Thurstan, R. H.; Buckley, S. M.; Pandolfi, J. M.: ENGAGING RESOURCE USERS TO IDENTIFY SOCIAL AND ECOLOGICAL CHANGES IN AUSTRALIA’S CORAL TROUT FISHERY (28463)

15:00 Wachenfeld, D. R.: ‘REEF RECOVERY PLANS’ FOR THE GREAT BARRIER REEF MARINE PARK: MANAGING LOCAL PRESSURES IN A GLOBAL CONTEXT (28971)

15:15 Jackson, J.: GOOD GOVERNANCE INCREASES CORAL REEF RESILIENCE (28699)

16:15 Nelson, P. A.; Crane, N.; Rulmal, J.; Paddock, M.; Bernardi, G.; Abelson, A.: SEAFOOD CONSUMPTION PATTERNS IN FISHERY-DEPENDENT HUMAN COMMUNITIES: ECOCLOGICAL RELATIONSHIPS IN A CORAL REEF SOCIO-ECOLOGICAL SYSTEM (30038)


17:15 Crane, N. L.; Nelson, P.; Paddock, M.; Bernardi, G.; Rulmal, J.: PARTNERSHIP FOR SUCCESS IN A CHANGING SEASCAP: COMBINING INDIGENOUS PRACTICES AND WESTERN SCIENCE FOR SUSTAINABLE REEF MANAGEMENT IN THE YAP OUTER ISLANDS (29987)

17:30 Halit, A.: PUBLIC INVOLVEMENT IN CORAL REEF MANAGEMENT: THE RESULT OF THREE CITIZEN PARTICIPATORY APPROACHES CONDUCTED IN SULAWESI, INDONESIA (27964)

71 DESIGNING MARINE MANAGED AREAS FOR FISHERIES MANAGEMENT AND BIODIVERSITY CONSERVATION: BRIDGING SCIENCE AND POLICY

Chair(s): Alison Green, agreen@tnc.org
Stacy Jupiter, sjupiter@wc.org
Rebecca Weeks, rebecca.weeks@jcu.edu.au

Location: 302 A/B


14:15 Kuempel, C. D.: Bode, M.; Adams, V. M.; Possingham, H. P.: BALANCING AREA AND EFFECTIVENESS: MPA EXPANSION VS. MANAGEMENT ENFORCEMENT IN MEETING GLOBAL CONSERVATION TARGETS (27800)

14:30 Box, S. J.: REPLACING BARBIE’S NOTEBOOK: HOW DIGITAL TECHNOLOGY IS REVOLUTIONIZING DATA COLLECTION IN SMALL SCALE FISHERIES (30054)


15:00 Munguia-Vega, A.; Suarez-Castillo, A. N.; Espinosa-Romero, M. J.; Green, A. L.: ADAPTING BIOPHYSICAL PRINCIPLES FOR MARINE RESERVE DESIGN FROM CORAL REEF ECOSYSTEMS TO ROCKY REEFS IN A TEMPERATE SYSTEM IN THE GULF OF CALIFORNIA (29824)

15:15 Maina, G. W.: DESIGNING FISHERIES MANAGEMENT AREAS FOR PATE ISLAND, LAMU ARCHIPELAGO, KENYA (29410)

15:30 Eugene Joseph, B.; Elizabeth Terk, S.; Rebecca Weeks, R.: USING REEF FISH MOVEMENT INFORMATION TO IMPROVE MARINE RESERVE DESIGN IN Pohnpei, Micronesia (28039)

15:45 Springer, H. K.: Kaupulehu Marine Life Advisory Committee: TRY WAIT! REVIVING THE PRACTICE OF KAPU TO REPLENISH MARINE LIFE AT KA’OPULEHU, HAWAI’I (29990)


16:45 Marlessy, C.; Steenbergen, D. J.: EXPANDING A LOCALLY MANAGED MARINE AREA NETWORK IN EASTERN INDONESIA: DRAWING FROM TRADITIONAL KNOWLEDGE AND MANAGING ‘JEALOUSY’ (29384)

17:00 Welly, M.; Karyawan, N.; Mochtar Sabit, J.: A COLLABORATIVE APPROACH ON MARINE PROTECTED AREA NETWORK ESTABLISHMENT IN INDONESIA, A CASE STUDY FROM NUSA PENIDA AND BANDA ISLANDS (28124)

17:15 Tarigan, S. A.; Campbell, S. J.; Pardeed, S.; Muttaqin, E.: COMPLEMENTARY MANAGEMENT PRACTICES TO ENHANCE FISH BIOMASS IN INDONESIA (28668)

17:30 Trinidad, A. C.; Aline, P. M.; Horigue, V.; Milan, A. I.; Quimpo, T.: AN ASSESSMENT OF SOCIO-ECONOMIC AND INSTITUTIONAL LINKAGES IN TRANSBOUNDARY MARINE PROTECTED AREA NETWORKS IN THE PHILIPPINES (29932)

17:45 Carter, A. B.; Coles, R. G.; McKenna, S. A.; Rasheed, M. A.: A SPATIAL MANAGEMENT TOOL FOR SEAGRASSES IN THE GREAT BARRIER REEF WORLD HERITAGE AREA (27805)

18:00 Wagner, C.; MacGowan, P. M.: THE REEF RESILIENCE NETWORK: TRAINING MANAGERS IN MMA DESIGN FOR FISHERIES AND BIODIVERSITY OBJECTIVES (29834)

72 MARINE RESOURCE SUSTAINABILITY, CONSERVATION AND MANAGEMENT IN THE CORAL TRIANGLE & SOUTHEAST ASIA

Chair(s): Thamasak Yeeomin, thamasakyeeomin@yahoo.com
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Cloto L. Nanola Jr, tingnanola@yahoo.com
Rili Djohani, rildjohani@coraltreanglecenter.org
Eleanor Carter, ecarter.conservation@gmail.com

