

Robert Howard Condon

702 Paisley Court, Wilmington, NC 28409

Phone: +1 (910) 386-1867, Email: mnemiopsis@me.com

Web: ysa.world, LinkedIn: www.linkedin.com/in/rob-condon-b42856133

Education Preparation

2002 – 2008 Ph.D., Virginia Institute of Marine Science (VIMS), College of William & Mary
1992 – 1997 B.Sc. (Hons.), University of Melbourne, Australia

Scientific and Professional Appointments

2017 – present Founder & Executive Director, Young Scientist Academy (YSA) (non-profit 501(c)(3))
2014 – 2017 Assistant Professor, University of North Carolina Wilmington (UNCW)
2010 – 2013 Research Senior Marine Scientist, DISL
2010 Post-Doctoral Researcher, Dauphin Island Sea Lab (DISL)
2009 – 2010 Assistant Research Scientist, Bermuda Institute of Ocean Sciences (BIOS)
2008 – 2009 Post-Doctoral Fellow, BIOS
2008 Senior Research Scientist, VIMS
2001 – 2002 Faculty Research Assistant II, Horn Point Laboratory, University of Maryland Center for Environmental Science (UMCES)
1999 – 2001 Faculty Research Assistant I, Horn Point Laboratory, UMCES

Professional Interests

I am an educator, marine scientist, and social entrepreneur with interests in:

- *Youth education and public outreach*: empowering all youth to be community ambassadors of science, with a priority on providing minority youth opportunities to experience real world science.
- *Climate change, urban sustainability, anthropogenic impacts, and environmental health*: allowing youth to use science as a problem-solving tool to community-relevant issues.
- *Innovation, technology and computer programming*: Python programming, app development, weather balloon technology, machine learning, cloud computing.
- *Science communication*: providing youth a platform to understand and discuss complex socioeconomic and environmental issues, and making science-relevant to the public.

Funding & Proposals

Young Scientist Academy Funding

As YSA's Founder and Executive Director, I have seen our budget grow by 90% in the last three years, which has enabled the organization to reach more youth served each week in our programs. Our budget is now over \$180K annually, and I have singly raised over \$400K in fundraising, foundation grants and corporate sponsorship to support our full fleet of STEM programs. Some key funding sources include:

Foundation Grants (*pending):

- NHC Endowment Fund: \$21,000 (FY23)
- Landfall Foundation: \$2,000 (FY19), \$4,000 (FY20), \$7,500 (FY21), \$7,500 (FY22)
- Eshelman Foundation: \$7,200 (FY19)
- Women's Impact Network of New Hanover County: \$20,000 (FY22)
- City of Wilmington NC: Rise Together Initiative - \$40,000 (FY20), Capacity Building - \$27,314 (FY22-23)
- New Hanover County Non-agency Grant: \$25,000 (FY22), \$39,085* (FY23)
- United Way Capacity Building Grant: \$58,681* (2023)
- Louise Oriole Burevitch Foundation: \$5,000 (2021-22)

Corporate Sponsorship:

- nCino: \$85,962 (FY19-25)

- Live Oak Bank: \$10,000 (2020), \$10,000 (2023)
- Corning Foundation: \$2,600 (2021-22), \$9,075 (2023)
- Jeff Gordon Chevrolet/Enterprise Holdings: \$5,000 (FY21), \$2,500 (FY22)
- WK Dickson Engineering: \$2,000 (FY22)
- Wilmington Health: \$3,000 (FY21-23)

Faculty & Academic Funding

- Award Term: 07/2014 – 12/2014
 Title: “Consequences of the priming effect for microbial metabolism of terrestrial carbon in the Cape Fear River estuary”
 Agency: UNCW Center for Marine Science 890 Pilot Project
 Amount: \$20,000
 PI’s: Condon, R.H.
- Award Term: 01/01/2011 – 02/28/2012
 Title: “Does the “primer effect” caused by the DWH oil spill result in increased microbial and zooplankton consumption of labile and refractory DOC?”
 Agency: Northern Gulf Institute, Deepwater Horizon Phase II Funding
 Amount: \$104,000
 PI’s: Condon, R.H. and W. Graham (U South Miss.)
- Award Term: 01/2011 – 12/2011
 Title: “Theme 3: Recovery. Task 3. Plankton dynamics in response to the *Deepwater Horizon* oil spill”
 Agency: Marine Environmental Science Consortium-BP Gulf Research Institute
 Amount: \$86,249
 PI’s: W. Graham (U South Miss.), Condon, R.H., A. Ortmann (DISL/U. South AL), A. Moss (Auburn), Y. Lu (U. Alabama)
- Award Term: 10/01/2010 – 09/30/2013
 Title: “Collaborative Research: Plankton Community Composition and Trophic Interactions as Modifiers of Carbon Export in the Sargasso Sea”
 Agency: NSF OCE-1030149
 Amount: \$301,339
 PI’s: Richardson, T. (U. South Carolina), Nauer, S. (Arizona State Univ.) & Condon, R.H.
- Award Term: 06/2010 – 05/2011
 Title: “Understanding ecosystem change within the plankton communities of the northern Gulf of Mexico as a consequence of the *Deepwater Horizon* oil spill: Is there a shift in the classical planktonic food web due to increased microbial activity on the shelf?”
 Agency: NSF-RAPID
 Amount: \$200,000
 PI’s: Graham, W.M. (U South Miss.), Condon, R.H.
- Award Term: 11/2009 – 11/2012
 Title: “Global expansion of jellyfish blooms: Magnitude, causes and consequences”
 Agency: National Center for Ecological Analysis and Synthesis (NCEAS)
 Amount: \$155,700
 PI’s: Condon, R.H., Graham, W.M. (U South Miss.) & Duarte, C.M. (KAUST)

Refereed publications in journals and books

(as of 12 February 2023: 3,517 citations, H-index = 26, i-10 index = 31, see [Google profile](#))

* Denotes lead PI or student project. † Denotes **Young Scientist Academy** product.

