

# MATTHEW JOHN OLIVER

## Curriculum Vitae

School of Marine Science and Policy  
College of Earth Ocean and Environment  
University of Delaware  
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### PROFESSIONAL PREPARATION

- 2006 Ph.D., Oceanography, Institute of Marine and Coastal Sciences, Rutgers University, New Brunswick, NJ.
- 2001 M.S., Biology, Highest Honors, California Polytechnic State University, San Luis Obispo, CA.
- 1999 B.S., Ecology and Systematic Biology, Summa Cum Laude, California Polytechnic State University, San Luis Obispo, CA.
- 1996 A.A. Natural Sciences, Honors, Cerritos College Norwalk, CA.

### APPOINTMENTS

- 2017-present Dual appointment in Department of Geography and School of Marine Science & Policy
- 2015-present Patricia & Charles Robertson Associate Professor of Marine Science & Policy, University of Delaware
- 2014-2015 Associate Professor of Oceanography, University of Delaware
- 2008-2014 Assistant Professor of Oceanography, University of Delaware
- 2007 Post Doctoral Researcher, Funded by NASA ROSES Program, at Rutgers University.

### HONORS AND AWARDS

\*Honors at U.D.

- 2017\* Outstanding Doctoral Graduate Advising and Mentoring Award, University of Delaware
- 2017\* Student Nominated for University of Delaware Excellence in Teaching Award
- 2015\* Patricia & Charles Robertson Associate Professor of Marine Science & Policy
- 2013\* National Academy of Sciences Kavli Fellow
- 2012\* Alfred P. Sloan Research Fellow
- 2010\* Presidential Early Career Award for Scientists and Engineers (PECASE)
- 2009\* Student Nominated for University of Delaware Excellence in Teaching Award
- 2008\* NASA New Investigator Award
- 2000 John David Jackmen Memorial Award for Excellence in Biology, Cal Poly, SLO
- 1999 Outstanding Graduating Senior, Ecology and Systematic Biology, Cal Poly, SLO  
E. H. Lehman Memorial Natural History Award, Cal Poly, SLO  
Montgomery/Richards Marine Biology Scholarship, Cal Poly, SLO  
Green and Gold Foundation Scholarship, Cal Poly, SLO
- 1998 Kevin M. Wright Memorial Biological Scholarship, Cal Poly, SLO  
Green and Gold Foundation Scholarship, Cal Poly, SLO

1997 GTE Mobile Net Scholar Athlete of the Year, Cal Poly, SLO  
Burger King Scholar Athlete of the Year, Cal Poly, SLO  
1996 Academic Excellence, Cerritos College Foundation  
1995 Gold Falcon Service Award, Cerritos College

### **PROFESSIONAL MEMBERSHIPS**

American Geophysical Union  
American Fisheries Society

### **FUNDING HISTORY**

2017-2019 National Aeronautic and Space Administration (\$419,501): A Satellite-Based Mobile Warning System to Reduce Atlantic Sturgeon Interactions in Delaware Waters  
2016-2019 National Science Foundation (\$286,351)  
Polar (NSF 15-114): Using Polar Science Data to Evaluate Media Claims in the Undergraduate Classroom  
2016-2019 Bureau of Ocean and Energy Management (\$581,357)  
Occurrence of Commercially Important and Endangered Fishes in Delaware Wind Energy Areas using Acoustic Telemetry  
2016-2020 National Oceanic and Atmospheric Administration (\$461,654)  
MARACOOS: Preparing for a changing Mid-Atlantic  
2016 Unidel Foundation (\$946,500)  
Advancing Robotic Environmental Informatics Systems  
2015 Unidel Foundation (\$304,000)  
Equipment for Rapid Prototyping and Data Fusion Technology  
2014-2016 Lenfest Ocean Program (\$363,918)  
Developing actionable spatial models for Atlantic Sturgeon and Sand Tiger Sharks in the Mid-Atlantic  
2013-2016 National Science Foundation (\$1.825M, \$280,402 to MJO)  
Collaborative research: Impacts of Local Oceanographic Processes on Adélie Penguin  
2012 Robertson Fund (\$133,000: includes value of donated APEX float)  
APEX Float Deployment in the Southern Ocean  
2012-2013 Alfred P. Sloan Research Fellow (\$50,000)  
2011-2015 National Oceanic and Atmospheric Administration (\$500,000; cut to \$388,192)  
The Middle Atlantic Regional Association Coastal Ocean Observing System  
2011 Robertson Fund (\$510,000)  
Biotelemetry AUV Technology Development  
2010-2012 National Oceanic and Atmospheric Administration (\$40,500)  
Cooperative study addressing butterfish and Loligo squid interactions in the commercial directed fishery  
2010 National Oceanic and Atmospheric Administration (\$45,000)  
Phased Deployment and Operation of the Mid-Atlantic Regional Coastal Ocean Observing System, 1-Year Extension (MARCOOS).  
2010 Otis Smith Global Visualization Endowment (\$100,000, with accruing interest)

2010-2012 National Oceanic and Atmospheric Administration (\$160,280)  
Sturgeons in the Mid-Atlantic Region: A Collaborative Research Approach.

2009-2012 National Aeronautic and Space Administration (\$747,860)  
Satellite Driven Studies of Climate Mediated Changes in Antarctic Food Webs

2012-2014 National Aeronautic and Space Administration PECASE (\$200,000)  
Augmentation of Satellite Driven Studies of Climate Mediated Changes in Antarctic Food Webs Award

2009-2012 Partner University Fund (\$158,000; \$0 to MJO, funded through cost sharing)  
The Carbon Cycle in Two Coastal Communities

2009-2010 Delaware Sea Grant Program (\$9,999)  
Developing an Autonomous Underwater Vehicle (AUV) Technology in the Delaware Coastal Ocean

2009 University of Delaware Research Foundation (\$3,500)  
Research Experience for Undergraduates

2008-2011 Office of Naval Research (\$45,000)  
Dynamic Modeling of Marine Bioluminescence and Night Time Leaving Radiance

2009-2012 Delaware Sea Grant Program (\$140,000; \$8,203 to MJO)  
The Remote Sensing Component for the DE Coastal Ocean Observing System: A Gap to be Filled

2009-2012 Delaware Sea Grant Program (\$64,329; \$33,040 to MJO)  
Chemical and Biological Sensors for the In Situ Determination of Biogeochemical Processes

2008 University of Delaware Research Foundation (\$25,000)  
Mapping the Quantum Yield of Photosynthesis in a Complex Coastal Ocean.

2008-2011 National Aeronautic and Space Administration, NIP (\$310,755)  
3-D Mapping of Ocean Water Masses and Biomes

2008 National Aeronautic and Space Administration, Delaware Space Grant (29,999)  
Satellite-derived Salinity Maps of Delaware Bay and the Surrounding Coastal Ocean

2008-2010 National Oceanic and Atmospheric Administration (\$32,570)  
Developing Ecological Indicators for Spatial Fisheries Management using Ocean Observatory Defined Habitat Characteristics in the Mid-Atlantic Bight

2007-2009 National Oceanic and Atmospheric Administration (\$119,549)  
Phased Deployment and Operation of the Mid-Atlantic Regional Coastal Ocean Observing System (MARCOOS)

2006-2009 National Aeronautic and Space Administration (\$491,000\*, \$53,723 to MJO)  
Bioinformatic Mapping of Ocean Biogeochemical Provinces  
\*Awarded as a Post-Doc Rutgers University and transferred to UD

## PUBICATIONS

\*Advised Student Author

### Peer-Reviewed

#### 2017

1. Lee\*, J. F., Friedlaender, A. S., Oliver, M. J., DeLiberty, T. 2017. Behavior of satellite-tracked Antarctic minke whales (*Balaenoptera bonaerensis*) in relation to environmental factors around the western Antarctic Peninsula, *Animal Biotelemetry*, [doi.org/10.1186/s40317-017-0138-7](https://doi.org/10.1186/s40317-017-0138-7)
2. Breece\*, M., Fox, D., Haulsee\*, D., Wirgin, I., Oliver, M. 2017. Satellite Driven Distribution Models of Endangered Atlantic Sturgeon Occurrence in the Mid-Atlantic Bight. *ICES Journal of Marine Science*, <https://doi.org/10.1093/icesjms/fsx187>
3. Mannocci, L., Boustany, A. M., Roberts, J. J., Dunn, D. C., Halpin, P. N., Viehman, S., Moxley, J., Cleary, J., Bailey, H., Bograd, S., Becker, E., Gardner, B., Hartog, J., Hazen, E., Ferguson, M., Forney, K., Kinlan, B., Oliver, M. J., Palacios, D., Peretti, C., Ridoux, V., Teo, S., Winship A. 2017. Modeling marine predator distributions: a question of time? *Diversity and Distributions*, *Diversity and Distributions*, 23, 1098-1109, [doi.org/10.1111/ddi.12609](https://doi.org/10.1111/ddi.12609)
4. Oliver, M. J., Breece\*, M. W., Haulsee\*, D. E., Cimino\*, M. A., Kohut, J., Aragon, D., Fox, D. A. 2017. Factors affecting detection efficiency of mobile telemetry Slocum gliders. *Animal Biotelemetry*, [doi.org/10.1186/s40317-017-0129-8](https://doi.org/10.1186/s40317-017-0129-8)
5. Bernard, K., Cimino\*, M., Fraser, W., Kohut, J., Oliver, M., Patterson-Fraser, D., Schofield, O., Statscewich, H., Steinberg, D., Winsor P. 2017. Factors that affect the nearshore aggregations of Antarctic krill in a biological hotspot, *Deep Sea Research*, 126, 139-147, [doi.org/10.1016/j.dsr.2017.05.008](https://doi.org/10.1016/j.dsr.2017.05.008)
6. Carvalho, F., Kohut, J., Oliver, M. J., Schofield, O. 2017. Defining the ecologically relevant mixed-layer depth for Antarctica's coastal seas. *Geophysical Research Letters*, 44, 338–345, doi: 10.1002/2016GL071205.