Location: 302 A/B


09:45 Benjamin, C. C.: MARINE CONSERVATION & RESOURCE MANAGEMENT YOUTH EDUCATION - A MISSING STRATEGY IN FUTURE CORAL REEF RESILIENCE IN THE CORAL TRIANGLE? (27856)

10:00 Napitupulu, L.; Setiash, H.; Ahmadia, G.; Mangunsong, F.: Estradivari, E.; Rathia, I. M.: STRENGTHENING LOCAL LINKS BETWEEN SCIENCE AND MANAGEMENT: BUILDING LOCAL STAKEHOLDERS INVOLVEMENT IN SCIENCE FOR CORAL REEF MANAGEMENT IN INDONESIA (29233)


11:00 Recamara, D. B.; Velos, M. F.; Mamanuag, A. S.; Arceo, H. O.: FISHING WHAT'S LEFT: IMPACTS OF FISHING ON TROPHIC STRUCTURE OF REEF FISHES (29129)


77 CORALS AND THE U.S. ENDANGERED SPECIES ACT: BRIDGING THE GAP BETWEEN SCIENCE, MANAGEMENT, AND CONSERVATION ACTION

Chair(s): Abel Valdivia, avaldivia@biologicaldiversity.org
John Bruno, jbruno@unc.edu
Jennifer Moore, jennifer.moore@noaa.gov
Bernardo Vargas-Angel, bernardo.vargasangel@noaa.gov

Location: 303 A/B

09:45 **MooRE, J. A.**; Moulding, A. L.: USING THE ENDANGERED SPECIES ACT TO ACHIEVE CORAL CONSERVATION

10:00 **SMITH, L. W.**: ESA-LISTED INDO-PACIFIC CORALS: CHALLENGES AND OPPORTUNITIES

10:15 **MOULDING, A. L.**; Moore, J. A.: RECOVERY PLAN FOR ACROPORA PALMATA AND ACROPORA CERVICORNIS

10:30 **VARDI, T.**; Williams, D. E.; Sandin, S. A.: REGIONAL ANALYSIS OF ACROPORA PALMATA POPULATION AND RESILIENCE DYNAMICS USING STOCHASTIC MATRIX MODELING


11:00 **BARTZ, R. J.**; Baker, A. C.: TRANSLOCATION OF CORAL POPULATIONS TO ENHANCE THERMAL TOLERANCE: PERSPECTIVES UNDER THE ENDANGERED SPECIES ACT

FRIDAY ORALS

05 ACCLIMATIZATION AND ADAPTATION IN REEF ORGANISMS

Chair(s): Mikhail V. Matz, matz@utexas.edu
Iliana Baums, baums@psu.edu
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Manuel Aranda Lastra, manuel.aranda@kauait.edu.sa
Sylvain Foret, sylvain.foret@amu.edu.au

Location: 313 B

09:30 Donelson, J. M.; Munday, P. L.; Booth, D.: TRANSGENERATIONAL PLASTICITY DEPENDS ON RATE OF WARMING ACROSS GENERATIONS (28001)

09:45 Schueter, C.; Welch, M. J.; Ryu, T.; Nilsson, G. E.; Munday, P. L.; Ravasi, T.: MOLECULAR SIGNATURES OF TRANSGENERATIONAL BRAIN RESPONSE TO OCEAN ACIDIFICATION IN A REEF FISH (29226)

10:00 Putnam, H. M.; Davidsson, J. M.; Risdon-Williams, R.; Gates, R. D.: A ROLE FOR INDUCTIVE DNA METHYLATION IN CORAL INTRA- AND CROSS-GENERATIONAL ACCLIMATIZATION TO FUTURE OCEAN CONDITIONS (28934)

10:15 Kuba, A. G.; Figueiredo, J.: TRANSGENERATIONAL EFFECTS OF TEMPERATURE STRESS: IMPACTS ON AND BEYOND CORAL REPRODUCTION (28172)


11:15 Hoadley, K. D.; Warner, M. E.; Marsh, A.: EPIGENIC MODIFICATION OF AN ANEMONE GENOME DURING CYTOSINE METHYLATION REVEALS PLASTICITY IN RESPONSE TO TEMPERATURE STRESS AND SYMBIOTIC TYPE. (28333)

11:30 Welch, M. J.; Munday, P. L.: HERITABILITY OF CO2 TOLERANCE IN A CORAL REEF FISH (27974)

14:00 Laubenstein, T. D.; Rummer, J. L.; Munday, P. L.: THE RELATIONSHIP BETWEEN BEHAVIOURAL AND PHYSIOLOGICAL TOLERANCE TO ELEVATED CO2 IN CORAL REEF FISH (29351)


15:30 Lucena, M. B.; Mendes, T. C.; Aguiar, A. A.; Ferreira, C. E.: FEEDING AND AGONISTIC BEHAVIOR BY A TROPICAL DAMSELFISH: INFLUENCES OF LIMITED SPACE AVAILABILITY (28733)

13 DISEASES ON THE REEF: PRESENCE, PERSISTENCE AND RESPONSES

Chair(s): Laura Mydlarz, Mydlarz@uta.edu
Ariel Kushmaro, arielku@bgu.ac.il
Greta Aeby, greta@hawaii.edu
Marilyn Brandt, mbrandt@jhu.edu
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Michael Sweet, M.Sweet@derby.ac.uk
Bette Willis, bette.willis@jcu.edu.au
Nikki Traylor-Knowles, ntk1717@gmail.com

Location: 313 C

09:30 Mydlarz, L. D.; Fuess, L. E.; Pinzon, J. C.; Weil, E.; IMMUNITY TO COMMUNITY: WHAT CAN IMMUNE PATHWAYS TELL US ABOUT DISEASE PATTERNS IN CORALS? (29202)

09:45 Traylor-Knowles, N.; Palumbi, S.: FINE –SCALE SAMPLING OF A. HYACINTHUS DURING AN ACUTE HEAT SHOCK, ILLUMINATES POTENTIAL IMMUNE GENE REACTIONS AND INTERACTIONS (27982)