1. †* Luo, J.K., **Condon, R.H.**, Stock, C.A., Duarte, C.M., Lucas, C.H., Pitt, K.A. & Cowen, R.K. (2020) Gelatinous zooplankton-mediated carbon flows in the global oceans: a data-driven modeling study. *Glob. Biogeochem. Cycles* 34(9): e2020GB006704
2. †* Treible, L.M. & **Condon, R.H.** (2019) Temperature-driven asexual reproduction and

strobilation in three scyphozoan jellyfish polyps. *J. Exp. Mar. Biol. Ecol.* 520: 151204.

3. † Pitt, K.A., Lucas, C.H., **Condon, R.H.**, Duarte, C.M. & Stewart-Koster, B. (2018) Claims that anthropogenic stressors facilitate jellyfish blooms have been amplified beyond the available evidence: a systematic review. *Front. Mar. Sci.* 5: 451.
4. *Treible, L.M., Pitt, K.A., Klein, S. & **Condon, R.H.** (2018). Elevated $p\text{CO}_2$ enhances reproductive success of *Aurelia aurita* jellyfish polyps under hypoxic conditions. *Marine Ecology Progress Series.* 591: 129-139 (doi: <https://doi.org/10.3354/meps12298>)
5. *Sanz-Martin, M., Pitt, K., **Condon, R.H.**, Lucas, C. H., Novaes de Santana, C., Duarte, C. M. (2016) Flawed citation practices facilitates the unsubstantiated perception of a global trend toward increased jellyfish blooms. *Global Ecol. Biogeogr.* 25: 1039-1049 DOI: 10.1111/geb.12474
6. Pitt, K. A., Budarf, A. C., Browne, J. G., **Condon, R.H.** (2014). *Chapter 4. Bloom and bust: why do blooms of jellyfish collapse?* In: *Jellyfish Blooms* Pitt, K.A. & Lucas, C.H. (eds.) Springer.
7. *Graham, W.M., Gelcich, S., Robinson, K.L., Duarte, C.M., Brotz, L., Purcell, J.E., Madin, L.P., Mianzan, H.W., Sutherland, K.R., Uye, S-I, Pitt, K.A., Lucas, C.H., Bøgeberg, M., Brodeur, R.D., **Condon, R.H.** (2014) Linking human well-being and jellyfish: ecosystem services, impacts, and societal responses. *Front. Ecol. Env.* 12: 515-523
8. Anderson, S. S., Peterson, C. H., Cherr, G., Ambrose, R., Angherra, S., Bay, S., Blum, M. J., **Condon, R.H.**, Dean, T., Graham, W.M., Guzy, M., Hampton, S., Joye, S., Lambrinos, J., Mate, B., Meffert, D., Powers, S., Somasundaran, P., Spies, R., Taylor, C. and Tjeerdema, R. (2014). *Understanding and properly interpreting the 2010 Deepwater Horizon blowout* (vol. 2, pp. 19-57). *Oil Spill Remediation: Colloid Chemistry-Based Principles and Solutions.* doi/10.1002/9781118825662
9. **Condon, R.H.**, Lucas, C.H., Pitt, K.A. & Uye, S-I. (2014) Introduction: Jellyfish blooms and ecological interactions *Mar. Ecol. Prog. Ser.* 510: 109-110
10. *Lucas, C.H., Hollyhead, C.J., **Condon, R.H.**, Duarte, C.M., Robinson, K.L., Graham, W.M. & Pitt, K.A. (2014) Gelatinous biomass in the global ocean. *Global Ecol. Biogeogr.* 23: 701-714 DOI: 10.1111/geb.12169
11. Powers, S.P., Hernandez, F.J., **Condon, R.H.**, Drymon, J.M. & Free, C. (2013) Novel pathways for injury from offshore oil spills: Direct, sublethal and indirect effects of the *Deepwater Horizon* oil spill on *Sargassum* communities. *PLoS ONE* 8(9): e74802
12. Pitt, K.A., Duarte, C.M., Lucas, C.H., Sutherland, K.R., **Condon, R.H.**, Mianzan, H., Purcell, J.E., Robinson, K. and Uye, S-I. (2013). Allometric anomalies of jellyfish are not explained by their low carbon content. *PLoS ONE.* 8(8): e72683
13. **Condon, R.H.**, Duarte, C.M., Pitt, K.A., Robinson, K.L., Lucas, C.H., Sutherland, K.R., Mianzan, H.W., Bøgeberg, M., Purcell, J.E., Decker, M.B., Uye, S-I, Madin, L.P., Brodeur, R.D., Haddock, S.H.D., Malej, A., Parry, G.D., Eriksen, E., Quinones, J., Acha, M., Harvey, M., Arthur, J.M. and Graham, W.M. (2013). Global oscillations foretell recurrent jellyfish blooms. *Proc. Nat. Acad. Sci. U.S.A.* 110: 1000-1005. doi:10.1073/pnas.1210920110
14. *Ortmann, A.C., Anders, J., Shelton, N.L., Moss, A.C. & **Condon, R.H.** (2012). Dispersed oil disrupts microbial pathways in pelagic food webs. *PLoS ONE.* 7: e42548
15. *Duarte, C.M., Pitt, K.A., Lucas, C., Purcell, J.E., Uye, S., Robinson, K.A., Brotz, L., Decker, M.B., Sutherland, K.R., Malej, A., Madin, L.P., Mianzan, H., Gili, J.M., Fuentes, V., Atienza, D., Pages, F., Breitburg, D., Malek, J.C., Graham, W.M. & **Condon, R.H.** (2012). Global ocean sprawl as a Trojan horse for jellyfish blooms. *Frontiers in Ecology and the Environment.* 2012: doi:10.1890/110246
16. *Lebrato, M., Pitt, K.A., Sweetman, A.K., Jones, D.O.B., Cartes, J.E., Oschlies, A., **Condon R.H.** Molinero, J.C., Adler, L., Gaillard, C., Lloris, D. and Billett, D.S.M. (2012). Jelly-falls historic and recent observations: a synthesis to drive future research directions. *Hydrobiologia* doi:10.1007/s10750-012-1046-8
17. * **Condon, R.H.**, Graham, W.M., Duarte, C.M., Pitt, K.A., Lucas, C.H., Haddock, S.H.D., Sutherland, K.R., Robinson, K.L., Dawson, M.N., Decker, M.B., Mills, C.E., Purcell, J.E., Malej,