#### 2016

7. Haulsee\*, D. E., Fox, D. A., Breece\*, M. W., Brown, L. M., Kneebone, J., Skomal, G. B., Oliver, M. J. 2016. Social network analysis reveals potential fission-fusion behavior in a Shark. *Scientific Reports*, 6, Article 34087. Doi:10.1038/srep34087
8. Cimino\*, M. A., Lynch, H., J., Saba, V. S., Oliver, M. J. 2016. Projected asymmetric response of Adélie penguins to Antarctic climate change. *Scientific Reports*, 6, Article number: 28785. doi:10.1038/srep28785
9. Carvalho, F., Kohut, J., Oliver, M. J., Sherrell, R., Schofield, O. 2016. Mixing and phytoplankton dynamics in a submarine canyon in the West Antarctic Peninsula. *Journal of Geophysical Research, Oceans*, 121, doi:10.1002/2016JC011650.
10. Kavanaugh, M., Oliver, M. J., Chavez, F., Letelier, R., Muller-Karger, F., Doney, S. 2016. Quo Vadimus: Seascapes as a new vernacular for ocean monitoring, management and conservation. *ICES Journal of Marine Science: Journal du Conseil*, 73(7) 1839-1850.
11. Scales, K. L., Hazen, E. L., Jacox, M. G., Edwards, C. A., Boustany, A. M., Oliver, M. J., Bograd, S. J. 2016. Scales of inference: on the sensitivity of habitat models for wide-ranging marine predators to the resolution of environmental data. *Ecography*. DOI: 10.1111/ecog.02272

12. Haulsee\*, D. E., Fox, D. A., Breece, M., Clauss, T., Oliver, M. J., 2016. Implantation and recovery of long-term archival transceivers in a migratory shark with high site fidelity. PLoS One. doi:10.1371/journal.pone.0148617
13. Breece\*, M. W., Fox, D. A., Dunton, K. J., Frisk, M. G., Jordaan, A., Oliver, M. J. 2016. Predicting the marine occurrence of an endangered species through satellite derived seascapes. *Methods in Ecology and Evolution*. doi:10.1111/2041-210X.12532
14. Cimino\*, M. A., Moline, M. A., Fraser, W. R., Patterson-Fraser, D. L., Oliver, M. J. 2016. Climate-driven sympatry may not lead to foraging competition between congeneric predators. *Scientific Reports*, 6, Article number: 18820. doi:10.1038/srep18820

## 2015

15. Sha, J., Young-Heon, J., Oliver, M. J., Kohut, J. T., Shatley, M., Liu, W. T., Yan, X. H. 2015. A case study of large phytoplankton blooms off the New Jersey coast with multi-sensor observations. *Continental Shelf Research*. doi:10.1016/j.csr.2015.07.006.
16. Haulsee\*, D. E., Breece\*, M. W., Miller, D. C., Wetherbee, B. M., Fox, D. A., Oliver, M. J. 2015. Habitat selection of a coastal shark species estimated from an autonomous underwater vehicle. *Marine Ecology Progress Series*. 528:277-288 doi: 10.3354/meps11259

## 2014

17. Kohut, J., Bernard, K., Fraser, W., Oliver, M. J., Statscewich, H., Winsor, P., Miles, T. Studying the Impacts of Local Oceanographic Processes on Adélie Penguin Foraging Ecology. 2014. *Marine Technology Society Journal*. doi: dx.doi.org/10.4031/MTSJ.48.5.10
18. Severin T., Conan P., Durrieu de Madron X., Houpert L, Oliver M. J., Oriol L., Caparros J., Ghigliione J. F., Pujo-Pay M. 2014. Impact of open-ocean convection on nutrients, phytoplankton biomass and activity. *Deep-Sea Research I*. doi: 10.1016/j.dsr.2014.07.015
19. Cimino\*, M. A., Fraser, W. R., Patterson-Fraser, D. L., Saba, V. S., Oliver, M. J. 2014. Large-scale climate and local weather drive interannual variability in Adélie Penguin chick fledging mass. *Marine Ecology Progress Series*. doi: 10.3354/meps10928.  
Featured: *ESA Dispatches. Frontiers in Ecology and Environment* 12: 540-544
20. Salter, I., Galand, P. E., Fagervold, S. K., Lebraon P., Obernosterer I., Oliver, M. J., Suzuki M. T. Tricoire, C. 2014. Seasonal dynamics of active SAR11 ecotypes in the oligotrophic Northwest Mediterranean Sea. *The ISME Journal*. doi:10.1038/ismej.2014.129.

## 2013

21. Voynova\*, Y. G., Oliver, M. J., Sharp, J. H. 2013. Wind to Zooplankton: Ecosystem-wide Influence of Seasonal Wind-Driven Upwelling in and around the Delaware Bay. *Journal of Geophysical Research*. doi: 10.1002/2013JC008793
22. Breece\*, M. W., Oliver, M. J., Cimino\*, M. A., Fox, D. A. 2013. Shifting Distributions of Adult Atlantic Sturgeon Amidst Post-Industrialization and Future Impacts in the Delaware River: a Maximum Entropy Approach. *PLoS One*, doi: 10.1371/journal.pone.0081321
23. Moline, M. A., Oliver, M. J., Zaneveld, R. Orrico, C. and Shulman, I. 2013. "Bioluminescence in the Sea." *Subsea Optics and Imaging*. Eds. J. Watson, and O. Zielinski. Woodhead Publishing Series in Electronic and Optical Materials. 2013. 124-170.

24. Oliver, M. J., Irwin, A. J., Moline, M. A., Fraser, W., Patterson, D., Schofield, O., Kohut, J. 2013. Adélie Penguin Foraging Location Predicted by Tidal Regime Switching. PLoS One, doi: 10.1371/journal.pone.0055163.
25. Oliver, M. J., Breece\*, M. W., Fox, D. A., Haulsee\*, D., Kohut, J. T., Manderson, J., Savoy, T. 2013. Shrinking the Haystack: Using an AUV in an Integrated Ocean Observatory to Map Atlantic Sturgeon in the Coastal Ocean. Fisheries, doi:10.1080/03632415.2013.782861
26. Schofield, O., Moline, M. A., Cahill, B., Frazer, T., Kahl, A., Oliver, M., Reinfelder, J., Glenn, S., Chant, R. 2013. Phytoplankton Productivity in a Turbid Buoyant Coastal Plume. Continental Shelf Research. doi:10.1016/j.csr.2013.02.005
27. Cimino\*, M. A., Fraser, W. R., Irwin A. J. Oliver, M. J. 2013. Satellite Data Identify Decadal Trends in the Quality of Pygoscelis Penguin Chick-Rearing Habitat. Global Change Biology, doi:10.1111/gcb.12016.

## 2012

28. Oliver, M. J., Moline, M. A., Robbins, I., Fraser, W., Patterson, D., Schofield, O. 2012. Letting Penguins Lead: Dynamic Modeling of Penguin Locations Guide Autonomous Robotic Sampling, Oceanography, <http://dx.doi.org/10.5670/oceanog.2012.84>.
29. Palamara, L., Manderson, J., Kohut, J., Oliver, M. J., Gray, S., Goff, J. 2012. Improving Habitat Models by Incorporating Pelagic Measurements from Coastal Ocean Observatories, Marine Ecology Progress Series, doi:10.3354/meps09496.
30. Shulman, I., Penta, B., Moline, M., Haddock S., Anderson, S., Oliver, M., Sakalaukus, P. 2012. Can Vertical Migrations of Dinoflagellates Explain Observed Bioluminescence Patterns During an Upwelling Event in Monterey Bay, CA? Journal of Geophysical Research, doi:10.1029/2011JC007480.

## 2011

31. Manderson, J., Palamara, L., Kohut, J., Oliver, M. J. 2011. Ocean Observatory Data are Useful for Regional Habitat Modeling of Species with Different Vertical Habitat Preferences, Marine Ecology Progress Series, Vol 438, 1-17, doi:10.3354/meps09308. FEATURED ARTICLE
32. Geiger\*, E. F., Grossi\*, M. D., Trembanis, A. C., Kohut, J. T., Oliver, M. J. 2011. Satellite-Derived Coastal Ocean and Estuarine Salinity in the Mid-Atlantic, Continental Shelf Research, doi:10.1016/j.csr.2011.12.001
33. Schofield, O., Glenn, S. M., Moline, M. A., Oliver, M., Irwin, A., Chao, Y., Arrot., M. 2011. Ocean Observatories and Information: Building a Global Ocean Observing Network. In: Encyclopedia of Sustainability Science and Technology, Springer.
34. Shulman, I., Moline, M. A., Penta, B., Anderson, S., Oliver, M., Haddock S. H. D. 2011. Observed and Modeled Bio-Optical, Bioluminescent and Physical Properties During a Coastal Upwelling Event in Monterey Bay, CA. Journal of Geophysical Research, doi:10.1029/2010JC006525.

## 2010

35. Schofield, O., Kohut, J. Glenn, S., Morell, J., Capella, J., Corredor, J., Orcutt, J. Arrott, M., Krueger, I., Meisinger, M., Peach, C., Vernon, F., Chave, A., Chao, Y., Chien, S., Thompson, D., Brown, W., Oliver, M., Boicourt, W. 2010. A Regional Slocum Glider Network in the Mid-Atlantic Bight Leverages Broad Community Engagement. Marine Technology Society Journal, doi: 10.4031/MTSJ.44.6.20.
36. Oliver, M. J., Schofield, O., Bidle, K., 2010. Density Dependent Expression of a Diatom Retrotransposon. Marine Genomics, doi: DOI: 10.1016/j.margen.2010.08.006.

37. Schofield, O., Glenn, S., Orcutt, J., Arrott, M., Messinger, M., Gangopadhyay, A., Brown, W., Signell, R., Moline, M., Chao, Y., Chien, S., Thompson, D., Balasuriya, A., Lermusiaux, P., Oliver, M., 2010. Automated Sensor Networks to Advance Ocean Science. *EOS*, 91(39).
38. Gómez-Pereira, P. R., Fuchs, B. M., Alonso, C., Oliver, M. J., Beusekom, J. E. E., Amann, R., 2010. Distinct Flavobacterial Communities in Contrasting Water Masses of the North Atlantic Ocean. *The ISME Journal*, doi:10.1038/ismej.2009.142

## 2009

39. Irwin, A. J., Oliver, M. J., 2009. Are Ocean Deserts Getting Larger? *Geophysical Research Letters*, Vol. 36, L18706, doi:10.1029/2009GL039414

## 2008

40. Oliver, M. J., Irwin, A. J. 2008. Objective Global Ocean Biogeographic Provinces. *Geophysical Research Letters*, Vol. 35, L15601, doi:10.1029/2008GL034238.  
EDITOR'S HIGHLIGHT
41. Falkowski, P. G., Oliver, M. J. 2008. Correspondence: Diatoms in a Future Ocean – Stirring it up: Reply From Falkowski and Oliver. *Nature Reviews Microbiology* doi:10.1038/nrmicro1751-c2.
42. Schofield, O., Bosch, J., Glenn, S. M., Kirkpatrick, G., Kerfoot, J., Lohrenz, S., Moline, M., Oliver, M., Bissett, P. 2008. Bio-Optics in Integrated Ocean Observing Networks: Potential for Studying Harmful Algal Blooms. In *Real Time Coastal Observing systems for ecosystems dynamics and harmful algal blooms*. Babin, M. And Cullen, J. J. (Eds) UNESCO, Paris. 85-108.
43. Connolly, J., Knight, C., Oliver, M., Tomanek, L., Beaulieu, J., Moline, M. 2008. Correlated Evolution of Cell Volume and Genome Size in Diatoms (Bacillariophyceae). *Journal of Phycology*, 44, 124-131.

## 2007

44. Falkowski, P. G., Oliver, M. J. 2007. Mix and Match: How Climate Selects Phytoplankton. *Nature Reviews Microbiology* 5:813-819.
45. Moline, M. A., Oliver, M. J., Mobley, C. D., Sundman, L., Bensky, T., Bergmann, T., Bissett, W. P., Case, J., Raymond, E. H., Schofield, O. M. E. 2007. Bioluminescence in a Complex Coastal Environment I: Temporal Dynamics of Night-time Water-leaving Radiance. *Journal of Geophysical Research*. 112, C11016, doi:10.1029/2007JC004138
46. Oliver, M. J., Moline, M. A., Mobley, C. D., Sundman, Schofield, O. M. E. 2007. Bioluminescence in a Complex Coastal Environment II: Prediction of Bioluminescent Source Depth from Spectral Water Leaving Radiance. *Journal of Geophysical Research*. 112, C11017, doi:10.1029/2007JC004136
47. Oliver, M. J., Petrov, D., Ackerly, D., Schofield, O. M. Falkowski, P.G. 2007. The Mode and Tempo of Genome Size Evolution in Eukaryotes. *Genome Research* 10.1101/gr.6096207

## 2006

48. Schofield, O., Kerfoot, J., Mahoney, K., Moline, M., Oliver, M., Lohrenz, S., Kirkpatrick, G. Vertical Migration of the Toxic dinoflagellate *Karenia brevis* and its Impact on Ocean Optics. 2006. *Journal of Geophysical Research*. 111, C06009, doi:10.1029/2005JC003115.

