

National Shellfisheries Association Quarterly Newsletter



Est. 1908

2014 (2)

President's Message

After a very long and cold winter in Maine, it was great to catch up with so many NSA members at the 106th Annual Meeting in Jacksonville this past spring. With over 250 scientific presentations, four insightful plenary sessions, and a rousing student auction, there was, as usual, more to attend to than time would avail. Thanks are due to Conference Manager, Sandy Shumway and the Conference Organizing Committee for attending to the hundreds of details involved in putting together such a great meeting. Meeting registration fees do not cover all of the NSA's costs in putting on a conference and thus, fiscal support from sponsoring organizations is critical to making each annual meeting a success. This year was no different and thanks are due to the many sponsors, both new and returning, who have supported this meeting. Finally, thanks to all the students who managed the SEF table, shuttled flash drives from room to room, assisted in the student auction and of course also reported on their individual research results. Recipients of the student presentation awards are found on page 6. Thanks are due to Endowment/Student Awards Committee Co-chairs, Stan Allen, Lisa Milke and Nature McGinn who spent considerable time this past year revising the evaluation process.



Annual meetings also mark transitions in leadership and so thanks are due to outgoing Vice-President Marta Gomez Chiarri and Member-at-Large, Steve Roberts for their contributions to our Association. Steve Allen has transitioned from Secretary to Vice-President. Finally, welcome aboard to Secretary Lisa Milke and Member-at-Large Julie Davis.

Enjoy the summer!

Chris Davis

Kenneth K. Chew Center for Shellfish Research and Restoration

A new hatchery and laboratory space has opened in the Puget Sound region. As a direct result of the Washington Shellfish Initiative, coupled with sustained interest and funding by NOAA, a new facility has been established at the Northwest Fisheries Science Center's Manchester Research Station. On Thursday, May 22 under a cloudless blue sky with an enthusiastic audience looking on, the facility was formally dedicated as the *Kenneth K. Chew Center for Shellfish Research and Restoration*. Ken, with friends and family looking on, regaled the group with old stories of the early days of shellfish research in Washington State. The effort to name the building in honor of Ken Chew was spearheaded by NOAA and the Puget Sound Restoration Fund. Speak-



Ken Chew assisted by NOAA Northwest Fisheries Science Center Director John Stein cut the ribbon.

Continued on page 2

In this issue:

- ***Jacksonville in the rear - view***
- ***2014 student achievement and research awards***
- ***Nelson and Gunter awards***

Recruits' Corner

Hopefully this letter finds you all well as the semester draws to a close. The Jacksonville meeting was another success, and we are so excited to have met many of you and hear about your projects and interests. There were over 50 student abstracts submitted, with the recruits giving over 40 oral presentations and 17 student posters this year, forming an integral part of the program

Again, another big "Thanks!" is due to all the student volunteers. Your help with A/V and sales booth ensured that the meeting ran smoothly and aided its success. NSA recruits really stepped it up this year and made their presence felt at this meeting. The NSA booth was a huge success, thanks in part to the efforts of all the NSA



student volunteers, with all funds raised going to the Student Endowment fund. The NSA Student Endowment Fund Auction was a big hit as usual, with over \$1500 raised. Thanks too to the "pirate" Sandy for all her efforts!

The Student Endowment Fund provided travel/lodging funds for 15 students attending the Jacksonville conference this year; keep your eye out for the next announcement online. Remember, you can apply for an SEF Travel Award every year, even if you have previously won, and help defer the costs to come to the next conference in Monterey!

The recruits would also like to thank Noreen Blaschik at the University of Connecticut for all her help in pre-meeting preparations. A special big thanks is due to Allison Mass, who is stepping down as co-chair as she transitions to a "settled Recruit". Allison received her PhD in December; we wish her nothing but success as she advances with her career. During her tenure as co-chair, Allison's unbridled enthusiasm and efforts on behalf of the recruits helped move the organization forward and ensure all recruits know they have a place with in NSA. Thanks Allie - we couldn't have done it without you!