- A., Mianzan, H.W., Uye, S-I., Gelcich, S. and Madin, L.P. (2012). Questioning the rise of gelatinous zooplankton in the world's oceans. *BioScience*. 62: 160-169
18. Peterson, C.H., Anderson, S.S., Cherr, G.N., Ambrose, R.F., Anghera, S., Bay, S., Blum, M., **Condon, R.H.** Dean, T.A., Graham, W.M., Guzy, M., Hampton, S., Joye, S., Lambrinos, J., Mate, B., Meffert, D., Powers, S.P., Somasundaran, P., Spies, R., Taylor, C.M., Tjeerdema, R. and Adams, E.E. (2012). A tale of two spills: Novel science and policy implications of an emerging new oil spill model. *BioScience*. 62: 461–469.
 19. **Condon, R.H.**, Steinberg, D.K., Del Giorgio, P.A., Bouvier, T.C., Bronk, D.A., Graham, W.M., & Ducklow, H.W. (2011). Jellyfish blooms result in a major microbial respiratory sink of carbon in marine systems. *Proc. Nat. Acad. Sci. U.S.A.*, 108: 10225–10230. doi:10.1073/pnas.1015782108
 20. * Brotz, L., Lebrato, M., Robinson, K. L., Sexton, M., Sweetman, A. K., Pitt, K. and **Condon, R.H.** (2011). Implications of increased carbon supply for the global expansion of jellyfish blooms. *Limnology & Oceanography Bulletin* 20: 38-39.
 21. del Giorgio, P.A., **Condon, R.H.**, Bouvier, T., Longnecker, K., Bouvier, C., Sherr, E.B. & Gasol, J.M. (2011). Coherent patterns in bacterial growth, growth efficiency and leucine respiration and incorporation along a North Pacific inshore- offshore transect. *Limnol. Oceanogr.* 56: 1-16.
 22. Lebrato, M., Pahlow, M., Oschlies, A., Pitt, K. A., Jones, D.O.B., Molinero, J.C., & **Condon, R.H.** (2011). Depth attenuation of organic matter export associated with jelly falls. *Limnol. Oceanogr.* 56: 1917–1928.
 23. * Lucas, C.H., Pitt, K.A., Purcell, J.E., Lebrato, M. & **Condon, R.H.** (2011). What's in a jellyfish? Proximate and elemental composition and biometric relationships for use in biogeochemical studies. *Ecology* 92:1704 (Supplemental material in *Ecological Archives* E092-144)
 24. Graham, W.M., **Condon, R.H.**, Carmichael, R.H. et al. Oil carbon entered the coastal planktonic food web during the Deepwater Horizon oil spill. (2010). *Environ. Res. Letters*. 5: 045301 (6pp)
 25. Ilikchyan, I.N., McKay, R.M.L., Kutovaya, O.A., **Condon, R.H.** & Bullerjahn, G.S. (2010). Seasonal expression of the picocyanobacterial phosphonate transporter gene *phnD* in the Sargasso Sea. *Frontiers in Microbiology*. Dec 2010, 1: Article 135
 26. Lomas, M.W., Steinberg, D.K., Carlson, C.A., Nelson, N.B., **Condon, R.H.** & Bates, N.R. (2010). Multi-year increases in shallow biological carbon export are mitigated by enhance mesopelagic attenuation in the Sargasso Sea. *Biogeoscience*. 7: 57–70.
 27. **Condon, R.H.**, Steinberg, D.K. & Bronk, D.A. (2010). Production of dissolved organic matter and inorganic nutrients by gelatinous zooplankton in the York River estuary, USA. *Journal of Plankton Research*. 32: 153–170.
 28. Steinberg, D.K. & **Condon, R.H.** (2009). Zooplankton of the York River. *Journal of Coastal Research*. SI (57): 66-79.
 29. Pitt, K.A., Welsh, D.T. & **Condon, R.H.** (2009). Influence of jellyfish blooms on nutrient cycling and plankton production. *Hydrobiologia*. 616: 133-149. doi: 10.1007/s10750-008-9584-9
 30. **Condon, R.H.** & Steinberg, D.K. (2008). Development, biological regulation, and fate of ctenophore (*Mnemiopsis leidyi*) blooms in the York River estuary, USA. *Marine Ecology Progress Series*. 369: 153-168. doi: 10.3354/meps07595
 31. Steinberg, D.K. & **Condon, R.H.** (2008). “Zooplankton” chapter. Special report for National Estuarine Research Reserve System (NERRS) publication into flora and fauna of the York River estuary, Virginia, USA.
 32. Pace, M.L., P.A. del Giorgio, D. Fischer, **R.H. Condon** & H. Malcolm. (2004). Estimates of bacterial production using leucine incorporation method are influenced by protein retention of microcentrifuge tubes. *Limnology & Oceanography Methods*. 2: 55-61.
 33. **Condon, R.H.**, Decker, M.B. & Purcell, J.E. (2001). Effects of low dissolved oxygen on survival and asexual reproduction of scyphozoan polyps (*Chrysaora quinquecirrha*). *Hydrobiologia* 451: 89-95
 34. **Condon, R.H.** & Norman, M.D. (1999). Commensal associations between the pelagic amphipod *Themisto australis* and the scyphomedusan *Cyanea capillata*. *Mar. Fresh. Beh. Phys.* 32: 261-267