## 2004

49. Glenn, S., Arnone, R., Bergmann, T., Bissett, W. P., Crowley, M., Cullen, J., Gryzmski, J., Haidvogel, D., Kohut, J., Moline, M., Oliver, M., Orrico, C., Sherrell, R., Song, S., Weidemann, A., Chant, R., Schofield, O. 2004. Biogeochemical Impact of Summertime Upwelling on the New Jersey Shelf. *Journal of Geophysical Research* 109, C12S02, doi:10.1029/2003JC002265.
50. Schofield, O., Bergmann, T., Oliver, M. J., Irwin, A., Kirkpatrick, G., Bissett, W. P., Moline, M. A., Orrico, C. 2004. Inversion of Spectral Absorption in the Optically Complex Coastal Waters of the Mid-Atlantic Bight. *Journal of Geophysical Research* 109, C12S04, doi:10.1029/2003JC002071.
51. Glenn, S., Schofield, O., Dickey, T., Chant, R., Kohut, J., Barrier, H., Bosch, J., Bowers, L., Creed, E., Haldeman, C., Hunter, E., Kerfoot, J., Mudgal, C., Oliver, M., Roarty, H., Romana, E., Crowley, M., Barrick D., and Jones C. 2004. The Expanding Role of Ocean Color and Optics in the Changing Field of Operational Oceanography. *Oceanography* 17(2): 86-95.
52. Schofield, O., Arnone, R., Bissett, W. P., Dickey, T., Davis, Curt, Finkel, Z., Oliver, M. J., Moline, M. A. 2004. Watercolors in the Coastal Zone: What can we see? *Oceanography* 17(2): 30-37.
53. Moline, M. A., Blackwell, S., Chant, R., Oliver, M. J., Bergmann, T., Glenn, S., Schofield, O. Episodic Physical Forcing and the Structure of Phytoplankton Communities in the Coastal Waters of New Jersey. 2004. *Journal of Geophysical Research* 110, C12S05, doi:10.1029/2003JC001985.
54. Oliver, M. J., Schofield, O., Bergmann, T., Glenn, S. M., Orrico, C., Moline, M. A. Deriving In Situ Phytoplankton Absorption for Bio-optical Productivity Models in Turbid Waters. 2004. *Journal of Geophysical Research* 109, C07S11, doi:10.1029/2002JC001627.
55. Oliver, M. J., Glenn, S. M., Kohut, J. T., Irwin, A. J., Schofield, O., Moline, M. A., Bissett, W. P. Bioinformatic Approaches for Objective Detection of Water Masses on Continental Shelves. 2004. *Journal of Geophysical Research* 109, C07S04, doi:10.1029/2003JC002072.
56. Moline, M.A., Arnone, R., Bergmann, T., Glenn, S., Oliver, M. J., Orrico, C., Schofield, O., Tozzi, S. 2004. Variability in Spectral Backscatter Estimated From Satellites and its Relation to In Situ Measurements in Optically Complex Coastal Waters. *Journal of International Remote Sensing*. 24:1-4.

## 2003

57. Kirkpatrick, G. J., Orrico, C., Moline, M. A., Oliver, M. J., Schofield, O. 2003. Continuous Hyperspectral Absorption Measurements of Colored Dissolved Organic Material in Aquatic Systems. *Applied Optics* 42(33): 6564-6568.

## Contributed Presentations at Conferences and Workshops

\*Advised Graduate Students

\*\*Advised Undergraduate Student

## 2017

1. Oliver, M. J., M. W. Breece\*, D. E. Haulsee\*, M. A. Cimino\*, J. Kohut, D. Aragon, D. A. Fox (2017) Factors affecting detection efficiency of mobile telemetry Slocum gliders. Mid-Atlantic American Fisheries Society Meeting, St. Jones National Estuarine Research Reserve, Delaware



2. Haulsee, D., M. Breece, D. Fox, M. Oliver, (2017) Seasonal Occurrence of Atlantic Sturgeon and Winter Skate in the Delaware Wind Energy Area. American Fisheries Society Meeting, St. Jones National Estuarine Research Reserve, Delaware
3. Goodrich\*, C., M. J. Oliver, J. T. Kohut, M. A. Cimino, P. Winsor, H. Statscewich, T. N. Miles, L. Nazzaro, P. Winsor, H. Statscewich, E. Fredj, K. Bernard, D. Patterson-Fraser, W. Fraser (2017) Project CONVERGE: Krill distribution in Palmer Deep Canyon on the West Antarctic Peninsula. Mid-Atlantic American Fisheries Society Meeting, St. Jones National Estuarine Research Reserve, Delaware
4. Goodrich\*, C., M. J. Oliver, J. T. Kohut, M. A. Cimino, P. Winsor, H. Statscewich, T. N. Miles, L. Nazzaro, P. Winsor, H. Statscewich, E. Fredj, K. Bernard, D. Patterson-Fraser, W. Fraser (2017) Project CONVERGE: Krill distribution in Palmer Deep Canyon on the West Antarctic Peninsula. XII SCAR Biology Symposium, Leuven, Belgium.
5. Oliver, M. J., M. A. Cimino, W. Fraser (2017) Projected climate induced changes to Adélie penguin populations. XII SCAR Biology Symposium, Leuven, Belgium.
6. Kohut, J., Bernard, K., Fraser, W., Oliver, M., Winsor, P., Statscewich, H., Cimino, M., Patterson-Fraser, D., Miles, T., Carvalho, F. 2017. Project CONVERGE: Impacts of local oceanographic processes on Adélie penguin foraging ecology. Developing the West Antarctic Peninsula International Network within SOOS. SOOS WAP Working Group Meeting. Cambridge, UK.
7. Oliver, M. J., D. Haulsee, M. Breece, D. Fox, J. Kohut. 2017. (2017) Integrating Coastal Ocean Observatories and Fishery-Independent Biotelemetry. Multi-Scale Coastal Ocean Dynamics and Exchange Processes, University of New England, Biddeford, ME.
8. Oliver, M., J. Kohut, M. Moline, L. Nazzaro, T. Miles, K. Bernard, W. Fraser, D. Patterson-Fraser, A. Irwin, M. Cimino, P. Winsor, H. Statscewich, E. Fredj, (2017) Adélie Penguin Foraging Location Predicted by Tidal Regime Switching. NSF Mobility Workshop, The Ohio State University, Columbus, OH.
9. Oliver, M. J., J. Kohut, Bernard, K., Fraser, W., Winsor, P., Statscewich, H., Cimino, M., Patterson-Fraser, D., Miles, T., Carvalho, F. (2017) Project CONVERGE: Estimated physical and biological decorrelation time and space scales from coordinated AUV observations in coastal Antarctica. Polar Marine Science Gordon Conference, Ventura, CA.
10. Oliver, M. J., Breece\*, M., Fox, D., Bograd, S., Hazen, E., Hale, E. (2017) A Satellite-Based Mobile Warning System to Reduce Atlantic Sturgeon Interactions in Delaware waters. NASA Ecosystem Forecasting Team Meeting, Washington D. C.
11. Oliver, M. J., D. Haulsee\*, M. W. Breece\*, M. Cimino\*, J. Kohut, D. Aragon, C. Haldeman, D. Fox. (2017) Acoustic Biotelemetry from Slocum Gliders. IOOC Glider Workshop Planning Meeting, Infinity Science Center, Pearlinton, MS.

## 2016

12. Haulsee\*, D. E., D. A. Fox, M. W. Breece\*, LM Brown, B. M. Wetherbee, T. M. Clauss, M. J. Oliver. (2016) Habitat Selection and Social Networks of Sand Tigers. Regional Aquatics Workshop, New Orleans, LA. Invited Oral Presentation. Best of RAW Award.
13. Breece\*, M. W., D. A. Fox, D.E. Haulsee\*, B. M. Wetherbee, and M. J. Oliver. 2016. Near-Realtime Estimates of Atlantic Sturgeon and Sand Tiger Occurrence to Facilitate

- Avoidance Measures. Mid-Atlantic Chapter of the American Fisheries Society Annual Meeting. Bordentown, N.J.
14. Breece\*, M. W., D. A. Fox, M. K. J. Dunton, M. G. Frisk, A. Jordaan, M. J. Oliver (2016) Dynamic Seascapes Predict the Marine Occurrence of an Endangered Species: Atlantic Sturgeon *Acipenser oxyrinchus oxyrinchus*. Atlantic and Shortnose Sturgeon 2016 Workshop, National Conservation Training Center in Shepherdstown, WV.
  15. Oliver, M. J., A. R. Davies (2016) Sub-seasonal processes controlling the natural phytoplankton abundance in the Southern Ocean. Rutgers Research Symposium, New Brunswick, NJ.
  16. Haulsee\*, D., D. A. Fox, M. Breece\*, B. Wetherbee, L. Brown, J. Kneebone, G. Skomal, M. J. Oliver (2016) Internal Acoustic Transceivers Reveal the Annual Social Network Patterns in a Coastal Top Predator. Ocean Sciences Meeting, New Orleans, LA.
  17. Hunter-Thomson, K. I., J. T. Kohut, K. Forio, J. D. McDonnell, C. Ferraro, H. Clark, K. Gardner, M. J. Oliver (2016) Tides, Krill, Penguins, Oh My!: Scientists and Teachers Partner in Project CONVERGE to Bring Collaborative Antarctic Research, Authentic Data, and Scientific Inquiry into the Hands of NJ and NY Students. Ocean Sciences Meeting, New Orleans, LA.
  18. Shulman, I., B. Penta, M. A. Moline, S. Anderson, M. Messie, P. Sakalaukus, M. J. Oliver (2016) Impact of physical-biological interactions on spatio-temporal distribution of bioluminescence potential. Ocean Sciences Meeting, New Orleans, LA.
  19. Carvalho, F., J. T. Kohut, O. Schofield, M. J. Oliver (2016) Deciphering the Temporal and Spatial Complexity in Submarine Canyons in Antarctica: the Role of Mixed Layer Depth in Regulating Primary Production Ocean Sciences Meeting, New Orleans, LA.
  20. Oliver, M. J., D. Haulsee\*, M. Breece\*, J. T. Kohut, D. A. Fox, B. Wetherbee (2016) Acoustic biotelemetry from Slocum Gliders. Ocean Sciences Meeting, New Orleans, LA.
  21. Statscewich, H., J. T. Kohut, P. Winsor, M. J. Oliver, K. S. Bernhard, M. A. Cimino\*, W. Fraser. (2016) Initial Results From the Mapping of Surface Currents in Palmer Deep. Ocean Sciences Meeting, New Orleans, LA.
  22. Cimino\*, M. A., M. A. Moline, W. Fraser, D. Patterson-Fraser, M. J. Oliver (2016) Climate-driven Sympatry does not Lead to Foraging Competition Between Adélie and Gentoo Penguins. Ocean Sciences Meeting, New Orleans, LA.
  23. Kohut, J. T., K. S. Bernard, W. Fraser, M. J. Oliver, H. Statscewich, D. Patterson-Fraser, P. Winsor, M. A. Cimino\*, T. N. Miles (2016) Project CONVERGE: Impacts of local oceanographic processes on Adélie penguin foraging ecology. Ocean Sciences Meeting, New Orleans, LA.
  24. Breece\*, M., D. A. Fox, K. J. Dunton, M. G. Frisk, A. Jordaan, M. J. Oliver (2016) Dynamic Seascapes Predict the Marine Occurrence of an Endangered Species. Ocean Sciences Meeting, New Orleans, LA.
  25. Oliver, M. J., J. T. Kohut, M. A. Cimino\*, P. Winsor, H. Statscewich, T. N. Miles, K. Todoroff (2016) Project CONVERGE: Estimated physical and biological decorrelation time and space scales from coordinated AUV observations in coastal Antarctica. Ocean Sciences Meeting, New Orleans, LA.
  26. Bernard, K. S., M. A. Cimino\*, W. Fraser, J. T. Kohut, M. J. Oliver, D. Patterson-Fraser, D. Paxton, S. Raycroft, H. Statscewich, D. K. Steinberg, P. Winsor (2016) Antarctic Krill Cohort Determines Dominant Aggregation Structure. Ocean Sciences Meeting, New Orleans, LA.