11:15 Knapp, I. S.; Belcaid, M.; Williams, G. J.; Toonen, R. J.: HOMOLOGS TO HUMAN CANCER GENES ASSOCIATED WITH CORAL GROWTH ANOMALIES (28448)

13:45 Raymundo, L. J.; Kerr, A. M.; Maypa, A. P.: OLD WOUNDS TAKE LONG TO HEAL: SHIP GROUNDINGS AND CORAL DISEASE ON A PRISTINE CORAL REEF (28554)

14:00 Brandt, M. E.; Smith, B. T.; Williams, L.; Beasley, V.; Keller, J.: DIVERSITY AFFECTS DISEASE TRANSMISSION IN CARIBBEAN CORALS (28769)


14:45 Quéré, G.; Nogues, M. M.: CORALLINE ALGAE DISEASE REDUCES SURVIVAL AND SETTLEMENT SUCCESS OF CORAL PLANULAE IN LABORATORY EXPERIMENTS (28836)

14:45 Caldwell, J. M.; Heron, S. F.; Eakin, C. M.; Donahue, M. J.: APPLICATION OF SATELLITE SST-BASED CORAL DISEASE OUTBREAK PREDICTIONS FOR HAWAII (28853)
1500 Randall, C. J.; van Woestik, R.: HINDCASTING RELATIONSHIPS BETWEEN THE ENVIRONMENT AND OUTBREAKS OF CORAL DISEASES IN THE CARIBBEAN (29643)

15:15 Séré, M.; Chabane, P.; Tribollet, A.; Tortosa, P.: FIRST CORAL DISEASE ASSESSMENT IN THE LAST MARINE SANCTUARIES IN THE SOUTH WESTERN INDIAN OCEAN: PARADISE ISLANDS (25352)

15:30 Wong, K. T.; Tsang, H. L.; Ang, P. O.: A CATASTROPHIC CORAL DISEASE OUTBREAK IN HONG KONG THAT MAY BE ASSOCIATED WITH HARMFUL ALGAL BLOOMS (29483)

15 CONNECTIONIVITY, RECRUITMENT AND ISOLATION AMONG CORAL REEF POPULATIONS

Chair(s): Kimberly A. Selkoe, selkoe@nceas.ucsb.edu
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Peter B. Ortner, portner@rsmas.miami.edu
Shirley Pomponi, spomponi@hboi.fau.edu
Beltran, D. M.; Appeldoorn, R. S.; Schizas, N. V.; Prada, C. A.: EFFECTIVE DISPERAL OF CARIBBEAN REEF FISH IS SMALLER THAN CURRENT SPACING AMONG MARINE PROTECTED AREAS (29826)


10:30 Beltran, D. M.; Appeldoorn, R. S.; Schizas, N. V.; Prada, C. A.: LOCALIZED DISPERAL LEADING TO FAMILY GROUPS IN A WIDESPREAD CARIBBEAN GOBY (28209)


11:00 Thompson, D. M.; Kleypas, J.; Castruccio, F.; Watson, J.; Chuchitser, E.; Pinsky, M.: VARIABILITY IN REEF CONNECTIVITY IN THE CORAL TRIANGLE (29558)


14:45 Stockwell, B. L.: ARE YOU MY BROTHER? RAD GENERATED SNPs REVEAL HIGHLY CONNECTED PARROT-FISH POPULATIONS WITHIN THE PHILIPPINES. (28843)

15:00 Robinzich, V.; Rowe, K. A.; Berumen, M. L.: RECRUITMENT PATTERNS OF CORAL REEF FISHES IN THE CENTRAL RED SEA: DIFFERENCES ACCORDING TO SEASON AND REEF TYPE (28664)

15:15 Elmer, F.; Gardner, J. P.; Bell, J. J.: BENTHIC COVER INFLUENCES THE PRESENCE OF CORAL RECRUITS WHILE NOT AFFECTING THEIR ABUNDANCE (28501)


17 CORAL REEF ECOSYSTEM DYNAMICS: INSTABILITIES, INvasIONS, TRANSITIONS AND REORGANIZATION

Chair(s): Benjamin Neal, b Neal@uc.edu.au
Nick Graham, nick.graham@cu.edu.au
Christian Wild, christian.wild@uni-bremen.de
Peter Doherty, p.doherty@aims.gov.au
Jessica Carillo, Jessica.Carillo@unimontverde.edu
Neal Cantin, n.cantin@aims.gov.au
Janice Lough, j.lough@aims.gov.au
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Morgan Pratchett, morgan.pratchett@jcu.edu.au
Ken Okai, cab67820@pop06.ond.ne.jp
Maria Byrne, mbyrne@anatomy.usyd.edu.au

14:45 Stockwell, B. L.: ARE YOU MY BROTHER? RAD GENERATED SNPs REVEAL HIGHLY CONNECTED PARROT-FISH POPULATIONS WITHIN THE PHILIPPINES. (28843)

15:00 Robinzich, V.; Rowe, K. A.; Berumen, M. L.: RECRUITMENT PATTERNS OF CORAL REEF FISHES IN THE CENTRAL RED SEA: DIFFERENCES ACCORDING TO SEASON AND REEF TYPE (28664)

15:15 Elmer, F.; Gardner, J. P.; Bell, J. J.: BENTHIC COVER INFLUENCES THE PRESENCE OF CORAL RECRUITS WHILE NOT AFFECTING THEIR ABUNDANCE (28501)

14:00  Caballes, C. F.; Pratchett, M. S.; Kerr, A. M.; Rivera-Posada, J. A.: THE ROLE OF MATERNAL NUTRITION ON OOECON GENESIS AND LARVAL DEVELOPMENT IN THE CORAL-EATING CROWN-OF-THORN STARFISH, ACANTHASPER PLANCI (29143)


14:45  Cowan, Z. L.; Dworjanyn, S. A.; Pratchett, M. S.: PREDATION ON CROWN-OF-THORNS STARFISH LARVAE BY DAMSELFISHES (27890)