Theme Sections, Editorials & Other Products

- Fuentes, V.L., Purcell, J.E., **Condon, R.H.**, Lombard, F. & Lucas, C.H. (2018) Jellyfish bloom research: advances and challenges. *Mar. Ecol. Prog. Ser.* 591: 1-302. Note: this theme section represents Proceedings from the 2016 Jellyfish Blooms Symposium held in Barcelona, Spain.
- **Condon RH**, Lucas CH, Duarte CM, Pitt KA, Haddock SHD, Madin LP, Brodeur RD, Sutherland KR, Mianzan HW, Purcell JE, Decker MB, Uye S-I, Malej A, Bogeberg M, and the JeDI Development Team (2014). Jellyfish Database Initiative (JeDI) <http://www.bco-dmo.org/dataset/526852>. DOI: 10.1575/1912/7191
- **Condon, R.H.**, Lucas, C.H., Pitt, K.A. & Uye, S-I (eds.). (2014) Jellyfish blooms and ecological interactions *Mar. Ecol. Prog. Ser.* 510: 107-288. Note: this theme section represents Proceedings from the 2013 Jellyfish Blooms Symposium held in Hiroshima, Japan.
- Duarte, C.M., Pitt, K.A. & **Condon, R.H.** (2012). [Jellyfish populations oscillate synchronously at a global scale](https://theconversation.com). Published online at <https://theconversation.com> on December 31, 2012
- **Condon, R.H.** (2012). ASLO Image Library: A picture tells a thousand words. *Limnology & Oceanography Bulletin.* 21:106-107
- **Condon, R.H.** & Duarte, C.M. (2012) [BP's 4.5 million \\$ fine: the "largest-ever criminal resolution in US history"](https://theconversation.com). Published online at <https://theconversation.com> on November 22, 2012
- **Condon, R.H.** & Duarte, C.M. (2012) [Meagre fines won't stop oil spills, but cooperation could](https://theconversation.com). Published online at <https://theconversation.com> on September 5, 2012

Science Communication

YSA Executive Director Presentations

- 2023 **Condon, R.H.** Chamber Connections Luncheon, Wilmington Chamber of Commerce, Wilmington, NC. "Building communities around science and our youth". (January 23, 2023).
- 2022 **Condon, R.H.** WakeUp Wilmington Breakfast, Wilmington Chamber of Commerce, Wilmington, NC. "Young Scientist Academy: Inspiring young scientists as future leaders in the community". (November 29, 2022).
- 2022 **Condon, R.H.** New Hanover County Commissioners Meeting, City Hall, Wilmington, NC. Invitation from Commissioner Rob Zapple for YSA to present their research on climate change and urban sustainability. (October 17, 2022).
- 2021 **Condon, R.H.** City of Wilmington Council Meeting, Thalian Hall City Chambers, Wilmington, NC. Invitation from Councilman Kevin Spears to present research on climate change, jellyfish blooms, greenspace and nuisance flooding. (October 17, 2021).
<https://www.youtube.com/watch?v=4OIXSULaDpI>
- 2017 **Condon, R.H.** Coastal Estuarine Research Foundation Biennial Conference, CERF, Providence, RI, "Young Scientist Academy: Inspiring young scientists as future stewards of global climate change and ocean health". (November 6, 2017).