## 2015

27. Breece\*, M. W., D. A. Fox, M. J. Oliver. (2015) Satellite Derived Seascapes Predict Occurrence of an Endangered Species in the Coastal Ocean NASA Biodiversity and Ecological Forecasting Team Meeting, MD
28. Oliver M, M. Cimino\*, A. Irwin, W. Fraser, J. Kohut, O. Schofield, M. Moline (2015) Satellite Driven Studies of Climate-Mediated Changes in Antarctic Food Webs. NASA Biodiversity and Ecological Forecasting Team Meeting, MD.
29. Haulsee\*, D. E., D. A. Fox, M. W. Breece\*, B. M. Wetherbee, L. M. Brown, J. Kneebone, G. Skomal, M. J. Oliver (2015) Internal Acoustic Transceivers Reveal the Annual Social Network Patterns in a Coastal Top Predator; A Tale of Two Sharks. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society. Cape May, NJ.
30. Breece\*, M, W, D. A. Fox, K. J. Dunton, M. G. Frisk, A. Jordaan, M. J. Oliver (2015) Dynamic Seascapes Predict the Marine Occurrence of an Endangered Species: Atlantic Sturgeon *Acipenser oxyrinchus oxyrinchus* Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society. Cape May, NJ.
31. Oliver, M. J., J. Kohut, D. A. Fox, H. Moustafid, F. Whorisky, D. Wilson (2015) The Benefits and Challenges of Integrating Animal Telemetry into Ocean Observatories Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society. Cape May, NJ.
32. Oliver, M. J., M. Shatley, T. Daley, M. Crowley (2015) Comparison of the MARACOOS AVHRR Sea Surface Temperature product to NDBC sites. Mid-Atlantic Bight Physical Oceanography and Meteorology Conference. Cape May, NJ.

## 2014

33. Oliver, M. J., D. A. Fox, J. Kohut, J. Manedron, A. Irwin (2014) A Satellite Driven Dynamic Biome Product to Assist in Fisheries Management and Marine Spatial Planning. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society. Lewes, Delaware.
34. Breece\*, M. W., D. A. Fox, K. Dunton, M. Oliver (2014) Identifying Marine Habitat Preferences for Atlantic Sturgeon Using Auvs, Satellites, and Telemetry. 144th National American Fisheries Society. Quebec City, Canada.
35. Breece, M. W., D. A. Fox, K. Dunton, M. Oliver (2014) Identifying Marine Habitat Preferences for Atlantic Sturgeon Using Auvs, Satellites, and Telemetry. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society. Lewes, Delaware.
36. Haulsee\*, D. E., M. W. Breece, L. M. Brown, B. M. Wetherbee, D. A. Fox, M. J. Oliver. (2014) Social Sharks: Long-term Internal Acoustic Transceivers Reveal Species Associations and Large-scale Movements of a Coastal Apex Predator. 144th National American Fisheries Society. Quebec City, Canada
37. Haulsee\*, D. E., M. W. Breece, L. M. Brown, B. M. Wetherbee, D. A. Fox, M. J. Oliver. (2014) Social Sharks: Long-term Internal Acoustic Transceivers Reveal Species Associations and Large-scale Movements of a Coastal Apex Predator. Annual Meeting of the Mid-Atlantic Chapter of the American Fisheries Society. Lewes, Delaware.
38. Bernard K, Paxton D, Cimino\* M, Oliver M, Fraser W, Steinberg D. Tidal variability in nearshore Antarctic krill distribution patterns in an Adélie penguin foraging hotspot.

- Oral presentation. 33<sup>rd</sup> Scientific Committee for Antarctic Research (SCAR) Open Science Conference. Auckland, New Zealand. 25-28 August 2014.
39. Oliver, M. J., Breece, M. W., Fox, D., Kohut, J., Manderson, J. (2014) Integration of Satellite, Glider and Biotelemetry Observations to Protect Endangered Species in the Coastal Ocean. Remote Sensing for Conservation: Uses, Prospects and Challenges, Zoological Society of London, Regents Park, London, UK.
  40. Oliver, M. J., M. A. Cimino\*, A. Irwin, W. Fraser, J. Kohut, O. Schofield, M. Moline, Donna Patterson-Fraser, Vince Saba. (2014) Satellite Driven Studies of Climate-mediated Changes in Antarctic Food Webs. NASA Biodiversity and Ecological Forecasting Team Meeting, Silver Spring, MD.
  41. Breece\*, M. W., Haulsee\*, D. E., Fox, D. A., Oliver, M. J. (2014) Integration of Satellite, glider and biotelemetry observations to protect endangered. NASA Biodiversity and Ecological Forecasting Team Meeting, Silver Spring, MD
  42. Cimino\*, M. A., Fraser, W. R., Saba, V. S., Oliver, M. J. (2014) Large-Scale and Local Climate Drive Adélie Penguin Chick Fledging Mass. Ocean Sciences Meeting, Honolulu, HI.
  43. Haulsee\*, D. E., Fox, D. A., Wetherbee, B. M., Breece\*, M. W., Oliver, M. J. (2014) Utilizing an Autonomous Underwater Vehicle with Integrated Acoustic Telemetry Assets to Understand Sand Tiger Shark Habitat Selectivity. Ocean Sciences Meeting, Honolulu, HI.
  44. Breece\*, M. W., Oliver, M. J., Dunton, K. J., Fox, D. A. (2014) Using Satellites and AUVS in and Integrated Ocean Observatory to Identify Atlantic Sturgeon Habitat. Ocean Sciences Meeting, Honolulu, HI.
  45. Oliver, M. J., Irwin, A., Moline, M. A., Fraser, W., Patterson, D. (2014) Adélie Penguin Foraging Location Predicted by Tidal Regime Switching in a Changing Climate. Ocean Sciences Meeting, Honolulu, HI.

### 2013

46. Davies\*, A., F. Veron, M. Oliver. (2013) Atmosphere-Ocean CO<sub>2</sub> Exchange and Carbon Sequestration. SOLAS Summer School, Xiamen, CN.
47. Breece\*, M. W., M. J. Oliver, K. J. Dunton, and D. A. Fox. (2013) Testing Atlantic sturgeon spring habitat selection with an autonomous underwater vehicle. Annual meeting of the Mid-Atlantic Chapter of the American Fisheries Society, Tuckerton, NJ.
48. Cimino\*, M., W. R. Fraser, A. J. Irwin, M. J. Oliver. (2013) Physical factors as predictors: trends in the quality of *Pycoscelis* penguin chick-rearing habitat in the Southern Ocean. 8<sup>th</sup> International Penguin Conference. Bristol, UK.
49. Breece\*, M. W., M. J. Oliver, K. J. Dunton, and D. A. Fox. (2013) Dynamic environments, dynamic sampling: using gliders, satellites and transmitters to determine Atlantic sturgeon habitat selection in the mid-Atlantic Bight. 7<sup>th</sup> International Symposium on Sturgeon. Naniamo, Canada, BC.
50. Haulsee\*, D., B. Wetherbee, D. Miller, M. Cimino\*, M. Breece\*, D. Fox, M. Oliver. (2013). Habitat Associations of the Sand Tiger Shark during a Fall Migration: Linking Acoustic Tags, Satellites and Underwater Robots. Annual Delaware Space Grant Research Symposium. University of Delaware, Newark DE.
51. Breece\*, M. W., Haulsee\*, D. E., Fox, D. A., Oliver, M. J. (2013) Testing Habitat Associations of Atlantic Sturgeon Using Remote Sensing and Acoustic Biotelemetry

NASA Biodiversity and Ecological Forecasting Team Meeting, April 23-25, 2013, Arlington, VA.

52. Cimino\*, M. A., Fraser, W. R., Irwin, A. J., Oliver, M. J. (2013) Potential Local and Broad Scale Drivers of Adélie Penguin Populations and Chick Weights at Palmer Station, Antarctica, NASA Biodiversity and Ecological Forecasting Team Meeting, April 23-25, 2013, Arlington, VA.
53. Haulsee\*, D. E., Wetherbee, B. M., Miller, D. C., Cimino\*, M. A., Breece\*, M. W., Fox, D. A., Oliver, M. J. (2013) Habitat Associations of the Sand Tiger Shark during a Fall Migration: Linking Acoustic Tags, Satellites and Underwater Robots, NASA Biodiversity and Ecological Forecasting Team Meeting, April 23-25, 2013, Arlington, VA.
54. Oliver, M. J., M. D. Grossi\*, E. F. Geiger\*, A. Irwin, F. Veron. (2013) Predicting Ocean Density Profiles Using Satellite Platforms, NASA Biodiversity and Ecological Forecasting Team Meeting, April 23-25, 2013, Arlington, VA.
55. Oliver, M. J., M. A. Cimino\*, A. Irwin, W. Fraser, J. Kohut, O. Schofield, M. Moline. Satellite Driven Studies of Climate-Mediated Changes in Antarctic Food Webs. (2013) NASA Biodiversity and Ecological Forecasting Team Meeting, April 23-25, Arlington, VA.
56. Breece\*, M. W., M. J. Oliver, M. A. Cimino\*, D. A. Fox. (2013) Spawning Atlantic Sturgeon Staying one Step Ahead of the Salt Front in a Changing Delaware River. Annual meeting of the Tidewater Chapter of the American Fisheries Society, Solomon's MD.
57. Haulsee\*, D. E., B. M. Wetherbee, D. C. Miller, M. A. Cimino\*, M. W. Breece\*, D. A. Fox, M. J. Oliver. (2013) Southbound and Down; Using Acoustic Telemetry and an Underwater Robot to Understand the Southerly Migrations of Sand Tiger Sharks (*Carcharias taurus*). Annual meeting of the Tidewater Chapter of the American Fisheries Society, Solomon's MD.
58. Fox, D. A., M. W. Breece\*, M. J. Oliver, T. F. Savoy. (2013) Coastal Movements of Atlantic Sturgeon in the Mid-Atlantic Bight. 2013. NOAA Fisheries and ASMFC Workshop to Develop Research Ideas to Reduce Sea Turtle and Atlantic Sturgeon Bycatch in Gillnet Gear. Ocean City, MD.