15:15  Clark, T. B.: SUCCESSFUL CONTROL OF CROWN-OF-THORN STARFISH IN AMERICAN SAMOA (29088)

15:30  Doherty, P. J.: OBSERVATIONS ON CONTROLLING CROWN-OF-THORNS STARFISH OUTBREAKS BY INJECTION (30106)

21 ACHIEVING SUSTAINABLE CORAL REEF FISHERIES: POLICY DEVELOPMENT, IMPLEMENTATION, MANAGEMENT AND ENFORCEMENT

Chair(s):  Lida Teneva, l.teneva@conservation.org
          Aaron MacNeil, a.macneil@aims.gov.au
          Tauna Rankin, tauna.rankin@noaa.gov
          John N. Kittinger, jkittinger@conservation.org
          Marc Nadon, marc.nadon@noaa.gov
          Ivor Williams, ivor.williams@noaa.gov
          Michelle Heupel, m.heupel@aims.gov.au
          Colin Simpfendorfer, colin.simpfendorfer@jcu.edu.au

Location: 310 THEATER

09:45  Hutubessy, B. G.; Tapilatu, R. F.; Mosse, J. W.: PUT FISHERS’ KNOWLEDGE IN THE RECONSTRUCTION OF LONG-TERM FISH CATCH DATA (28148)

10:00  McCoy, K.; Friedlander, A.; Williams, J.; Kittinger, J.; Teneva, L.: ESTIMATING NEARSHORE FISHERIES CATCH FOR THE MAIN HAWAIIAN ISLANDS (28770)


10:45  Barclay, K. M.: GOVERNANCE ANALYSIS USING THE FISH CHAIN METHODOLOGY: PNG’S BECHE DE MER INDUSTRY (28079)

11:00  Steenbergen, D. J.; Barclay, K.; Cohen, P.; Eriksson, H.; Fabinyi, M.; Mills, D.: HOW MARKETS ARE INFLUENCING GOVERNABILITY OF SMALL SCALE FISHERIES: UNDERSTANDING OPPORTUNITIES FOR MULTI-SCALE GOVERNANCE (28206)

14:15  Calosso, M. C.; Clayton, J. A.: LEGACIES OF THE PAST FEED MISMATCHES BETWEEN REGULATIONS AND CORAL REEF FISHERIES (30142)

14:30  Young, M. A.; Foale, S.; Bellwood, D. R.: RECREATIONAL SPEARFISHING ON CORAL REEFS: AN AUSTRALIAN PERSPECTIVE (27785)

14:45  Barbosa, M. C.; Giglio, V. J.; Cordeiro, C. M.; Ferreira, C. E.: CHARACTERIZATION OF RECREATIONAL SPEARFISHING IN A SUBTROPICAL ROCKY REEF (29980)

15:00  Kojis, B. L.; Tobias, W. J.: SURVEY OF BOAT BASED RECREATIONAL FISHERS IN THE U.S. VIRGIN ISLANDS (29518)


22 LARGE REEF PREDATORS: ECOLOGY, STATUS AND MANAGEMENT

Chair(s):  Michelle Heupel, m.heupel@aims.gov.au
          Colin Simpfendorfer, colin.simpfendorfer@jcu.edu.au
          Andrew Chin, andrew.chin@jcu.edu.au

Location: 314 FRIDAY

09:30  Bradley, D.; Conkin, E.; Papastamatiou, Y. P.; McCauley, D. J.; Pollock, K.; Pollock, A.; Kendall, B. E.; Gaines, S. D.; Caselle, J. E.: LOW BUT STABLE REEF SHARK POPULATION ABUNDANCE AND DENSITY AT AN UNFISHED CORAL REEF (28401)


10:00  Asher, J. M.: Williams, I. D.; Harvey, E. S.: ROVING PREDATORS RELOADED: AN INVESTIGATION OF SHARK AND JACK POPULATIONS IN SHALLOW (0-30M) AND MESOPHOTIC DEPTHS (30-100M) IN THE HAWAIIAN ARCHIPELAGO (28880)


10:30  Escoro, M. T.; Mamauag, A. S.; Arceo, H. O.: ASSESSMENT OF SHARKS CAUGHT BY CORAL REEF FISHERS IN THE PHILIPPINES (29811)


11:00  Papastamatiou, Y.; Bradley, D.; Demsaar, U.; Friedlander, A.; Leos, V.; Lowe, C.; Watanabe, Y.; Weng, K.; Caselle, J.: CENTRAL PLACE REFUGING IN MARINE PREDATORS THAT NEVER SLEEP: EATING AT HOME AND AWAY (27998)


14:30  Johansen, J. L.; Pratchett, M. S.; Messmer, V.; Coker, D. J.; Tobin, A. J.; Hoey, A. S.: LARGE PREDATORY CORAL TROUT SPECIES UNLIKELY TO MEET INCREASING ENERGETIC DEMANDS IN A WARMING OCEAN (28362)

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<th>Time</th>
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<tr>
<td>10:00</td>
<td>MacPherson, R.; Villagomez, A.; Rohwer, F. L.; Haas, A. F.: TOWARDS AN EMPIRICAL DEMONSTRATION THAT HEALTHY REEFS NEED SHARKS: EMERGING POLICY AND MANAGEMENT TOOLS TO SUPPORT THE CASE FOR PROTECTION (29100)</td>
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**35 RISING SEA LEVEL AND THE RESPONSES OF REEFS AND REEF ISLANDS**

**Chair(s):** Dennis K. Hubbard, dhubbard@oberlin.edu

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<th>Time</th>
<th>Session Title</th>
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<td>11:00</td>
<td>Hajime Kayanne, <a href="mailto:kayanne@eps.s.u-tokyo.ac.jp">kayanne@eps.s.u-tokyo.ac.jp</a>; Chris Perry, <a href="mailto:C.Perry@exeter.ac.uk">C.Perry@exeter.ac.uk</a>; Paul S. Kench, <a href="mailto:pkchench@auburn.ac.aunz">pkchench@auburn.ac.aunz</a></td>
</tr>
<tr>
<td>11:15</td>
<td>Sverker Gischler, <a href="mailto:gischler@em.uni-frankfurt.de">gischler@em.uni-frankfurt.de</a></td>
</tr>
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**Location:** 311