YSA Summits

- 2022 Earth Day Summit, Cameron Arts Museum, Wilmington, NC. Youth ambassador presentations and discussion about climate change, water quality, greenspace in Moldova, and heat island index. (April 22, 2022). Presentation links:
- Part 1 - AIR: Climate Change & Mission Sol Weather Balloon Project:
<https://www.youtube.com/watch?v=cnedZdAxFcC>

- Part 2 - LAND & WATER: Sustainability, Greenspace & Water Quality:
<https://www.youtube.com/watch?v=pyulajDHzdI>
- Part 3 - LAND: Moldova Tribute and Chisinau Greenspace:
<https://www.youtube.com/watch?v=zbww-FH6XQQ>

2021 Women's Impact Network of New Hanover County, Children's Museum, Wilmington, NC. Invitation for YSA youth ambassadors to present their research on climate change and urban sustainability. (November, 2021).

2021 Youth CAUSE - Climate Action and Urban Sustainability Emissaries - Initiative Summit, Harrelson Center, Wilmington, NC. Youth ambassador presentations and discussion about climate change, urban sustainability, sea level rise, food deserts, and urban agriculture. (August 12-13, 2021).

Academic Presentations

2017 * Treible, L.M. & **Condon, R.H.** Coastal Estuarine Research Foundation Biennial Conference, CERF, Providence, RI, "Jellyfish blooms in a warming ocean: Temperature-induced asexual reproduction in three scyphozoan jellyfish polyps". (November 7, 2017).

2015 **Condon, R.H.** Old Dominion University, Norfolk, Virginia, "Jellyfish Blooms May Not Be Increasing Globally". (November 17, 2015). **Invited speaker.**

2015 **Condon, R.H.,** Reid-Griffin, A. R., Fallaize, E., Young, B., Davit-Loysen, M., Conrad, C., Giacomelli, L. Coastal Estuarine Research Foundation Biennial Conference, CERF, Portland, Oregon, "Toward Elementary Advancement in Marine Science (TEAMS) Program. (November 7, 2015). **Invited speaker.**

2015 **Condon, R.H.** Ocean Carbon Biogeochemistry Workshop, NSF, Woods Hole Oceanographic Institution, "Revisiting Stommel to Assess Spatiotemporal Scales of Gelatinous Zooplankton & Their Roles in Biogeochemical Cycles". (July 22, 2015). **Invited speaker.**

2014 **Condon, R.H.** VIMS Biological Oceanography Seminar Series, Virginia Institute of Marine Sciences, Gloucester Point, VA "Jellyfish blooms may not be increasing globally. (October, 2014). **Invited speaker.**

2014 **Condon, R.H.** IMS Seminar Series, UNC-CH, Institute of Marine Sciences, Morehead City, NC, "Jellyfish blooms may not be increasing globally". (October 3, 2014). **Invited speaker.**

2014 **Condon, R.H.** UNCW Biology & Marine Biology Seminar Series, "Global oil spills: validating assessments & future consequences for ecosystem functioning" (September 5, 2014). **Invited speaker.**

2014 **Condon, R.H.** Jellyfish blooms may not be increasing globally. **Invited speaker** for Planet Ocean seminar series. Center for Marine Science, UNCW. (May 2014)

2013 **Condon, R.H.,** Duarte, C.M., Pitt, K.A., Lucas, C.H., Arthur, J.M., Decker, M.B., Hollyhead, C.J., Sanz Martin, M. and the NCEAS Global Jellyfish Group. Global jellyfish blooms: Assessing current paradigm, and natural and anthropogenic drivers of long-term jellyfish populations from the 19th century to present. ASLO Annual Conference, New Orleans LA. (Feb 2013) **Invited speaker** for "Zooplankton responses to ecosystem stressors" session

2012 **Condon, R.H.,** Duarte, C.M. and Pitt, K.A. Global jellyfish blooms and oil spills: Perceptions, paradigm and consequences for ecosystem functioning. Atlantic Estuarine Research Society (AERS) Conference, Chincoteague, VA. (Oct, 2012) **Invited speaker.**

2012 **Condon, R.H.** Global Jellyfish Blooms: Magnitude, Expansion and Causes. National Center for Ecological Analysis and Synthesis (NCEAS), Santa Barbara, CA. (Feb, 2012)

2012 **Condon, R.H.** & NCEAS Jellyfish Group Questioning the rise of jellyfish in the world's oceans? The University of Western Australia, Oceans Institute, Perth. (Jan, 2012)

2012 Shelton, N.L., **Condon, R.H.,** Wilson, S.E., Neuer, S., Lomas, M.W., Smith, S.R., Kramer, L., Carassou, L., Richardson, T.L. Contrasting roles of gelatinous and crustacean zooplankton as mediators of carbon pathways in oligotrophic food webs. ASLO Annual Conference, Salt Lake City, UT. (Feb, 2012)