## 2012

59. Kohut, J., L. Palamara, E. Bochenek, O. Jensen, J. Manderson, M. Oliver, S. Gray, and C. Roebuck. (2012) Using Ocean Observing Systems and Local Ecological Knowledge to Nowcast Butterfish Bycatch Events in the Mid-Atlantic Bight Longfin Squid Fishery. *Oceans*. doi: 10.1109/OCEANS.2012.6404954.
60. Simpson\*\*, C.A., M. J. Oliver, D. A. Fox, D. Haulsee\*, M. Breece\*, M. Cimino\*. (2012) Effects of Wind Speed on Acoustic Tracking of Sand Tiger Sharks (*Carcharias taurus*) in the Delaware Bay. Atlantic Estuarine Research Society 2012, Fall Meeting. October 11-13. Chincoteague, VA.
61. Breece\*, M., M. Oliver, D. Haulsee\*, D. Fox, L. Brown, J. Kohut, D. Aragon, C. Haldeman, B. Wethebee, J. Manderson. (2012) Utilizing Remote Sensing, AUV's and Acoustic Biotelemetry to Create Dynamic Single Species Distribution Models in the Mid-Atlantic. The 2012 Annual meeting of the Mid-Atlantic Regional Association for Coastal Ocean Observing System. 2012. Baltimore, MD.

62. Breece\*, M. W., D. A. Fox, M. Oliver. (2012) Mapping and Modeling Movements and Habitat use of Atlantic Sturgeon in an Integrated Ocean Observatory, A Workshop to Develop a Framework for Quantitative Seascape Ecology Supporting Ecosystem Assessment and Management, New Brunswick, NJ.
63. Haulsee\* D., M. Oliver, D. Fox, M. Breece. (2012) Incorporating Acoustic Telemetry and Underwater Robots to Understand Fish Movements and Species Assemblages in the Mid-Atlantic Bight. Mid-Atlantic Chapter of American Fisheries Society Meeting. Wilmington, DE. (Best Student Presentation)
64. Breece\*, M. W., D. A. Fox, and M. J. Oliver. (2012) Utilizing Remote Sensing and Acoustic Biotelemetry to Create Dynamic Species Distribution Models for Atlantic Sturgeon in the Mid-Atlantic. Mid-Atlantic Chapter of the American Fisheries Society Annual Meeting. Wilmington, DE.
65. Cimino\*, M. A., M. J. Oliver, W. Fraser, A. J. Irwin. (2012) Satellite Data and a Presence-Only Modeling Approach Identify Trends in the Quality of *Pygoscelis* Penguin Chick-Rearing Habitats. Biodiversity and Functioning of Marine Ecosystems Workshop, Banyuls-sur-Mer, France.
66. Breece\*, M. W., D. A. Fox, M. Oliver. (2012) Unlocking the Secrets of Atlantic Sturgeon Movements Through Collaborative Research, Garden State Seafood Association Workshop, Tuckerton, NJ.
67. Kohut, J., M. Oliver, J. Manderson, O. Jensen, L. Palamara, S. Gray, G. DiDomenico, E. A. Bochenek, C. Roebuck, J. Didden, S. Gray. (2012) Collaborative Development of Regional Scale, Dynamic Habitat Models in the Context of Squid/Butterfish Bycatch. Working Group on the Northwest Atlantic Regional Sea for the International Council of the Exploration of the Sea, Falmouth, MA.
68. Cimino\*, M. A., M. J. Oliver, W. Fraser A. Irwin, D. Miller. (2012) Climate Migration Changes Penguin Distributions on the West Antarctic Peninsula. Ocean Sciences Meeting, Salt Lake City, UT.
69. Oliver, M. J., A. Irwin, M. A. Moline, W. Fraser, D. Patterson, O. Schofield, J. Kohut. (2012) Adélie Penguin Foraging Behavior Affected by Local Tides. Ocean Sciences Meeting, Salt Lake City, UT.
70. Oliver, M. J., A. Irwin, J. Kohut, J. Manderson. (2012) A Dynamic Biome Concept to Assist in Marine Spatial Planning. Ocean Sciences Meeting, Salt Lake City, UT.
71. Haulsee\*, D. E., M. J. Oliver, B. Wetherbee, D. A. Fox. (2012) Mapping Spatiotemporal Patterns in Tiger Shark Habitats using Satellite Technology. Ocean Sciences Meeting, Salt Lake City, UT.
72. Shulman, I., B. Penta, M. Moline, S. Haddock, M. Oliver, S. Anderson, P. Sakalaukus, A. Weidemann, R. Gould, J. Ryan. (2012) Joint Study and Modeling of Bioluminescence and Physical/Bio-optical Properties. Ocean Sciences Meeting, Salt Lake City, UT.
73. Yan, X. H., Y. H. Jo, J. Sha, W. Liu, M. J. Oliver, M. Shatley, L. Jiang. (2012) Remote Sensing of Coastal Plumes and Algal Blooms: Recent Events of Physical-Biological Coupling in the Mid Atlantic Bight Coastal Regions. Ocean Sciences Meeting, Salt Lake City, UT.
74. Schofield, O. M., J. Kohut, G. Saba, J. Manderson, M. Oliver, S. M. Glenn. (2012) Phytoplankton Dynamics and Bottom Water Oxygen During an Exceptional Bloom in the Summer of 2011. Ocean Sciences Meeting, Salt Lake City, UT.

75. Geiger\*, E. F., M. A. Cimino\*, D. J. MacDonald, M. J. Oliver, G. W. Luther. 2012. Phytoplankton Physiology in Suboxic/Sulfidic Zones in the Chesapeake Bay using *In Situ* FIRE Fluorometry and Electrochemistry. Ocean Sciences Meeting, Salt Lake City, UT.
76. Glenn, S. M., O. Schofield, J. Kohut, H. Roarty, J. Kerfoot, M. Oliver, H. Seim, W. Boicourt, W. Brown, L. Atkinson. (2012) Impact of Ocean Observations on Hurricane Irene Intensity Forecasts. Ocean Sciences Meeting, Salt Lake City, UT.

## 2011

77. Oliver, M. J., M. Shatley, E. Geiger\*, D. Haulsee\*, M. Cimino\*, J. Kerfoot, L. Ojanen (2011) Satellite Data Streams for the MARACOOS region. Mid-Atlantic Regional Association Coastal Ocean Observing System Annual Meeting, Washington, D.C.
78. Haulsee\*, D., M. J. Oliver, B. Wetherbee, D. Fox. (2011) Mapping Spatiotemporal Patterns in Tiger Shark Habitats Using Satellite Technology. Annual Mid-Atlantic Chapter of the American Fisheries Society Meeting.
79. Cimino\*, M., M. J. Oliver, W. Fraser, A. Irwin, D. Miller. (2011) Predicting Marine Habitat Structure for Antarctic Penguins from Space-based Platforms, NASA Joint Carbon and Ecosystems, Washington D.C.
80. Oliver, M. J., A. Irwin, W. Fraser, O. Schofield, M. Moline. (2011) Tidal Influence on Adélie Penguin Foraging Locations, NASA Joint Carbon and Ecosystems, Washington D.C.
81. Oliver, M. J., M. D. Grossi\*, E. F. Geiger\*, A. Irwin, F. Veron. (2011) Predicting Ocean Density Profiles Using Satellite Platforms, NASA Joint Carbon and Ecosystems, Washington D.C.
82. Geiger\*, E. F., M. D. Grossi\*, A. C. Trembanis, J. T. Kohut, M. J. Oliver (2011) Satellite-Derived Coastal Ocean and Estuarine Salinity in the Mid-Atlantic, NASA Joint Carbon and Ecosystems, Washington D.C.

## 2010

83. Kohut, J. T., J. Manderson, M. J. Oliver, L. Palamara, D. Gong. (2010) Freshwater flow along the Hudson Shelf Valley: Do fish in the Mid-Atlantic Bight really care? Ocean Sciences Meeting, Portland, OR.
84. Geiger\*, E. F., M. D. Grossi\*, A. C. Trembanis, J. T. Kohut, M. J. Oliver. (2010) Satellite Derived Salinity Predictions of the Mid-Atlantic Coastal Ocean. Ocean Sciences Meeting, Portland, OR.
85. Voynova\*, Y., J. H. Sharp, M. J. Oliver. (2010) Sea Surface Temperature and Biogeochemical Anomalies due to Coastal Upwelling in the Delaware Estuary. Ocean Sciences Meeting, Portland, OR.
86. Oliver, M. J., B. Fraser, O. Schofield, J. T. Kohut, A. J. Irwin. (2010) Satellite Analysis of Climate Mediated Changes in Antarctic Food-Webs. Ocean Sciences Meeting, Portland, OR.
87. Palamara, L., J. Manderson, J. T. Kohut, M. J. Oliver, J. A. Goff, S. Gray. (2010) . Developing Ecological Indicators for Fisheries Management using IOOS Defined Habitat Characteristics in the Mid-Atlantic Bight. Ocean Sciences Meeting, Portland, OR.
88. Treible\*\*, L. M., E. F. Geiger\*, M. D. Grossi\*, M. J. Oliver. (2010) The Impact of Wind on Non-Photochemical Quenching in the Mid-Atlantic Coastal Ocean. Ocean Sciences Meeting, Portland, OR.

89. Grossi\*, M. D., E. F. Geiger\*, A. J. Irwin, F. Veron, M. J. Oliver. (2010) Predicting Open Ocean Density Profiles from Satellite Observations. Ocean Sciences Meeting, Portland, OR.
90. Irwin, A. J., M. J. Oliver. (2010) Are Ocean Deserts Getting Larger? Ocean Sciences Meeting, Portland, OR.

#### **2009**

91. Geiger\*, E., M. Grossi\*, M. Oliver (2009). Developing Satellite-Derived Salinity Product for the Mid-Atlantic Coastal Region. Delaware EPSCoR Annual State Meeting. Newark, DE.
92. Manderson, J., L. Palamara, J. Kohut, M. Oliver, J. Goff, S. Gray (2009) Developing Ecological Indicators for Fisheries Management using IOOS Defined Habitat Characteristics in the Mid-Atlantic Bight. Mid-Atlantic Fisheries Council, New York, NY.
93. Oliver, M., M. Grossi\*, E. Geiger\* (2009) 3-D Mapping of Ocean Water Masses and Provinces. Joint Carbon/Biodiversity Meeting, New York, NY.
94. Irwin, A., M. Oliver, (2009) Ocean Biogeography Shows Accelerating Ocean Desertification. Joint Carbon/Biodiversity Meeting, New York, NY.