**09:30** Albert, S.; Leon, J. X.; Grinham, A. R.; Church, J. A.; Gibbes, B. R.; Woodroffe, C. D.: DISAPPEARING CORAL CAYS IN SOLOMON ISLANDS (27884)

**09:45** Kayanne, H.; Tajima, Y.; Yokoki, H.; Yamanuchi, T.; Yamano, H.: ECO-TECHNOLOGICAL MANAGEMENT OF ATOLL ISLANDS AGAINST SEA LEVEL RISE (28577)

**10:00** Duvat, V.; Salvat, B.: FACTORS CONTROLLING SHORELINE CHANGES IN THE NORTHERN TUAMOTU REEF ISLANDS, FRENCH POLYNESIA (28598)

**10:15** Kench, P. S.: PHYSICAL MECHANISMS OF ISLAND BUILDING – THE IMPLICATIONS OF OVERWASH FOR ISLAND MAINTENANCE (28506)

**10:30** East, H. K.; Perry, C. T.; Kench, P. S.; Liang, Y.: REEF ECOLOGY – REEF ISLAND CONNECTIVITY ON HUVADHU ATOLL, MALDIVES (28321)


**11:00** Perry, C. T.: CHANGING DYNAMICS OF CORAL REEF CARBONATE PRODUCTION AND IMPLICATIONS FOR FUTURE REEF GROWTH POTENTIAL (27816)


**36 ASSESSING AND ADDRESSING THE EFFECTS OF MULTIPLE STRESSORS ON CORAL REEFS TOWARDS DEVELOPING EFFECTIVE MANAGEMENT AND POLICY RESPONSES**

**Chair(s):** David I. Kline, dklincук@ucsd.edu

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<th>Time</th>
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<td>15:00</td>
<td>Beatriz E. Casareto, <a href="mailto:dcbear@ipc.shizuoka.ac.jp">dcbear@ipc.shizuoka.ac.jp</a>; Andrea G. Grottoli, <a href="mailto:grottoli.1@osu.edu">grottoli.1@osu.edu</a>; Martin Tresguerres, <a href="mailto:mtresguerres@ucsd.edu">mtresguerres@ucsd.edu</a>; Ernesto Weil, <a href="mailto:reefeal@gmail.com">reefeal@gmail.com</a>; Robert Toonen, <a href="mailto:toonen@hawaii.edu">toonen@hawaii.edu</a>; Katie L. Barott, <a href="mailto:katiebarott@gmail.com">katiebarott@gmail.com</a>; Thamasak Yeemin, <a href="mailto:thamasakyeemin@yahoo.com">thamasakyeemin@yahoo.com</a>; Christopher P. Jury, <a href="mailto:jurycp@hawaii.edu">jurycp@hawaii.edu</a>; Ranjeet B. Bagad, <a href="mailto:rbagad11@gmail.com">rbagad11@gmail.com</a>; Keisha Bahr, <a href="mailto:kbaa@hawaii.edu">kbaa@hawaii.edu</a></td>
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<td>15:15</td>
<td>Lam, V.; Chaloupka, M.; Doropoulos, C.; Thompson, A.; Mumby, P. J.: STATE-SPACE MODELLING TO QUANTIFY THE DRIVERS OF CORAL COMMUNITY DYNAMICS OF THE INSORHE GREAT BARRIER REEF (28436)</td>
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**Location:** 306 A/B

**09:30** Iddreesbabu, K. K.; Sureshkumar, S.: STATUS AND CHANGING TRENDS OF CORAL REEFS IN LAKSHADWEEP ARCHIPELAGO AFTER 1998 MASS BLEACHING EVENT - LONG TERM MONITORING SURVEY (27796)


**10:45** Ang, P.: NEW CHALLENGES FACED BY DOMINANT CORALS IN HONG KONG MARGINAL CORAL COMMUNITIES (29830)

**11:00** Reboton, C. T.; Calumpang, H. P.: TEMPORAL VARIATION AND COMPARISON OF THE STATUS OF CORAL REEFS IN SELECTED SITES IN THE PHILIPPINES (28548)


**14:45** Marangoni, L. F.; Marques, J. A.; Duarte, G. A.; Pereira, C. M.; Calderon, E. N.; Castro, C. B.; Bianchini, A.; GLOBAL AND LOCAL IMPACTS ON THE PHYSIOLOGY OF SYMBIONT-BEARING FORAMINIFERAE, HYDROCORALS AND CORALS OF BRAZILIAN REEFS: A MESocosm APPROACH (29329)

**15:00** Ruiz-Jones, L. J.; Palumbi, S. R.: TRANSGRITOME CHANGES IN CORALS SUBJECT TO PROTECTIVE HEAT PULSES DURING MIDDAY LOW TIDES (28207)

**15:15** Murphy, J. W.; Richmond, R. H.; Bingham, J. P.; Collier, A. C.: ANALYSIS OF ANTIOXIDANT ENZYME EXPRESSION OVER REPRODUCTIVE TIME POINTS IN POCILLOPORA DAMICORNIS (28478)

**15:30** Alam, M. S.; Casareto, B. E.; Suzuki, Y.: RAPID AND HIGH PRECISION MEASUREMENT OF UREA USING HIGH TEMPERATURE: SIGNIFICANCE IN COASTAL ECOSYSTEMS (29109)

**15:30** Sultana, R.; Casareto, B. E.; Sohrin, R.; Suzuki, T.; Fujimara, H.; Suzuki, Y.: SEDIMENT PRIMARY PRODUCTION UNDER EXPERIMENTAL WARMING AND ELEVATED PCO2 IN SHALLOW MARINE ECOSYSTEMS OF ORINAWA, JAPAN (28554)