Hillary Lane, a PhD student at University of Maryland, will be taking over as Recruits' co-chair. Hillary has been involved with NSA for many years and is very excited about the opportunity! Hillary is interested in physiological ecology and is using knowledge gained from working with oysters in the Chesapeake Bay system to help guide her Ph.D. research. Her dissertation is focused on the physiological impacts of climate change on juvenile blue crab in the Chesapeake Bay.

Maria Rosa and Hillary Lane

Ken Chew Center *Continued from page 1.*

ing for members of the northwest shellfish community who continue to maintain strong ties with Ken Chew, we are especially pleased that this honor was extended as a tribute to his long career in shellfish research and aquaculture.

The event in many ways punctuated a long and circuitous drive to establish a new shellfish hatchery and laboratory that will initially enable "restoration grade" shellfish seed to be produced in meaningful quantities. The facility also has the space and capacity to host a variety of other projects requiring seawater and on-site algal production and rearing space for invertebrates. A dry laboratory is incorporated in the design of the building, as are separate rearing and algal production spaces. A separate 600 sqf green house complements the 1400 sqf laboratory facility. The greenhouse will have capacity for full quarantine utilization and will house additional algal and production space. Outdoor space is also dedicated to a variety of tanks for setting spat on shell oysters for later deployment onto Puget Sound oyster habitats.



The facility will be operated by the Puget Sound Restoration Fund and will initially focus on the production of Olympia oyster seed for restocking areas in Washington State that historically supported large native oyster populations. PSRF Executive Director and NSA Member, Betsy Peabody, spoke eloquently about the project, the needs in the region and the utility the new facility will bring to the effort of restoring local shellfish populations. The overall oyster restoration effort represents a close collaboration between PSRF, NOAA and the WA Department of Fish and Wildlife (WDFW), WA Department of Natural Resources (WDNR), and Tribes. Funding for the facility was provided by NOAA Aquaculture, WA Department of Ecology, WDFW and WDNR, in addition to smaller, private donations. As Senior Scientist for the Puget Sound Restoration Fund, I will be happily immersed in directing technicians and students alike in both research and restoration projects at the new facility.

Ascribing to the philosophy that if we build it they will come, other funded projects are poised to utilize the facility as well. Funded projects include new research on rock scallops (supported by the Western Regional Aquaculture Center) and work on developing lines of Pacific oysters resistant to adverse changes in carbonate chemistry of local waters (supported by WA Sea Grant).

Joth Davis

Student Achievement and Research Awards Presented at the 106th Annual Meeting

The 106th NSA meeting which convened in Jacksonville, FL this year was afforded an impressive array of students presenting their scientific research and participating in the many events available. As in years past, the NSA Annual Business Meeting was the occasion to announce the winners of this year's student research awards. These competitive grants provide support funding earmarked for student research projects.

This year was the inaugural presentation of the **George R. Abbe Student Research Award** in the area of crustacean biology and fisheries management. The first Abbe Award was presented to **Catherine Drake** at the Moss Landing Marine Laboratory in California. Catherine's proposal was titled, *The Evolution of Decorating Behavior in the Decorator Crab (Loxorhynchus crispatus) and Advantages for Living on a Mobile Environment*. In particular, she poses three questions in her study — (1) Are there measurable benefits or costs for organisms inhabiting a mobile environment?, (2) Is there evidence that the crabs are choosing their decorative organisms in a non-random way?, and (3) Why did the behavior of decoration evolve in this species of spider crab? Stay tuned for an update on Catherine's research in subsequent newsletters.