#### **2008**

95. Oliver, M., A. Irwin, O. Schofield, P. Falkowski (2008) Objective Global Ocean Biogeographic Provinces. Joint Carbon/Biodiversity Meeting, Washington DC.
96. Irwin, A., M. Oliver, O. Schofield, P. Falkowski (2008) Satellite Detection of Seasonal and Secular Change of Global Ocean Biomes. Joint Carbon/Biodiversity Meeting, Washington DC.
97. Oliver, M., A. Irwin, O. Schofield, P. Falkowski (2008) Objective Global Ocean Biogeographic Provinces. Ocean Sciences Meeting, Orlando, FL.
98. Irwin, A., M. Oliver, O. Schofield, P. Falkowski (2008) Satellite Detection of Seasonal and Secular Change of Global Ocean Biomes. Ocean Sciences Meeting, Orlando, FL.

#### **2006**

99. Schofield, O., L. Bowers, G. Fotti, S. Glenn, D. Gong, A. Kahl, J. Kohut, M. Oliver, J. Wilkin, R. Chant (2006) Studying the Dynamics and Biological Significance of the Hudson River Using an Ocean Observatory. Marine Technology Society, Boston Meeting, September 2006.
100. Frazer, T.K., S.R. Keller, O. Schofield, S.M. Glenn, J. Kohut, R.J. Chant, M. Oliver, J.R. Reinfelder, M.A. Moline, M. Zhou, R.F. Chen. Coastal Ocean Observatories Enable Biological Investigations in a Buoyant Plume. Marine Technology Society, Boston Meeting, September 2006.
101. Oliver, M. J., D. Petrov, D. Ackerly, P. Falkowski, O. Schofield. The Rapid Evolution Of Diatom and Dinoflagellate Genomes. Ocean Sciences Meeting, Honolulu, Hawaii, Feb 20-24, 2006.
102. Bosch, J., O. Schofield, J. Kohut, S. Glenn, M. Gogte, M. Oliver. East Coast Plumes and Blooms: Monitoring On-Ramp Traffic to the Ocean Highway off New Jersey. Ocean Sciences Meeting, Honolulu, Hawaii, Feb 20-24, 2006.
103. Connolly, J., M. Moline, C. Knight, M. Oliver. Exploring the Evolutionary Implications of Diatom (Bacillariophyceae) Genome Size Variation. Ocean Sciences Meeting, Honolulu, Hawaii, Feb 20-24, 2006.



104. Frazer, T. K., O. Schofield, M. Moline, S. Glenn, J. T. Kohut, R. J. Chant, S. R. Keller, M. J. Oliver, J. R. Reinfelder, M. Zhou, M., R. F. Chen. LaTTE 2005: Super Size Me! Ocean Sciences Meeting, Honolulu, Hawaii, Feb 20-24, 2006.

#### 2005

105. Oliver, M. J., Z. Finkel, O. Schofield, P. G. Falkowski, C. de Vargas. Retrotransposons in Diatom Taxa. The International Ocean Research Conference, UNESCO Headquarters, Paris, France, June 6-10, 2005.
106. Kohut, J., R. Chant, S. Glenn, O. Schofield, M. J. Oliver. Observed Response of the Hudson River Plume to Wind Forcing. The International Ocean Research Conference, UNESCO Headquarters, Paris, France, June 6-10, 2005.

#### 2004

107. Kohut, J., J. A. Bosch, M. J. Oliver, S. M. Glenn, O. M. E. Schofield. Evolution of Fronts in the Mid-Atlantic Bight (MAB): What Exit on the Ocean Highway off New Jersey? American Geophysical Union Fall Meeting, San Francisco, CA. Dec 13-17, 2004.
108. Oliver, M. J., J. T. Kohut, A. J. Irwin, S. M. Glenn, O. Schofield, M. A. Moline, W. P. Bissett. Bioinformatic Approaches for Objective Detection of Water Masses. Ocean Optics XVII, Fremantle, Au, Oct 25-29, 2004.
109. Oliver, M. J., Z. V. Finkel, O. M. Schofield, P. G. Falkowski. A Hypothesis of Genome Structure in Marine Phytoplankton. 56th Annual Meeting of The Society of Protozoologists June 2-6, Bryant College, Smithfield, Rhode Island, 2004.
110. Matteson, R. S., M. A. Moline, J. G. Bellingham, S. M. Blackwell, F. P. Chavez, S., Haddock, M. A. McManus, M. J. Oliver, O. M. Schofield. Distribution of Optical Constituents in Response to Episodic Upwelling in Monterey Bay ASLO/TOS Ocean Research Conference Feb 15 - 20 Honolulu, HI, 2004.

#### 2002

111. Oliver, M. J., T. Bergmann, S. Glenn, M. Moline, C. Orrico, O. Schofield. Application of Optical Inversion Model: Implications for Constituent Specific Absorption and Bio-Optical Modeling of Primary Production. Ocean Optics XVI, Santa Fe, NM. 2002.
112. Schofield, O., T. Bergmann, W. P. Bissett, G. Kirkpatrick, M. J. Oliver, C. Orrico, M. A. Moline, S. Glenn. Inversion of the Inherent Optical Properties and Their Utility for Delineation of Water Masses in Turbid Coastal Waters. Ocean Optics XVI, Santa Fe, NM. 2002.
113. Moline, M. A., T. Bergmann, W. P. Bissett, J. Case, J., C. Herren, C. D. Mobley, M. J. Oliver, O. Schofield, O., Sundman L. (2002). Integrating Optics and Biology: Estimation of Bioluminescence Leaving Radiance From an Autonomous Vertical Profiler. Ocean Optics XVI, Santa Fe, NM, 2002.
114. Oliver, M. J., Moline, M. A., Schofield, O., Bergmann, T., Glenn, S., Bisset, W. P., Bio-Optical Estimates of Phytoplankton Productivity From an Autonomous *In Situ* Profiler in the Coastal Waters of the Mid-Atlantic Bight. Ocean Sciences Meeting, Honolulu, Hawaii, 2002.
115. Kirkpatrick, G.H., M. J. Oliver, B. Berg, C. Orrico, M. A. Moline, S. E. Lohrenz, O. Schofield. Continuous, Real-Time Determination of Hyperspectral Absorption of Colored Dissolved Organic Material. Ocean Sciences Meeting, Honolulu, Hawaii, 2002.

116. Pearson, J. A., S. M. Blackwell, N. Doughty, M. A. Moline, M. J. Oliver, C. Orrico. Optical Estimation of Phytoplankton and Sediment Transport in Morro Bay Estuary. Ocean Sciences Meeting, Honolulu, Hawaii, 2002.

**2000**

117. Moline, M. A., R. Arnone, T. Bergmann, S. Glenn, M. J. Oliver, C. Orrico, O. Schofield, S. Tozzi. Variability in Spectral Backscatter Estimated from Satellites and its Relation to In-Situ Measurements in Optically Complex Coastal Waters. Presented at, Oceans From Space 2000 Venice, Italy. 2000. Sponsored by the Joint European center and NASA. (Best Poster Award)

**INVITED SEMINARS**

**2017**

1. Oliver, M. J., D. Haulsee, M. Breece, D. Fox, J. Kohut. 2017. (2017) Integrating Coastal Ocean Observatories and Fishery-Independent Biotelemetry. Multi-Scale Coastal Ocean Dynamics and Exchange Processes, University of New England, Biddeford, ME.
2. Oliver, M., J. Kohut, M. Moline, L. Nazzaro, T. Miles, K. Bernard, W. Fraser, D. Patterson-Fraser, A. Irwin, M. Cimino, P. Winsor, H. Statscewich, E. Fredj, (2017) Adélie Penguin Foraging Location Predicted by Tidal Regime Switching. NSF Mobility Workshop, The Ohio State University, Columbus, OH.

**2015**

3. The Benefits and Challenges of Integrating Animal Telemetry into Ocean Observatories, Joint Session of the Mid-Atlantic Bight Physical Oceanography Meeting and the Mid-Atlantic Chapter of the American Fisheries Society. Cape May, NJ

**2014**

4. Scales, Proxies and Biogeography, Duke University, NC, December 17, 2014
5. Testing marine ecosystem selection processes on multiple scales: Examples and Approaches, Duke University, NC, November 11, 2014
6. The Match and Mis-Match of Environmental Selection. Gordon Conference, Global Change Biology, Waterville Valley, NH July 11, 2014
7. Integrating biotelemetry, gliders and satellites to develop habitat models for coastal fish species. Xiamen University, CN, April 3, 2014
8. The Match and Mis-Match of Environmental Selection. Chesapeake Bay Biological Laboratory, MD, February 11, 2014

**2013**

9. Using Ocean Observatories to Discover Habitat Associations. U.S. Kavli Frontiers of Science, National Academy of Sciences, Irvine, CA November 7, 2013.
10. The Match and Mis-Match of Environmental Selection. University of Southern California, CA, November 5, 2013
11. The Match and Mis-Match of Environmental Selection. University of Southern California, CA, June 19, 2013
12. The Match and Mis-Match of Environmental Selection in a Polar System: Does Mesoscale Variability Provide Refuge from a Changing Climate? Institute of Marine and Coastal Science, Rutgers University, March 11, 2013

13. Revisiting Sverdrup: Phytoplankton as Signal Amplifiers of Ocean Vertical Density Structure, Physical Ocean Science and Engineering Seminar, University of Delaware, March 15, 2013

14. Sharks, Sturgeon, Robots and Satellites: Finding the Fish, Saltwater Fly Anglers of Delaware, Rehoboth Beach, Delaware, March 13, 2013

#### **2012**

15. Sharks, Sturgeon, Robots and Satellites: Adventures in Biogeography, Lunch and Learn Program, Cape Henlopen State Park, Dec, 2012.

16. Modeling Marine Ecosystems with Remote Satellite Data, Biodiversity and Functioning of Marine Ecosystems, Laboratoire Arago, Observatoire océanologique de Banyuls sur mer, Université Pierre et Marie Curie France, May 30, 2012.

#### **2011**

17. Dynamic Marine Biogeography from Space, Joint International Workshop of OCCOS and Choice-C, Xiamen University, China, April, 2011.

18. Remote Sensing of the Mid-Atlantic Coastal Ocean, Partnership University Project with Laboratoire Arago, Observatoire océanologique de Banyuls sur mer and the University of Delaware, March, 2011.

#### **2010**

19. Fast Carbon, Slow Carbon, Oily Carbon: A Short Tour from the Archean Ocean to Ocean Observatories, Ocean Currents Public Lecture, Lewes, DE, July 2010.

20. Fast Carbon, Slow Carbon, Oily Carbon: A Short Tour from the Archean Ocean to Ocean Observatories, NSF REU Program, Mote Marine Laboratory, July 2010.

#### **2009**

21. Loaves and Fishes in the Future: Who Pays for Ocean Desertification? The Ethics of Climate Change; Intergenerational Justice and the Global Challenge; The Program in Science Ethics and Public Policy, Clayton Hall, University of Delaware, Oct. 2009.

22. Are Ocean Deserts Getting Larger?, Mid-Atlantic Marine Education Association Annual Conference, University of Delaware, Oct. 2009.

#### **2008**

23. How Microscopic Ocean Algae Let Us Breathe, Have Babies, and Drive Cars (Really!), Ocean Currents Public Lecture, Lewes, DE, May 2008.

#### **2006**

24. Selfish Genes in Phytoplankton Genomes; From Environmental Induction to Evolutionary Patterns, Dalhousie University, Halifax, NS. Nov, 2006.