41 REEFS OF TOMORROW: APPLICATIONS OF REEF RESTORATION, STRUCTURE, AND CONSERVATION FOR SOCIO-ECONOMIC RISK REDUCTION AND CLIMATE ADAPTATION

Chair(s): Philip Kramer, pkrramer@tnc.org
Borja G. Reguero, breguero@ucsc.edu
Boze Hancock, bhancock@tnc.org

Location: 301 B
09:45 Lynch, H.; Minton, D.; Carr, R.; Robertson, G.; Conklin, E.: EXPANDING THE REEF RESTORATION TOOLBOX. DEVELOPMENT OF A NEW INVASIVE ALGAE CONTROL METHOD IN HAWAII (29105)
10:00 Cheng, J.; Hancock, B.; Kramer, P.; Lewis, K. A.; Wang, Y.; Zhao, P.: PARTNERING WITH PRIVATE TOURISM AND HOTEL DEVELOPMENT SECTORS TO INITIATE CORAL REEF RESTORATION IN CHINA (28257)
10:30 Beck, M. W.; Losada, I. J.; Menendez, P.; Reguero, B. G.: BUILT CAPITAL AND PEOPLE PROTECTED BY CORAL REEFS GLOBALLY, NOW AND IN THE FUTURE (29593)
10:45 Byrne, J.; Schill, S.: THE CAYMAN ISLANDS CORAL REEF RESTORATION EXPLORER (29918)
11:15 Kramer, P. A.; Riguro, H.; Hancock, B.; Frederick, N.; Agostini, V.: ENHANCING AND RESTORING CORAL REEFS FOR COASTAL DEFENCE: A SOFT SOLUTION CASE EXAMPLE FROM GRENADA* (29853)

43 NEW LARGE-SCALE STRATEGIES IN CORAL REEF MITIGATION SUPPORTING REEF RECOVERY – CREATING A TOOLBOX

Chair(s): David Gallo, david.a.gallo@hawaii.gov
Karene Tun, karene.tun@nparks.gov.sg
Patricia Ramirez Romero, pattdf@gmail.com

Location: 301 B
14:15 Kramer, A.; Francou, P.; Lescinski, J. M.; Gautier-Debernardi, J.; Dini, E.: 3D PRINTED REEFS AS AN ENRICHMENT FOR NATURAL HABITATS (28655)
14:45 Anwar, V. H.; Zakaria, J. I.; Johan, O.: CARBON ABSORPTION AT TRANSLATIONAL OF CORAL REEFS IN NIRWANA BEACH, PADANG, WEST SUMATRA, INDONESIA (28814)
15:00 Drury, C.; Lirman, D.: GENOTYPING BY SEQUENCING AS A TOOL FOR UNDERSTANDING GENETIC AND GENOTYPIC PATTERNS OF ACROPORA CERVICORNIS RESTORATION (28176)

44 EMERGING TECHNOLOGIES IN CELLULAR, MOLECULAR, AND ECOTOXICOLOGY TECHNIQUES

Chair(s): Esti Kramarsky-Winter, esti.winter@gmail.com
Amanda Reichelt-Bruschet, amanda.reichelt-bruschet@scu.edu.au
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Peter Harrison, peter.harrison@scu.edu.au
Mary Hagedorn, hagedorm@si.edu
Buki Rinkevich, buki@ocean.org.co.il

Location: 308 A/B
13:45 Richmond, R. H.; Tishhammer, K. H.; Seneca, F. O.; Spies, N. P.; Downs, C. A.: USING MOLECULAR TOOLS TO DIAGNOSE AND TREAT THE CAUSES OF CORAL REEF DECLINE (28226)
14:00 Klueter, A.; Archer, F. I.: ENVIRONMENTAL METABOLOMICS – A NEW DIAGNOSTIC TOOL FOR CORAL REEF ECOSYSTEM ASSESSMENT AND MONITORING* (30070)
14:15 Vroom, P. C.; Peters, E. C.; Lumsden, J. S.: REGENERATION IN CORALLIMORPHARIA (28833)
14:30 Negri, A. P.; Brinkman, D. L.; van Dam, J.; Flores, F.; Jones, R. J.; Makarynskyy, O.; Kroon, F. J.; Webster, N. S.: TROPICAL ECOTOXICOLOGY FOR OIL AND GAS (29243)
14:45 Morgan, M. B.; Ross, J.; Martin, R. A.: LABORATORY INDUCED ESTRADIOL EXPOSURE STIMULATES TRANSCRIPTIONAL RESPONSES IN THE SEA ANEMONE EXAIPTASIA PALLIDA (28125)
15:00 Hartmann, A. C.; Quinn, R. A.; Galtier d’Auriac, I.; Little, M.; Benler, S.; Doresteins, P. C.; Rohwer, F. L.: MOLECULAR MODIFICATIONS IN CORAL REEF TAXA AND THE METABOLIC RULES OF COMMUNITY ASSEMBLY (28788)
15:15 Ventura, P.; Touleel, G.; Chapron, L.; Furla, P.; Barnay-Verdier, S.: STRESS RESPONSE OF GASTRODERMAL PRIMARY CELL CULTURE FROM THE TEMPERATE SYMBIOTIC Cnidarian, ANEMONIA VIRIDIS (28345)
15:30 Shapiro, O. H.: CORAL ON A CHIP: A MICROFLUIDIC PLATFORM FOR STUDYING REEF-BUILDING CORALS AT THE MICROSCALE (27891)

46 TRAIT-BASED APPROACHES IN CORAL REEF ECOLOGY: FROM FUNCTIONAL ECOLOGY TO MANAGEMENT

Chair(s): Sebastian Ferse, sebastian.ferse@zmt-bremen.de
Valeriano Parravicini, valeriano.parravicini@ird.fr
Jeremiah Plass-Johnson, jpllass72@yahoo.com
Sebastien Villegier, svillegie@uni-montp2.fr
Sonja Bejarano, sonia.bejarano@leibniz-zmt.de