- 2011 Graham, W.M., **Condon, R.H.**, and 8 others. Was there a collapse of lower trophic structure on the northern Gulf Shelf during DWH?. CERF Conference, Daytona Beach, FL (Nov, 2011).
- 2011 **Condon, R.H.** ¿Están aumentando las proliferaciones de medusa a nivel mundial? (Are jellyfish blooms increasing globally?). FBBVA Jellyfish Event, Madrid, Spain. (Sept, 2011).
- 2011 Ortmann, A.C., Metzger, R.C. & **Condon, R.H.** Investigating patterns of growth, grazing and viral lysis of the phytoplankton along a salinity gradient influenced by oil from the *Deepwater Horizon* spill. NGI Conference, Mobile, AL. (May, 2011).
- 2011 Graham, W.M. & **Condon, R.H.** Microbial-zooplankton linkages during *Deepwater Horizon*: a shift to heterotrophy? University of Southern Mississippi, Stennis Space Center, MS. (April, 2011).
- 2010 Graham, W.M., **Condon, R.H.**, Carmichael, R.H., D'Ambra, I., Patterson, H., Linn, L & Hernandez Jr., F. Entry of oil (carbon) into the coastal planktonic food web during the *Deepwater Horizon* spill. AGU Conference, San Francisco, CA. (Dec, 2010).
- 2010 **Condon, R.H.** et al. Exploring the paradigm of a global expansion in jellyfish: Implications for biogeochemical cycles & food webs in a changing ocean. IMBER Workshop, Crete, Greece (Oct, 2010).
- 2009 **Condon, R.H.** et al. The 'jelly pump': Consequences of jellyfish blooms for increased carbon metabolism within the microbial loop. Annual ASLO Conference, Nice, France. (Jan, 2009).
Session co-chair with G. Gorsky & W.M. Graham of "Gelatinous zooplankton blooms" session.
- 2007 **Condon, R.H.** Links between dissolved organic matter excretion by gelatinous zooplankton and bacterial metabolism. Laboratoire d'Océanographie de Villefranche, France. (November, 2007).
- 2007 **Condon, R.H.**, D.K. Steinberg, T. Bouvier & P.A. del Giorgio. Links between dissolved organic matter excretion by gelatinous zooplankton and bacterial metabolism. 2nd International Jellyfish Blooms Symposium, Gold Coast, Australia. (June, 2007). Awarded **Best Student Oral Presentation**
- 2004 **Condon, R.H.** and D.K. Steinberg. Effects of ctenophores on organic and inorganic nutrient cycling in the York River estuary, Virginia, USA. ASLO Summer Meeting, Savannah, USA. (June, 2004). **Session co-chair** with W.M. Graham of "Gelatinous zooplankton blooms" session.

Academic poster presentations (Underlined names signify Condon's students)

- 2017 † Varadarajan, A., Condon, I.E.B., Anderson, S.E., Kolonia, E.E. & **Condon, R.H.** Effects of temperature on asexual budding and strobilation in Atlantic sea nettle jellyfish polyps. CERF Biennial Conference, Providence, RI. (November 2017).
- 2017 † Varadarajan, V., Flynt, C., Condon, I.E.B., Condon, T.J.D., Varadarajan, A., Bostick, C. & **Condon, R.H.** Project deBort: Novel techniques for examining ocean-atmospheric interactions using stratospheric weather balloons. CERF Biennial Conference, Providence, RI. (November 2017).
- 2017 † Condon, I.E.B., Bostick, C., Anderson, S.E., DenHartog, A. & **Condon, R.H.** Potential connections between solar flares and jellyfish beaching events. CERF Biennial Conference, Providence, RI. (November 2017).
- 2016 Luo, J.Y., Condon, R.H. & Cowen R.K. Gelatinous animals facilitate carbon export in the global ocean. ASLO Ocean Sciences Meeting, New Orleans, LA. (February 2016).
- 2015 Dexter, A., Condon, R.H. 29th Tidewater American Fisheries Society Meeting 2015, Tidewater AFS, North Carolina Aquarium Pine Knoll Shores, North Carolina, "Jellyfish Database Initiative (JeDI): Improving estimates of gelatinous zooplankton biomass in the ocean. (March 5, 2015).
- 2014 Siegert, D., Condon, R., Durako, M. J., Whitehead, R. Southeastern Estuarine Research Society Fall Meeting 2014, SEERS, Carolina Beach, NC, "Source-sink dynamics of terrestrial dissolved organic matter (TDOM) in the Cape Fear River estuary. (November 6, 2014).

- 2012 **Condon, R.H.**, Graham, W.M., Brandes, J., Ortmann, A.C., Linn, L.J., Shelton, N.L., Heranadez Jr., F.J. Hydrocarbons as subsidy energy for microbial and food web production in coastal Gulf of Mexico waters. (Feb, 2012)
- 2012 Robinson, K.L., **Condon, R.H.**, Graham, W.M., Duarte, C.M., Decker, M.B., Purcell, J.E., Pitt, K.A., Lucas, C.H., Madin, L.P. and JEDI Development Team. (Feb, 2012) Quantifying global-scale dependencies between jellies and climate forces: an analytical approach using the Jellyfish Database Initiative. ASLO Annual Conference, Salt Lake City, UT.
- 2011 **Condon, R.H.**, Graham, W.M., Brandes, J., Kiene, R., Linn, L.J., Ortmann, A.C. & Shelton, N. Hydrocarbons as subsidy energy for food web production in coastal Gulf of Mexico waters. NGI Conference, Mobile, AL. (May, 2011)
- 2011 Shelton, N.L., **Condon, R.H.**, Graham, W.M. & Linn, L.J. Source-sink dynamics of oil-derived chromophoric dissolved organic matter in coastal Gulf of Mexico waters. ASLO Ocean Sciences Meeting, San Juan, PR. (Feb, 2011).
- 2010 Graham, W.M., and **Condon, R.H.** Oil carbon entered the coastal microbial & planktonic food web during the *Deepwater Horizon* oil spill. IMBER Workshop. (Oct, 2010).
- 2008 **Condon, R.H.**, Steinberg, D.K., del Giorgio, P.A. & Bouvier, T.C., Bronk, D.A. & Ducklow, H.W. The ‘jelly pump’: Consequences of jellyfish blooms for increased carbon metabolism within the microbial loop. Ocean Carbon & Biogeochemistry Workshop, Woods Hole (July, 2008)
- 2007 **Condon, R.H.**, M.D. Norman & K. Bayha. (2007). Nematocysts and morphometrics of lion’s mane jellyfishes, genus *Cyanea*, supporting validity of *C. nozakii* and *C. annaskala* in Australian waters. 2nd International Jellyfish Blooms Symposium, Gold Coast, Australia. (June, 2007).
- 2003 Tozzi, S., **R.H. Condon**, E.S. Darrow, A.C. Spivak, L.H. Brasseur & L.W. Haas. (2003). Characterization and environmental regulation of the spring bloom in the York River estuary, Virginia, USA. 17th Biennial Conference of the Estuarine Research Federation (ERF), Seattle, WA. (14-18 September, 2003).
- 2000 **Condon, R.H.**, M.B. Decker & J.E. Purcell. (2000). Effects of hypoxia on sea nettle polyps, *Chrysaora quinquecirrha*. 1st International Conference into Jellyfish Blooms, Alabama, USA. (January, 2000).