#### **2005**

25. Evolution of Dinoflagellate and Diatom Genomes; Thoroughbreds of the Eukaryotes, Mote Marine Laboratory, Sarasota, FL. June, 2005.

26. Bioinformatic Approaches for Objective Detection of Water Masses on Continental Shelves: Early Results from LaTTE 2005, Lamont-Doherty Earth Observatory, Columbia University, NY, May 5, 2005.

### **MEDIA PUBLICITY**

#### **2017**

1. LenFest Ocean Program, October 17, 2017, “*New Study to Help Fishermen Avoid Endangered Sturgeon*” highlighted our work to use real time data to help fishermen avoid

bycatch. <http://www.lenfestocean.org/en/news-and-publications/fact-sheet/new-study-to-help-fishermen-avoid-endangered-sturgeon>

2. UDaily, May 31, 2017, "*Superb Scientist, Influential Mentor*" Highlighted my nomination for the 2017 Outstanding doctoral advising and mentoring award.
3. UDaily, April 12, 2017, "*Thoughtful News Consumption*" Highlighted our work on analyzing media claims about the polar regions.  
<https://www.youtube.com/watch?v=6ogfYJyoc0o>
4. March for science, April 22, 2017. My remarks covered by Heterodox Academy (<https://heterodoxacademy.org/2017/04/24/hard-sciences-and-viewpoint-diversity/>)
5. March for science, April 22, 2017. My remarks covered by Psychology Today (<https://www.psychologytoday.com/blog/rabble-rouser/201705/climate-scientists-talk-the-march-science>)

## 2016

6. Guardian, October 9, 2016, "*Sand tiger sharks: far friendlier than you think*" Highlighted our work on discovering the social networks of Sand Tiger Sharks.
7. Newsweek, February 23, 2016, "*Tiger Sharks Along East Coast Are More Social Than Once Thought*" Highlighted our work on discovering the social networks of Sand Tiger Sharks.
8. American Littoral Society, *A Vision for Our Oceans: Stewardship Through Ocean Planning* <https://www.youtube.com/watch?v=YIMhllzXqfY>
9. The News Journal, February 26, 2016, "*The Sturgeon Tracker*" Highlighted our work on protecting endangered species in the coastal ocean.
10. UDaily, February 29, 2016, "*Safeguarding sturgeon*" Highlighted our work on protecting endangered species in the coastal ocean.
11. The News Journal, January 14, 2016, "*UD researcher studies penguin turf war*" Highlighted my labs work in understanding penguin foraging dynamics with robotics.
12. IFL Science, January 9, 2016, "*How Adélie and Gentoo Penguins Avoid Food Fights in Antarctica*" Highlighted my labs work in understanding penguin foraging dynamics with robotics.
13. NSF Science360.org, January 6, 2016, "*Penguins, food and robots*" Highlighted my labs work in understanding penguin foraging dynamics with robotics.
14. UDaily, January 6, 2016, "*Penguins and robots*" Highlighted my labs work in understanding penguin foraging dynamics with robotics.
15. Environmental Monitor, January, 2016, "*Tracking Sharks*" Highlighted how my lab is combining acoustic telemetry and AUVs to understand Sand Tiger sharks.

## 2015

16. UDaily, September 24, 2015, "*Oliver named Robertson Professor of Marine Science and Policy*"
17. Cape Gazette, May 21, 2015, "*Ocean Currents lecture to focus on Antarctic penguins May 21 in Lewes*" showcases the public lectures with my labs science stories.
18. The News Journal, May 20, 2015, "*Research sheds light on sharks off Delmarva coast*" highlighted my labs work to understand the migration patterns of sand-tiger sharks.
19. UD Messenger Vol 23 #1, "*Penguin Chicks, Weight and Climate Change*" highlights my labs Antarctic work.
20. Environmental Monitor, February 27, 2015, "*U. Delaware Scientists Study Falling Adélie Penguin Populations, Antarctic Food Web*" highlights my labs Antarctic work.

21. The News Journal, January 26, 2015, “*U of D research teams at polar opposites*” highlighted my labs work to understand the ecology of the Adélie penguin.

#### 2014

22. The Antarctic Sun, May 9, 2014, “*Converging factors*” <http://antarcticsun.usap.gov/science/contenthandler.cfm?id=3019> is an article about our labs Antarctic work.
23. Campus Voices, April 17, 2014, “*From Plankton to Sharks*” <http://sites.udel.edu/campusvoices/2014/04/17/oliver/> is an interview about biological oceanography and the future of conservation.
24. The News Journal, November 4, 2014 “*Cold, wet baby penguins struggle to survive*” highlighted my labs work to understand the ecology of the Adélie Penguins.
25. The News Journal, August 18, 2014 “*UD Expands Ocean Research*” highlighted my (and others) labs work to use robotics in research

#### 2013

26. UDaily, May 3, 2013, “*Sturgeon search*” highlights my labs efforts to understand the distribution of Atlantic sturgeon with an underwater glider.
27. The News Journal, February 7, 2013, “*Social sharks: UD researchers monitoring animals’ travels, networks*” highlighted my labs work to understand the ecology of the Sand tiger shark.
28. UDaily, January 16, 2013, “*Keeping a float*” highlighted my labs deployment of a privately funded APEX float to study Antarctic phytoplankton blooms.
29. Ocean Mysteries with Jeff Corwin episode 209, January 12, 2013, “*Eye of the Sand Tiger*” highlighted the shark tracking research efforts of graduate students Danielle Haulsee and Matthew Breece.
30. UDaily, January 10, 2013 “*Shark Special*”, highlighted the shark tracking and AUV efforts of the Oliver Lab.
31. Delaware Sea Grant, “*January 2013 – Penguins*” <http://youtu.be/bH3zph4YAME> highlighted the Antarctic research efforts of the Oliver Lab.

#### 2012

32. UDaily, November 7, 2012, “*Post-Sandy sewage*” highlighted the efforts of my lab to track potentially hazardous river plumes after Hurricane Sandy.
33. NBCNEWS.com, October 19, 2012, “*Underwater robots track sharks off US*” highlighted the first successful detection of sharks using a Slocum Glider AUV.
34. UDaily, October 16, 2012, “*Shark Social Networking*” highlighted the integration of tagged sharks into ocean observatories.
35. NewsWorks, NPR affiliate, Broadcast on WDDE, August 3, 2012, “*Tracking a predator in the Delaware Bay*” highlighted graduate student Danielle Haulsee’s efforts to track sand tiger sharks in Delaware Bay
36. UD Messenger, Volume 20, #1, “*Follow the penguins*” highlighted the labs efforts to understand the foraging patterns of penguins in Antarctica.
37. UDaily, February 20, 2012, “*On the radar*” described the Oliver’s Sloan Research Fellowship.
38. UDaily, January 18, 2012, “*Sea Change*” highlighted lab efforts visualize penguin foraging behaviors in real-time.

39. The News Journal, January 14, 2012 “*UD researcher part of effort to study Antarctica’s penguins*” highlighted the efforts of graduate student Megan Cimino to understand penguin population dynamics.
40. UDaily, January 5, 2012 “*Bycatch-22*” highlighted the labs efforts to help reduce the bycatch of butterfish in the min-Atlantic region.

**2010**

41. UDaily, November 9, 2010, “*CEOE’s Oliver wins Prestigious Presidential Early Career Award*” described Oliver’s PECASE Award.
42. WBOC16, June 16, 2010, “*Delaware Researchers Assist in Tracking Gulf Oil*” describes my labs efforts to use satellites and an AUV to visualize the gulf oil spill.
43. WHYY, June 10, 2010, “*Local Robots aid Gulf surveys*” describes how our AUV robot was integrated into a larger fleet of robots to monitor the Gulf Oil spill.
44. WGMD.com, June 9, 2010, “*UD Robotic Sub Helping to Track Oil from Gulf Spill*” highlights the mission of our glider AUV in the Gulf of Mexico during the Deep Water Horizon oil spill.
45. WBOC16, June 9, 2010, “*UDel. Robot Helping Assess Gulf Oil Spill Impact*” discusses the activity of our glider AUV during the Deep Water Horizon oil spill.
46. myfoxphilly.com, June 2, 2010, “*U of D’s Blue Hen Reports to the Keys*”, describes my labs deployment of our AUV near the Florida Keys to search for oil from the Deep Water Horizon disaster.
47. Coastal Sussex Weekly, Issue 58, May 27. 2010, “*The Burning Question: Can Oil from the Gulf Reach Us?*” discussed the likelihood of oil from the Deep Water Horizon oil spill reaching the shores of Delaware.
48. UDaily, May 26, 2010, “*UD, DBI Join Effort to Track Gulf of Mexico Oil Spill*”, describes our labs efforts to visualize the ocean observatory response effort using the super-computers at Delaware Biotechnology Institute.

**2008**

49. UDaily, July 2, 2008, “*Matt Oliver Receives NASA New Investigator Award*” described Oliver’s NIP award.

**TEACHING**

**Courses Taught** (F = Fall semester, S = Spring semester)

| Semester          | Title   | Enrollment (4xx/6xx) |
|-------------------|---|----------------------|
| F 2017 – MAST 667 | <i>Economics Coupling Human and Natural Systems</i><br>(co-taught with Dr. Parsons) | 35                   |
| F 2017 – MAST 627 | <i>Biological Oceanography</i>  | 25                   |
| S 2017 – HONR 267 | <i>The Oceans, the Media, and Polar Science</i><br>(co-taught with Dr. Cohen)       | 20                   |
| F 2016 – MAST 853 | <i>Oceanography Seminar: Great Papers in Oceanography</i>                           | 8                    |
| F 2016 – MAST 627 | <i>Biological Oceanography</i>  | 18                   |
| F 2015 – MAST 627 | <i>Biological Oceanography</i>  | 10                   |
| S 2015 – MAST 382 | <i>Introduction to Ocean Sciences</i>   | 40                   |
| S 2015 – MAST 382 | <i>Introduction to Ocean Sciences-Honors</i>  | 5                    |
| F 2014 – MAST 627 | <i>Biological Oceanography</i>  | 17                   |
| S 2014 – MAST 482 | <i>Introduction to Ocean Sciences</i>   | 38                   |
| F 2013 – MAST 627 | <i>Marine Biology</i>   | 11                   |

|                       |  |       |
|-----------------------|--|-------|
| S 2013 – MAST 482     | <i>Introduction to Ocean Sciences</i> (co-taught with Dr. Marsh) | 21    |
| F 2012 – MAST 427/627 | <i>Marine Biology</i> (co-taught with Dr. Kirchman)              | 21/12 |
| S 2012 – MAST 482     | <i>Introduction to Ocean Sciences</i> (co-taught with Dr. Marsh) | 27    |
| F 2011 – MAST 604     | <i>Environmental Data Management</i>                             | 7     |
| F 2011 – MAST 866     | <i>Special Problem: Ecological Models in R</i>                   | 4     |
| S 2011 – MAST 482     | <i>Introduction to Ocean Sciences</i> (co-taught with Dr. Marsh) | 28    |
| F 2010 – MAST 427/627 | <i>Marine Biology</i>  | 6/15  |
| S 2010 – MAST 482     | <i>Introduction to Ocean Sciences</i> (co-taught with Dr. Marsh) | 20    |
| F 2009 – MAST 427/627 | <i>Marine Biology</i> (co-taught with Dr. Kirchman)              | 8/10  |
| F 2009 – MAST 853     | <i>Oceanography Seminar: Great Papers in Oceanography</i>        | 10    |
| F 2008 – MAST 427/627 | <i>Marine Biology</i> (co-taught with Dr. Kirchman)              | 0/14  |