Location: 308 A/B
09:30 Bridge, T.; Luiz, O. J.; Coleman, R. R.; Kane, C. N.; Kosaki, R. K.: ECOLOGICAL AND MORPHOLOGICAL TRAITS PREDICT DEPTH-GENERALIST FISHES ON CORAL REEFS (27776)
10:00 Luiz, O. J.; Graham, N. A.; Coker, D. J.; Allen, A. P.; Madin, J. S.: TRAIT MATCHING IN REEF FISH-CORAL SPECIES ASSOCIATIONS (29827)
10:15 McWilliam, M. J.; Hughes, T. P.: CORAL TRAIT DIVERSITY AND FUNCTIONAL COLLAPSE ON CARIBBEAN CORAL REEFS (27900)
10:30 Kim, S. W.; Pandolfi, J. M.: FILLING THE GAPS: IMPUTATION OF CORAL TRAIT DATABASE AND FUNCTIONAL BIOGEOGRAPHY OF CORALS (28289)
11:00 Kuo, C.; Madin, J. S.; Baird, A. H.: ADAPTIVE STRATEGIES OF SCLERACTINIAN CORALS (29093)
11:15 Birrell, C. L.; Mumbry, P. J.; McCook, L.: A FUNCTIONAL ANALYSIS OF ALGAL ASSEMBLAGES ON THE GREAT BARRIER REEF TO ESTIMATE EFFECTS ON CORAL COMMUNITY DYNAMICS. (28402)
53 DISCUSSION & SYNTHESIS: EMERGING TECHNOLOGIES FOR REEF SCIENCE AND CONSERVATION

Chair(s): Elizabeth Madin, elizabeth.madin@mq.edu.au
Emily Darling, edarling@wcs.org
David Saggert, David.Saggert@uts.edu.au
Bill Legget, bill.legget@cu.edu.au
Mathieu Fernice, Mathieu.Fernice@uts.edu.au

Location: 312

09:30

09:45

10:00

10:15

10:30
Tougher, B.; LaFranchi, C.: Marine Monitor: A Low Cost Radar for Marine Protected Areas (28884)

10:45

11:00

11:45

12:00

14:00

14:15

14:30

14:45

15:00

15:15
Zawada, K. J.; Dornelas, M.; Madin, J. S.: Using 3D Scanning to Quantify Coral Morphology (28681)

15:30

58 THE SCIENCE OF COMPLIANCE: LINKING JUDICIAL ACTIONS, ENFORCEMENT AND MANAGEMENT FOR POLICY AND PRACTICE

Chair(s): Jack Kittinger, jkittinger@conservation.org
Paulo Maurin, paulo.maurin@noaa.gov
Josh Cinner, joshua.cinner@cu.edu.au
Mike Lameier, michael.lameier@noaa.gov
Brook Bergseth, brook.bergseth@my.jcu.edu.au
David Sakoda, David.Sakoda@hawaii.gov
Adrian Arias, adarrio@gmail.com
Denise Antolini, antolini@hawaii.edu

Location: 305 A/B

09:45

10:00

10:15
Quinecey, R.: Compliance Management in the Great Barrier Reef World Heritage Area (29198)

10:30
Arias, A.; Cinner, J. E.; Rhondda, R. E.; Pressey, R. L.: Levels and Drivers of Compliance with Marine Protected Areas (29212)

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Rohe, J. R.; Furse, S.: Unravelling Compliance Dynamics Within Locally Managed Marine Areas in Solomon Islands and Fiji (28358)

11:00

11:15
Foster, J. R.: Hawaii’s Environmental Court - Bridging Science to Policy Through Improved Adjudication of Resource Violations (28244)

62 A CRITICAL EXAMINATION OF ECOSYSTEM RESPONSE TO HERBIVORE MANAGEMENT

Chair(s): Emily Kelly, elkelly@ucsd.edu
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Megan Ross, mroslin@hawaii.edu
Alison Green, agreen@tnc.org

Location: 305 A/B

13:45
Steneck, R. S.; Mumby, P. J.: The Eastern Caribbean: A Laboratory for Studying the Resilience and Management of Coral Reefs (28490)

14:00
Suchley, A.; McField, M. D.; Alvarez-Filip, L.: Do Parrotfish Rule Mesoamerica? The Impacts of Fish Herbivory on Reef Macroalgal and Coral Cover Trajectories (28335)

14:15
Williams, I. D.; Sparks, R. T.; White, D. J.; Lino, K. C.; Kelly, E. L.: Impacts of 6 Years of Herbivore Protection at Kāhekili Herbivore Fisheries Management Area (KHFMA), Maui (28384)

14:30
Cox, C. E.: The Role of Reef Community Composition and Parrotfish Protection in Phase Shift Reversal (30334)

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Kelly, E. L.; Eynaud, Y.; Sparks, R. T.; Williams, I. D.; Smith, J. E.: Balancing the Budget: A New Way to Assess Herbivore Function on Fished and Unfished Reefs Across Maui, Hawaii (29951)

15:00
Ruttenberg, B. I.; Adam, T. C.; Roycroft, M. V.; Burkepile, D. E.: Parrotfish Herbivory and Potential Recovery of Corals in the Caribbean: Using Species-Level Data to Predict Assemblage-Level Impacts (29606)
80 OFFSHORE CORAL REEFS IN THE SOUTH CHINA SEA: SCIENCE, PROBLEMS AND SOLUTIONS

Chair(s): John W. McManus, mcmanus.john@gmail.com
Kwang-Tsao Shao, zoskt@gate.sinica.edu.tw

Location: 302 A/B


09:45 Zhang, Y.; Huang, H.; Jiang, L.; Miao, G.; Lian, J.; Sheng, L.: AN OUTBREAK OF A SESSILE SEA CUCUMBER REDUCES POST-SETTLEMENT SURVIVORSHIP OF CORAL RECRUITS (28561)

10:00 McManus, J. W.: RECENT DAMAGE TO OFFSHORE CORAL REEFS IN THE SOUTH CHINA SEA: QUANTITATIVE IMPACTS AND POTENTIAL SOLUTIONS (28225)