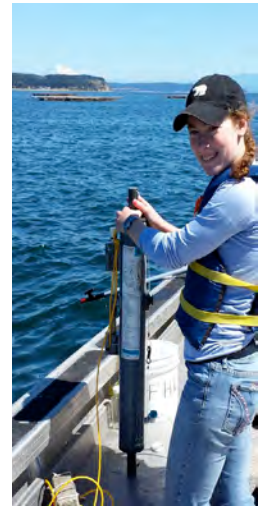


The **Melbourne R. Carriker Award** supports a student's research project in any topic of shellfisheries. The 2014 Carriker Award was presented to **Keri Lydon** from the University of Georgia for, *Triclosan Pollution Impacts on Intrinsically Resistant Vibrios: Understanding Risk in Shellfish Populations*. Keri proposes to determine if risks of *Vibrio* infections and severity of those infections may be exacerbated by increases in antibiotic pollution associated with sewage contamination in shellfish harvesting waters by selecting for intrinsically resistant bacteria, including *Vibrio*. Specifically, her study seeks to determine if wastewater effluent containing triclosan is selecting for *Vibrio* downstream of the outfall creating higher risks of exposure in shellfish.



Laura Newcomb from the University of Washington is the 2014 recipient of the **Michael Castagna Award** for student

research devoted to the area of applied shellfisheries. Her project, entitled *Monitoring Risk: The Role of Ocean Warming and Acidification on Mussel Fall-off from Aquaculture Lines* will address the impact of environmental stressors on the mechanics of mussel byssal threads - it aims to test how high temperature and low pH contribute to weakened mussel attachment in the field through monitoring of water conditions and mussel attachment at a local mussel farm. This study will inform mussel farmers of the possible role that temperature and pH play in mussel fall-off, which reduces farm yields, hurting the economic performance of the industry. Temperature increases and pH decreases are projected to occur over the next century. Our ability to understand the extent how these factors could negatively affect aquaculture increases the resilience of this system to ocean change.



Judging of the **Sandra E. Shumway Award** for Best Student Paper Published in the JSR has specific selection and evaluation criteria: (1) The lead author must have been a student when the work was completed, (2) the paper must present the student's work, not that of a co-author, (3) it will be evaluated on the quality of science and writing, and (4) the importance of the work to the field of shellfish research.

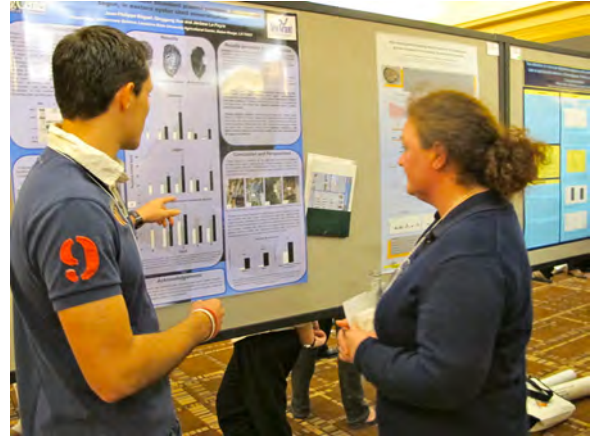
The consensus of the judges determined that the paper by Raymond Mroch, David Eggleston, and Brandon Puckett, entitled *Spatiotemporal Variation in Oyster Fecundity and Reproductive Output in a Network of No-take Reserves* (Volume 31, No. 4) was the recipient of the Sandra E. Shumway Award for 2014.



The authors suggest that inland oyster broodstock reserves should be prioritized for stock enhancement/seeding—and more seaward reserves for reserve expansion—and they highlight the need to consider spatiotemporal variation and the scale at which a key demographic rate (fecundity and reproductive potential) is expressed when assessing the efficacy and conservation/restoration targets of marine reserves.

Congratulations to our award recipients for 2014!

IMAGES FROM THE 106th ANNUAL MEETING



Jacksonville is now in the rear-view

There were over 250 registrants, approximately 200 oral presentations, and 60 posters, the 106th annual meeting in Jacksonville is history. Four outstanding plenary speakers helped to kick off each day - special thanks to Brian Bayne, Nicki Holmyard, Joao Ferreira, and Eddie Allison for their engaging presentations. Thanks to all the folks who organized special sessions and to all the participants who travelled to Jacksonville!