## Graduate Advisees

### \*Graduated Students

#### **As Lead Advisor (n=10)**

- 2017-pr. Katherine Hudson (MS)
- 2016-pr. Joseph Gradone (MS)
- 2015-pr. Cordilyn Goodrich (MS)
- 2015-pr. Seth Cowell (PhD, co-lead with Pam Cook): Modeled stability of phytoplankton blooms.
- \*2012-17 Matthew Breece (PhD): Defining Habitats of Atlantic Sturgeon
- \*2010-16 Megan Cimino (PhD): Defining Habitats of Adélie Penguins with AUV's
- \*2010-17 Danielle Haulsee (PhD): Defining Habitats of Sand Tiger Sharks from Space
- \*2013-15 Alexander Davies (MS, co-lead with Fabrice Veron): Gas Transfer and Phytoplankton in the Southern Ocean
- \*2008-10 Matthew Grossi (MS): Space-Based Prediction of Ocean Density Structure
- \*2008-11 Erick Geiger (MS): Space-Based Prediction of Coastal Ocean Salinity

#### **As Committee Member (n=10)**

- \*2014-16 Jessica Lee (MS): Satellite tracking Antarctic minke whales (*Balaenoptera bonaerensis*) in a dynamic sea ice habitat along the Western Antarctic Peninsula
- \*2014-16 Danielle Ferraro (MS) Estimating sea scallop incidental mortality from photogrammetric before-after-control impact surveys.
- \*2012-16 Chris Hughes (MS): Impact of Land and Sea Surface on Delaware Sea Breeze
- \*2013-15 Thomas Lankiewicz (MS): Molecular Methods to Estimate Bacterial Growth Rates
- \*2010-15 Joe Russell (PhD): Bacterial Communities in Pavilion Lakes and North Pond
- \*2010-13 Mrina Nikrad (PhD): Abundance and Activity of Heterotrophic Bacteria in Polar Systems
- \*2008-10 Lauren Salvitti (MS): *Heterosigma akashiwo* as a harmful algal bloom
- \*2008-10 Sharon Grim (MS): Controls of Microbial Diversity in the Coastal Ocean
- \*2008-12 Yoana Voynova (PhD): River Discharge and Upwelling in Delaware Bay
- \*2008-12 Matthew Aschaffenburg (PhD): Symbionium Competition in Corals

#### **As External Committee Member (n=3)**

- \*2015-17 Filipa Carvalho (Rutgers University): Phytoplankton dynamics in submarine canyons in the West Antarctic Peninsula

- \*2011-12 Matthew Breece (Delaware State University): Movements of Atlantic Sturgeon
- \*2008-10 Laura Palmara (Rutgers University): Fish-Stock Indicators in the Mid-Atlantic.

**Research Undergraduate Advisees (n=13)**

- 2017 Shae Timmons, United States Naval Academy
- 2017 Harrison Smith, *NSF REU*, Rutgers University
- 2017 Luke Frankel, *NSF REU*, Bowdin College
- 2015 Katherine Liming, Undergraduate Research, University of Delaware, DE
- 2014 Anastasia Procaccini, *NSF REU*, University of Vermont
- 2014 Kelly McBride, *NSF REU*, University of Rhode Island, RI
- 2013 Eadoh Reshef, University of Delaware, DE
- 2013 Danielle Ferarro, *REU*, University of Delaware, DE
- 2012 Cara Simpson, *NSF REU*, St. Mary's College, MD
- 2010 Lauren Weisebron, *NSF REU*, Johns Hopkins University, MD
- 2010 Chris Mitchell, *NASA Space Grant*, University of Delaware, DE
- 2009 Kendra Ryan, *NSF REU/UDRF*, Johns Hopkins University, MD
- 2009 Laura Treible, *NSF REU*, University of Delaware, DE

**FIELD RESEARCH EXPERIENCE (>400 days in the field)**

- 2017 R. V. *Joanne Daiber* – Three glider deployments (6 days)
- 2016 R. V. *Baysport* – Two glider deployments (5 days)
- 2015 Palmer Station Antarctica- Using AUV's and satellites to understand Antarctic ecosystems (6 weeks)
- 2014 R.V. *Bay Sport* – Recovering acoustic and PSAT transmitters on Sand Tiger Sharks in Delaware Bay (three weeks)
- 2014 Central Caribbean Research Institute – Research Diving (four weeks)
- 2013 R.V. *Bay Sport* – Deploying acoustic and PSAT transmitters on Sand Tiger Sharks in Delaware Bay (three weeks)
- 2012 R.V. *Donna M.* – Four glider deployments (5 days)
- 2012 R.V. *Stanley* – Deploying acoustic and PSAT transmitters on Sand Tiger Sharks in Delaware Bay (three weeks)
- 2011 Palmer Station Antarctica- Using AUV's and satellites to understand Antarctic ecosystems (6 weeks)
- 2009 R.V. *Sharp* – Mapping photosynthetic quantum yield in the coastal ocean (8 cruises).
- 2008 R.V. *Sharp* – Mapping photosynthetic quantum yield in the coastal ocean (5 cruises).
- 2006 R.V. *Maria S. Merian* – VISION cruise sponsored by the Max Plank Institute – focused on the interaction between phytoplankton and bacteria during the fall bloom.
- 2005 R.V. *Oceanus* – Lagrangian Transport and Transformation Experiment (LaTTE) focused on primary production, community composition and phytoplankton retrotransposable elements in the Hudson River Plume.
- 2004 R.V. *Cape Hatteras* – Lagrangian Transport and Transformation Experiment (LaTTE) focused on evolution of optical properties, community composition, and phytoplankton retrotransposable elements of the Hudson River Plume.
- 2003 Norfolk Naval Base, Mine Warfare Readiness and Effectiveness Measuring (MIREM) focused on optical mine detection and radiative transfer in coastal systems.
- 2003 R.V. *Suncoaster* – Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) focused on detection and diel cycles of *Karenia brevis*.



- 2003 R.V. *Suncoaster* – Monitoring and Event Response for Harmful Algal Blooms (MERHAB) focused on optical and molecular detection of *Karenia brevis*.
- 2001 Rutgers Tuckerton Field Station (LEO-15), Office of Naval Research Hyperspectral Coupled Ocean Dynamics Experiment (HyCODE)
- 2001 R.V. *Walford* – Coastal predictive skill experiments focused on coastal upwelling
- 2000 Rutgers Tuckerton Field Station (LEO-15), Office of Naval Research Hyperspectral Coupled Ocean Dynamics Experiment (HyCODE)
- 2000 R.V. *Walford* – Coastal predictive skill experiments focused on coastal upwelling
- 2000 R.V. *Endeavor* – Utilization of KSS laser lidar for assessing thermocline depth, CTD/FRRF/Bathypotometer profiles
- 2000 R.V. *Point Sur*, Monterey Bay – Assisted operation of Bathypotometer and Schindler trap profiles
- 2000 Morro Bay Estuary, Optical quantification of particulate and phytoplankton transport
- 2000 Morro Bay Estuary, DNA ribotyping analysis of non-point source fecal coliforms in conjunction with Regional Water Quality Control Board/California Department of Health
- 1999 Marine Laboratory Center for Coastal and Tropical Benthic Ecology; Internship
- 1998 T.S. Golden Bear Educational Oceanographic Cruise, Cal Poly Quarter at Sea Program

## **SERVICE**

### **School, College, and University Service**

#### **2017**

Participant in UD Delaware First Campaign

Participant in UD Day on the Hill

One of three original drafters (along with Dr. Hansen and Dr. Archer) of CEOE Statement on core freedoms of scientific inquiry

Created satellite receiving station value added data service contract with ROFFS fishing forecast service

#### **2016**

Marine Policy Search Committee for Fisheries Economist

#### **2014**

Strategic Planning Initiative – Delaware Will Shine Committee

#### **2013**

Participant in UD Day on the Hill

Marine Policy Search Committee for Fisheries Economist

CEOE Seminar Series co-organizer

#### **2012**

CEOE Seminar Series co-organizer

Environmental Cluster Hire Search Committee

University of Delaware Coast Day demonstrations of Ocean Observing

#### **2011**

CEOE Seminar Series co-organizer

Environmental Cluster Hire Search Committee  
School of Marine Sciences and Policy Director Search Committee  
Participant in UD Day on the Hill  
University of Delaware Coast Day demonstrations of Ocean Observing

## **2010**

Participant in *Inside Delaware* showcasing UD's science initiatives to UD Alumni  
CEOE Seminar Series co-organizer  
School of Marine Sciences and Policy Director Search Committee  
University of Delaware Coast Day demonstrations of Ocean Observing

## **2009**

CEOE Seminar Series co-organizer  
Satellite Receiving Station Installation Committee  
University of Delaware Coast Day demonstrations of Ocean Observing  
Honors Day Committee

## **2008**

University of Delaware Coast Day demonstrations of Ocean Observing  
Honors Day Committee

## **Professional Service**

ICES Journal of Marine Science Topic Editor

### *Manuscript Reviewer for:*

Frontiers Marine Science  
Global Change Biology  
PLoS ONE  
Limnology and Oceanography  
Journal of Geophysical Research-Oceans  
Journal of Geophysical Research-Biogeosciences  
Geophysical Research Letters  
Ecosystems  
Ecology  
Estuarine, Coastal and Shelf Science  
Marine Ecology Progress Series  
The Journal of Coastal Research  
Progress in Oceanography  
Journal of Plankton Research  
Remote Sensing of Environment

### *Grant and Panel Reviewer for:*

National Aeronautic and Space Administration  
National Science Foundation  
National Oceanic and Atmospheric Administration

## **Public Service**

### *Public Stakeholders (State and Federal Agencies)*

- 2008-pr. Process, distribute and maintain real time sea surface temperature data that is distributed via a THREDDS server through the MARACOOS web site (<http://tds.maracoos.org/thredds/SST.html>). This data are collected by the L-band dish at Rutgers University, but de-clouded, processed and distributed by my lab. The data are consumed by a variety of state and federal agencies.
- 2011-pr. Collect, process and distribute and maintain real time Ocean color data that is distributed via a THREDDS server through the MARACOOS web site (<http://tds.maracoos.org/thredds/MODIS.html>). The X-band dish at the University of Delaware collects the data. The data are consumed by a variety of state and federal Agencies.
- 2012 Provider of satellite data tracking the impact and aftermath of Hurricane Sandy to Federal and State Agencies
- 2010 Provider of satellite and AUV data/visualizations to Federal Agencies in an emergency response to the Deepwater Horizon Oil Spill in the Gulf of Mexico

### *General Public*

- 2011-pr. Maintain ORB website with freely available real-time satellite data through a web interface (<http://orb.ceoe.udel.edu/public-access>)  
Launched Cape Henlopen High School Marine Science Curriculum Website (<http://coseenow.net/udel>)
- 2010-pr. Operation of Public Global Visualization lab with 6600 public visitors since 2010.