Teaching Experience

(Teaching syllabi available upon request)

K-12:

YSA (see www.youngscientistacademy.org for more details):

Developed and taught the following courses and programs for upper elementary and middle school youth. These programs serve 120-140 youth each week, 75% were girls and 85% were Black, Latinx and refugee youth.

- *Code Niñas* and *Code Boys* - Computer coding & technology experiences for upper elementary and middle school boys and girls
- *Afterschool Science Explorers Program* - hands on science experience introducing underserved youth to the process of science
- *Youth Ambassadors Research Program* - invitation only program where youth learn how to use science as a problem solving tool. Research themes include climate change, urban sustainability, public health, atmospheric and marine science, clean water, and impacts of fast fashion.
- *Global Ambassadors Program* - science experiences and career opportunities for refugee youth, including Afghanistan, Ukrainian, and Syrian youth.
- *Sidewalk Science* - community outreach program taking science and technology to neighborhoods and communities, over 1000 public participants annually
- *Serie de Ciencias Para Latinx Youth* - Spanish Science Series
- *Virtual Science Experiences* - virtual Zoom lessons conducted during Covid-19

Graduate:

UNCW:

- Biological Oceanography (BIO 564) – Lecture and lab, 3 and 1 credits. 10-15 students per semester
- Synthesis in Climate Change & Oceanography (BIO 601), 2 credits. 5-10 students per semester
- Oceanographic and Environmental Science Research (BIO 601), 2 credits, 5 students.

BIOS:

- Biological Oceanography module, POGO Center of Excellence program.

VIMS

- Teaching assistant for first year Chemical, Physical, Biological and Geological Oceanography classes (VIMS MS 501A–D). Presented lectures on methods used in microbial ecology, zooplankton ecology, and topics in biological oceanography to graduate students
- Conducted pre-exam review sessions for first year students. Responsible for grading exams and homework assignments.

Undergraduate:

UNCW

- Marine Biology (BIO 362) – lecture and lab, 4 credits. 80-100 students per semester

DISL:

- Introduction to Oceanography – lecture and lab, 4 credits. 20-25 students per semester

BIOS

- Marine Invertebrate Zoology, 5 credits. 20-25 students.
- Marine Biology & Oceanographic Research (6 credits) conducted through Roger Williams University and University of Rhode Island.
- Seminars to REU students on jellyfish blooms, experimental design and statistical analyses

Current and Previous College-level Students (* indicates female, minority or military student)

Graduate Primary Advisor: *UNCW:* L. Treible* (Ph.D, 2014 – 2017), A. Al-Otaibi* (MSc, 2015-2016). *BIOS:* K. Suzuki, O. Shatova*, R. Ayala, N. Joshi & S. Kidawi* (POGO program).

Graduate Committee member: *UNCW:* S. Simmons* (M.Sc.), J. Reneker* (MSc), S. Davis* (M.Sc), S. Hammaker* (M.Sc). *ECU:* N. Sassano* (M.Sc). *DISL:* N. Ortell Cumbaa* (Ph.D), J. Jones* (MSc). *U. Miami:* J. Luo* (Ph.D), *VIMS:* J. Stone (Ph.D).

Honors Student Chair: *UNCW:* N. Hinojosa*, A. Woodruff*, D. Siegert*, S. Lea*, A. Harrington*, M. Redick*, B. Young*, E. Meyer*, R. Lucas*, A. Kuhn*

Directed Independent Study Advisor: *UNCW:* C. Matysek, E. Kolonia*, K. Roberson, M. Gerkin*, K. Allen, A. Cooke*, N. Paxton, C. Emery*, C. Conrad*, M. Davitt-Loysen*, E. Fallaize*, R. Wysor*, K. Bumgardner*, A. Dexter*, D. Bush*, L. Crews*

REU & Interns *UNCW:* C. Ingram*. *DISL:* A. Johns* (VCU), E. McParland* (USC), J. Ivory* (Humboldt), M. Bogeberg*, N. Shelton* (Kansas), S. Cecil* (Coastal Carolina), J. Burchfield (Intern). *BIOS:* A. Hendrix* (Scripps College), K. Davis* (NCSU), A. Hermann* (Princeton).