Every meeting engages a large group of people, experienced and newcomers, and there are plenty of thanks to go around. In no particular order, let's begin with The Organizing Committee who spent many hours doing a lot more than organizing and their efforts were obvious. Steve Allen, Leroy Creswell, and Chris Davis were all very busy behind the scenes. Karolyn Hansen, Maria Rosa, and Melissa Pierce went far and above the call of duty on the program and other needs. Denny Miller (Sheridan Press) was, as always, indispensable and made sure that the program was ready and printed on

time. Nancy Boland took charge of the registration table and things ran flawlessly. A big cheer for all of the students, kept to schedule by Maria Rosa and Allison Fitzgerald. Dane Frank made sure that all of the talks were delivered to the right computers. Thanks to all the students who helped out at registration, organized the student sales table, delivered items at the auction and generally helped out willingly whenever asked.

The President's Reception was a great evening, thanks to the seafood donors who provided the amazing shellfish: Shooting Point Oyster Company, Florida Sea Grant, Pemaquid Mussel Farms, Ward Oyster Company, East Coast Shellfish Growers Association, Baywater, Woods Fisheries, Point aux Pins Oysters, Mobjack Bay Seafood, Pemaquid Oyster Company, Island Creek Oysters, Cedar Key Aquaculture Association, Murder Point Oysters, Charles Island Oysters Farm, Louisiana Oyster Dealers and Growers Association, Lady's Island Oysters, and Sapelo Sea Farms. Leslie Sturmer and

ANNUAL MEETING IN JACKSONVILLE



ow mirror and was a great success!

Leroy Creswell solicited all of the shellfish for the opening reception and Chef Brittingham did an amazing job of preparation and presentation. A special thanks to all who risked their appendages to shuck oysters, especially Bob Rheault who organized the team.

The staff at the Renaissance was amazing - beginning with our event manager, Janice Petrelli, and including a long list of accommodating and pleasant staff who helped the meeting to run seamlessly. THANKS to Janice and all of the following members of the Hyatt Team: Ashley Robinson, Jonathan Dias, Cara Carmack, Rosa Hernandez, Yessunie Rivera, William Hornsby, Orietta Broom, Alfredo Rodriguez, Brittney Wright, Greg Tercyak, Chris Fra Shini, Allen Mosley, and the entire Food and Banquet Staff. A very special thanks to our sponsors: Harbor Branch/Florida Atlantic University, the Oyster Recovery Partnership, Mississippi-Alabama, Louisiana, Florida and South Carolina Sea Grants, Wiley-Blackwell Science Publishers, Elsevier, and The Sheridan

Press. In addition, Reed Aquaculture had a strong presence and made a generous donation to the auction. The collective sponsorship made it possible to keep the registration costs reasonable and to assist many student participants and we truly appreciate the support.

Next year we will return to the beautiful Monterey Peninsula for the 107th Annual Meeting. So mark the dates: March 22-26 at the Monterey Marriott. Meeting planning is already well underway and the program is taking shape (watch the web page for updates). If you have an idea for a special session or would like to organize one, let us know soon. This is an outstanding venue in a wonderful part of the country and several new and exciting activities are in the offing!

See you in Monterey,

Sandy Shumway
Conference Manager

Congratulations to the Recipients of the Thurlow C. Nelson and Gordon Gunter Student Presentation Awards

The participation for the 2014 student presentation awards at the 106th NSA in Jacksonville was exceptional — and according to our distinguished panel of judges — highly competitive. Also notable was the outstanding showing by our undergraduate presenters.

THE THURLOW C. NELSON AWARD

The *Thurlow C. Nelson Award* is given for the outstanding oral presentation of research that represents a distinctive and valuable contribution to shellfisheries science. The Award is named after the distinguished shellfish biologist who served as NSA President from 1931-1933 and contributed more than 125 papers, many relating to oyster biology

Applied Category

William Shoer, an undergraduate from Allegheny College was the winner, presenting "Battling bio-fouling by mud worms, *Polydora spp.* on a Delaware Bay, New Jersey oyster farm." There were two honorable mentions in the Applied category — **Allison Colden**, from the Virginia Institute of Marine Science, for her presentation entitled "Oyster reef influences on local sediment transport processes.", and **Jacob Goodwin**, University of Maryland, presenting, "Using a novel automated identification technique to enhance our understanding of Eastern oyster (*Crassostrea virginica*) larval dispersal."