10:15 Huang, H.: STATUS OF CORAL REEFS IN XISHA ISLANDS/PARACEL ISLANDS (28412)

10:30 Hui, H.; McCook, L.: CHINESE CORAL REEF MANAGEMENT AND RESEARCH: ENHANCING THE SCIENTIFIC FOUNDATION FOR BEST PRACTICE. ADAPTIVE MANAGEMENT IN THE SOUTH CHINA SEA (29947)

10:45 Gomez, E. D.; Menez, A. J.; Alino, P. M.; Villanoy, C. L.; Siringan, F. P.: DESIGNING AN ASIAN MARINE HERITAGE: FISHING FOR PEACE (30073)

11:00 Shao, K.: MARINE BIODIVERSITY AT TAIPING ISLAND AND PROPOSAL FOR ESTABLISHING MARINE PROTECTED AREA AT THE SPRATLY ISLANDS (28557)

11:15 Carpenter, K. E.: ENVIRONMENTAL DAMAGE TO CORAL REEFS IN THE SOUTH CHINA SEA AND INTERNATIONAL ARBITRATION UNDER THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (29776)

82 INNOVATIONS IN THE USE OF DIGITAL TOOLS AND THE MEDIA FOR COMMUNICATION, OUTREACH AND EDUCATION IN SUPPORT OF CORAL REEF PROTECTION

Chair(s): Mark Heckman, mheckman@hawaii.edu
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Location: 302 A/B


14:00 Radway, S. A.: SHIFTING SOCIAL NORMS TO CREATE SUSTAINABLE CHANGE (29906)

14:15 Wiener, C. S.; Zykov, V.; Pace, L.; Miller, A.; Friedman, A.: DEEP SEA GAZING: MAKING SHIP-BASED RESEARCH ABOARDS RV FALKOR RELEVANT AND ACCESSIBLE (29187)

14:30 Wilcox, C. L.: BLOGGING 201: I'VE GOT A BLOG. NOW WHAT? (29222)

14:45 Kelley, R.: Fears, R. J.; Pratchett, M. S.: VISUAL DECISION TOOLS: AN INNOVATIVE TECHNIQUE FOR BUILDING OCEAN LITERACY (28519)

15:00 Medina-Rosas, P.: COMMUNICATING THE SCIENCE OF THE MEXICAN CORAL REEFS TO SUPPORT THEIR PROTECTION AND CONSERVATION (28727)


15:30 Scoli Seaone, J. C.; Araújo, J. C.; Britto Pereira, B. S.; Duarte, F. C.; Cacínha Fonseca, I. F.: SANTA CRUZ CABRALIA REEFS, BAHIA BRAZIL: USING DIGITAL TOOLS AND PRINTED MEDIA TO RAISE CONSERVATION AWARENESS IN K-12 EDUCATION (29121)

87 FUNDING AND FINANCE IN SUPPORT OF CORAL REEF RESEARCH, CONSERVATION AND EDUCATION - BUILDING LOCAL AND GLOBAL CAPACITY TO REVERSE CORAL REEF DECLINE

Chair(s): Melissa Walsh, melissa@marineconservationfinance.com
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Location: 303 A/B

13:45 Walsh, M.: MARINE CONSERVATION FINANCE: IMPROVING THE AMOUNT, EFFICACY AND EFFICIENCY OF INVESTMENT INTO CORAL REEF MANAGEMENT (29847)

14:00 LaFranchi, C. L.: Andrew, W.: DIRECT FINANCING OF CONSERVATION ON THE GROUND: A MODEL FOR PALAU AND BEYOND (29694)

14:15 Mendes, J. M.: Minshall, P.: PETER MINSHALL’S WATER COLOURS: AN INNOVATIVE APPROACH TO CORAL REEF CONSERVATION AND CONSERVATION FINANCING IN TOBAGO (28740)


15:00 Lloyd, A. J.; Garwood, M.; Turner, K.; Rechtorik, C.: FOSTERING SOLUTIONARIES AND OCEANPRENEURS IN OCEAN YOUTH’S CORAL WORKSHOP (29899)

15:15 Duncan Seraphin, K., Phillipoff, J.: VOICE OF THE SEA: USING TELEVISION TO TEACH CORAL REEF SCIENCE AND PROMOTE STEM CAREERS ACROSS THE PACIFIC (29621)

15:30 Mcorry, D. M.: INDUSTRY AND RESEARCH COLLABORATION TO LEVERAGE CORAL REEF SCIENCE FOR ENVIRONMENTAL RISK ASSESSMENT AND MANAGEMENT (28142)

88 CITIZEN SCIENCE IN SUPPORT OF CORAL REEF PROTECTION AND SUSTAINABILITY

Chair(s): Karsten Shein, karsten.shein@noaa.gov
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Location: 303 A/B

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<td>OUR PROJECT IN HAWAII’S INTERTIDAL (OPHI): CITIZEN SCIENCE IN AN ACCESSIBLE MARINE ENVIRONMENT (30086)</td>
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<td>10:30</td>
<td>Galvis, N. H.; Galvis, R. H.</td>
<td>COLOMBIAN CITIZEN SCIENCE TO IMPROVE CORAL REEF CONSERVATION (27854)</td>
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<td>Fulton, S.; Torre, J.; Hernández-Velasco, A.; Saurez-Castillo, A.; Rojo, M.; Fernández-Rivera Melo, F.</td>
<td>FROM FISHING FISH TO FISHING DATA: CITIZEN SCIENCE, CONSERVATION AND MANAGEMENT IN FISHING COMMUNITIES. (28259)</td>
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<td>Iqbal Herwata Putra, M.; Sari, S. K.; Sukandar, H.; Malik, D. A.; Prabuning, D.</td>
<td>ENGAGING DIVE TOURISM IN SUSTAINABLE FINANCING AND CORAL REEF DATA COLLECTION FOR BETTER MANAGEMENT OF KARIMUNJAWA NATIONAL PARK, INDONESIA (28657)</td>
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