Physiology Category

The winning presentation in this category went to **Malwenn Lassudrie**, Laboratoire des Sciences de l'Environnement Marin, for the presentation, "Effects of the infection by the trematode *Bucephalus sp.* upon physiology of the Eastern oyster *Crassostrea virginica*, and consequences of an additional stress, the exposure to the toxic dinoflagellate *Alexandrium fundyense*." **Maria Rosa**, University of Connecticut, received honorable mention for, "Examining seasonal shifts in retention efficiency and mucosal composition in the blue mussel *Mytilus edulis*."

Ecology Category

Joshua Moody, Partnership for the Delaware Estuary, placed 1st in the ecology category with "Geospatial distribution of ribbed mussels (*Gukensia demissa*) and nutrient removal services across a salt marsh." Honorable mention was awarded to **Valerie Hall**, University of Massachusetts Dartmouth, for her presentation, "Use of a matrix population model to assess the impact of the second seasonal spawn on the northern bay scallop, *Argopecten irradians irradians*."

Disease Category

Kehan Bao, University of Rhode Island, received the T.C. Nelson award in this category with "Evaluating the performance of selectively-bred lines of Eastern oysters, *Crassostrea virginica*, at different locations along the east coast of the United States." Stony Brook University student, **Soren Dahl**, received an honorable mention for "QPX disease relationships with environmental parameters monitored over a decade in a Raritan Bay (NY) hard clam fishery."

THE GORDON GUNTER AWARD

The Gordon Gunter Award is given for the outstanding poster presentation of research that represents a distinctive and valuable contribution to shellfisheries science. This award recognizes the important and essential role of poster presentations as a vehicle for research communication.

Applied Category

There were two Gordon Gunter Award winners in this category — **Katherine McFarland**, from Florida Gulf Coast University, for her poster entitled "Application of the dynamic energy budget theory to the invasive green mussel, *Perna viridis*, in southwest Florida.", and **Philip Staudigel**, at the University of Miami, for "Isotopic profiles of Olympia oysters in response to ocean acidification conditions."

Contributed Shellfish Category

Matthew Turner, Hofstra University, received the award for Contributed Shellfish posters with "Polymorphism for octopine dehydrogenase in bay scallops: is it functionally important?" and the honorable mention was awarded to **Whitney Jaillet**, Roger Williams University, for her presentation, "The utilization of molecular diagnostics to equate traditional Mackin ratings to real-time PCR data to optimize the detection of Dermo disease, *Perkinsus marinus* in the Eastern oyster, *Crassostrea virginica*."

Kudos to all of our students for their participation in the 106th annual meeting of the National Shellfisheries Association, and our best wishes and support for your continued scientific pursuits.

NACE and MAS to Host Canadian Aquaculturists

In an effort to "Bridge the Gulf", organizers of the Northeast Aquaculture Conference and Exposition (NACE) and the NOAA Milford Aquaculture Seminar are excited to be partnering with the Aquaculture Association of Nova Scotia for its upcoming meeting January 14-16, 2015 in Portland, Maine. Other partners include the PEI Aquaculture Alliance, the Atlantic Canada Fish Farmers Association. Convening biennially at different sites throughout the Northeast region,

Continued on page 7

NACE *Continued from page 6.*

the NACE is coming to downtown Portland, Maine next winter for three days of field trips, workshops, seminars, technology transfer sessions and presentations of research results on finfish, shellfish and algae aquaculture. In addition, the NACE trade show will bring together 35-40 North American equipment vendors and service providers addressing the needs of our aquaculture industry.

Currently 25 special sessions and workshops are being planned featuring a wide variety of topics including implications of ocean acidification, advances in land-based culture systems, farm modeling and site selection and alternative species development of various shellfish. The Call for Papers will be announced in mid-July. For more information on this event, please visit the conference web site at www.northeast-aquaculture.org or contact the NACE conference manager, Chris Davis, at cdavis@midcoast.com.

ICHA 2014 New Zealand

Kia ora koutou katoa (greetings to all) ISSHA members, colleagues and friends.

The International Harmful Algae science community are invited to the 16th International Conference on Harmful Algae (ICHA) to be held in the Convention Centre, Wellington City, New Zealand on 27–31 October 2014. The theme of the conference is “Advancement Through Shared Science” in recognition of the multidisciplinary nature of the field and the important role that international collaboration has played in the understanding of HAB phenomena and the mitigation of their effects.

We are planning an innovative, informative and enjoyable meeting where scientists can present their research, and interact with regulators and industry representatives, share ideas, form new collaborations and explore ways in which science can be applied to meet the challenges of the future. New Zealand has important cultural and economic relation-

ships with other nations in the South Pacific and we are planning sessions on cyanobacteria and ciguatera-related subjects of special importance to the Australasian/Oceania region. However there is considerable commonality in HA issues world-wide and we welcome contributions on any relevant topic from anywhere around the globe. We look forward to the opportunity to host the collective wisdom of the HA science community to help us achieve this.

Dr Lincoln MacKenzie
icha2014@confer.co.nz

16th Annual International Conference on Shellfish Restoration: Restoration in an Ever-Changing World

Please plan on joining shellfish restoration experts, resource managers, farmers, community groups, NGOs, and others in historic Charleston, South Carolina for the 16th Annual International Conference on Shellfish Restoration December 10-13, 2014 in Charleston SC.

This conference will focus on shellfish restoration activities from around the world, highlighting restoration successes, including best management practices and challenges, such as the current regulatory climate. The agenda will feature plenary speakers, contributed oral and poster presentations, panel sessions, and interactive workshops.

Plan to arrive in time for field trips and a welcoming reception on Wednesday, December 10. The formal program will be December 11, 12, and 13. You won't want to miss the popular evening activities on Friday, December 12 which include a delicious dinner, music, and dancing. There will be plenty of opportunities to network with colleagues and share ideas!

**The Call for Abstracts will be available in
June 2014 - www.scseagrant.org/icsr.**

Upcoming Events

NSA-PCS & PCSGA Conference & Tradeshow. Sept. 21-24, 2014. Vancouver, WA. For more information, visit <http://www.pcsga.org>.

16th Annual Conference on Harmful Algae. October 27-31, 2014, Wellington, New Zealand. Paper submission deadline: May 15, 2014. For more information, visit: www.icha2014nz.com.

Northeast Aquaculture Conference & Exposition. January

14-16, 2015 in Portland, Maine. For more information, visit: www.northeastaquaculture.org.

107th Annual Meeting of the National Shellfisheries Association. March 21–26, 2015, Monterey, CA USA.

If you would like to announce a meeting, conference, workshop, or publication that might be of interest to NSA members, please contact the *QNL* Editors, Joth Davis (jothpdavis@mail.com) or LeRoy Creswell (creswell@ufl.edu).

Linda Kallansrude, NSA Secretariat
14 Carter Lane
East Quogue, NY 11942 USA

Forwarding Service Requested

Officers, Committee Chairs & Staff of the National Shellfisheries Association

Dr. Christopher V. Davis
President
Pemaquid Oyster Company
P.O. Box 302
Waldoboro, ME 04572
Phone: (207) 832-6812 (voice & Fax)
Email: cdavis@midcoast.com

Dr. Karolyn Mueller Hansen
President-Elect, Webmaster
University of Dayton
300 College Park
Dayton, OH 45469
Phone: (937) 229-2141
Email: khansen1@u Dayton.edu

Steven M. Allen
Vice-President
Darling Marine Center
193 Clarks Cove Road
Walpole, ME 04573
Phone: (443) 994-5164
Email: stevenmallen@gmail.com

Dr. Lisa Milke
Secretary and Co-Chair, Endowment/Student
Awards Committee
NOAA
212 Rogers Avenue
Milford, CT 06460
Phone: (203) 882-6528
Email: lisa.milke@noaa.gov

Dr. John Scarpa
Treasurer
Harbor Branch Oceanographic Institute at FAU
5600 North US 1
Fort Pierce, FL 34946
Phone: (772) 242-2404
Email: jscarpa1@hboi.fau.edu

R. LeRoy Creswell
Chair, Past-Presidents', Elections & Awards
Committees, Co-Editor, *NSA QNL*
Florida Sea Grant Extension Program
2199 South Rock Road
Ft. Pierce, FL 34945
Phone: (772) 468-3922
Email: creswell@ufl.edu

Dr. Brett Dumbauld
Chair, Pacific Coast Section
Hatfield Marine Science Center
2030 SE Marine Science Dr.
Newport, OR 97365
Phone: (541) 867-0191
Email: Brett.Dumbauld@ars.usda.gov

Dr. Sandra E. Shumway
Editor, *JSR*; Conference Manager
University of Connecticut/Dept. of Marine Sciences
1080 Shennecossett Road
Groton, CT 06340
Phone: (860) 405-9282
Fax: (860) 405-9153
Email: sandra.shumway@uconn.edu

Dr. Nature McGinn
2012-2015 Member-at-Large and Co-Chair,
Endowment/Student Awards Committee
613 Pennsylvania Ave SE, Apt. 3
Washington, DC 20003
Email: naturemcginn@gmail.com

Leslie Sturmer Taiani
2013-2016 Member-at-Large
Chair, Resolutions Committee
University of Florida
12260 SW 167th Court
Cedar Key, FL 32625
Phone: (352) 543-5057
Email: LNST@ufl.edu

Julie Davis
2014-2017 Member-at-Large
PO Box 189
Beaufort, SC 29901
Phone: (843) 255-6060
Email: julie.davis@scseagrant.org

Dr. John Supan
Chair, Industry Committee
227C Sea Grant Bldg.
Louisiana State University
Baton Rouge, LA 70803-7507
Phone: (225) 578-6527
Email: jsupan@lsu.edu

Dr. Standish K. Allen
Co-Chair, Endowment/Student Awards Committee
Virginia Institute of Marine Science
P.O. Box 1346
Gloucester, VA 23063
Phone: (804) 684-7710
Email: ska@vims.edu

Dr. William C. Walton
Co-Chair, Membership Committee
Auburn University Shellfish Laboratory
150 Agassiz St.
Dauphin Island, AL 36528
Phone: (251) 861-3018
Email: billwalton@auburn.edu

Dr. John N. Kraeuter
Chair, Audit-Budget-Finance Committee
Co-Chair, Publications Committee
148 Kings Highway
Kennebunkport, ME 04046
Phone: (207) 967-3302
Email: kraeuter@hsrl.rutgers.edu

Dr. Susan E. Ford
Co-Chair, Publications Committee
Haskin Shellfish Research Laboratory
Port Norris, NJ 08349
Phone: (856) 785 0074 ext. 4305
Email: susan@hsrl.rutgers.edu

Maria Rosa
Co-Chair, Student Recruits
University of Connecticut
1080 Shennecossett Rd.
Groton, CT 06340
Phone: (646) 413-1848
Email: maria.rosa@uconn.edu

Hillary Lane
Co-Chair, Student Recruits
University of Maryland
Biology Building #144, Room 1210
College Park, MD 20742
Phone: (301) 405-9701
Email: hillyaryannelane@gmail.com

Dr. Jonathan P. Davis
Co-Editor, *NSA Quarterly Newsletter*
15425 Smoland Lane
Bainbridge Island, WA 98110
Phone: (360) 765-3566
Email: jothpdavis@mail.com

Linda Kallansrude, *Secretariat*
14 Carter Lane
East Quogue, NY 11942
Phone: (631) 653-6327
Email: lindajk@optonline.net