Professional Development & Qualifications, Community Service & Awards

2022 YSA Awarded Harrelson Center Partner of the Year, Wilmington, NC.

2021 YSA Awarded Partner of the Year by Voyage, Wilmington, NC.

2018 Scientific Education Research Network Coast (SciREN Coast) Lesson Plan Workshop. Duke Marine Lab, Beaufort, NC.

2017 Scientific Education Research Network (SciREN) Lesson Plan Workshop. NC Museum of

Natural Sciences, Raleigh NC.

2016 NC Transportation UAS Government Operator Permit (Permit No. G0000123)

2015 Governors' South Atlantic Alliance, Task Force Member.

2015 UNCW Institutional Research Board Certified (IRB). Also participated in two pedagogical workshops at UNCW in 2015 entitled "Get students to focus on learning instead of grades: Metacognition is the key" and "How to get your students thinking". Allows for pedagogical evaluation of teaching.

2014 UNCW Broader Impacts (BIOMES) Committee Chair, 2014-15.

2013 Served on several UNCW committees including the UNCW Offshore Energy, Undergraduate Assessment, Graduate Assessment, Neurobiology Search and CMS Outdoor committees.

2013 Contributing Editor, *Marine Ecology Progress Series*, 2013 – 2018

2012 VIMS Best Publication by a PhD Student (for 2011 PNAS paper, PhD research), April 2012

2011 Member of the DISL Estuarium Advisory Committee, 2011-12

2011 Former Chair of the ASLO Image Library Committee 2011-14

1995 NASDS Open-water SCUBA Certification

Museum Related Experience:

- ***Research Assistant & Volunteer, Museum Victoria, Australia***
1994 – 1997: Over 350 hours work for the Invertebrate Zoology, Ichthyology and Crustacean departments. Collaborated with collection managers and museum employees in the curation of the cnidarian, cephalopod, crustacean, fish and polychaete worm collections. Interpreted museum exhibits to the public. Participated in invasive fish sampling program. Dissection and electron microscopy of cephalopod radulae for scientific publication.
- ***Undergraduate Honors Research, University of Melbourne***
Thesis research examined the taxonomy and systematics of Lion's Mane jellyfishes, genus *Cyanea*, from Australian coastal waters. Research included scientific illustration, microscopy, literature search of historical literature on jellyfishes, and examination of museum collections.

Journal and Panel Service:

- Reviewed manuscripts for many internationally recognized peer-review journals, including *Aquatic Microbial Ecology*, *Proc. Nat. Acad. Sci.*, *Frontiers in Microbiology*, *Limnology and Oceanography*, *Journal of Sea Research*, *Deep Sea Research*, *Marine Ecology Progress Series*, *FEMS Microbiological Ecology*, *Global Change Biology*, *Journal of Plankton Research*, *Journal of Experimental Marine Biology & Ecology*, and *Hydrobiologia*. Also reviewed research proposals for North Carolina Sea Grant, NSF and National Geographic Society.
- Participant in Gulf of Mexico Research Initiative (GoMRI) IV, GoMRI V and NSF Polar Review panels. Reviewed over 50 proposals and was lead reviewer in 20-30 proposals.

Computer Experience:

- ***Statistical and Database packages:*** Python (intermediate level), Python modules (e.g., Pandas, Matplotlib, Open CV, Numpy, urllib, Basemap), App development software such as Django, HTML, SQLite, Javascript (beginner level)
- ***Word Processing & Graphics packages:*** Microsoft Office (Word, Excel, Powerpoint), Adobe Photoshop & Acrobat, Sigma Plot, ArcGIS, SeaView.

Media & Public Outreach

- ***YSA media & community outreach:***

Youth CAUSE Initiative:

- Youth ambassadors talking about their community research projects on the news: <https://www.wect.com/2021/07/27/young-scientists-use-research-tackle-wilmington-problems/>
- Video summary of Youth CAUSE Initiative activities: <https://www.youtube.com/watch?v=t7o9rB3LwcY>

Short Films:

- Chisinau Greenspace, Moldova: <https://www.youtube.com/watch?v=8S5Fa7zrOA0>
- YSA Field Science Ambassadors - Water Quality in the Cape Fear Region: <https://www.youtube.com/watch?v=nILYN2Dx3Z0>

Code Niñas:

- Girls talking about their Code Niñas experiences program on the local news <https://www.wect.com/2020/07/06/young-scientist-academy-launches-summer-coding-program-local-girls/>
- 'Rewriting the Code': Documentary about the first coding program at YSA during the early stages of the pandemic: <https://www.youtube.com/watch?v=rFrPnFT7E8s>

Weather Balloon Project:

- Mission deBort 1 & 3: <https://www.youtube.com/watch?v=oRtNiVmKA6s> and <https://www.youtube.com/watch?v=Ddu07qO6qho>
- Mission Sol 2: <https://www.youtube.com/watch?v=ui0wwvVKwmg>

General:

- Article in Wilma Magazine about our mission to support women in STEM: <https://www.wilmamag.com/science-connections/>
- ***Toward Elementary Advancement in Marine Science (TEAMS) Program***
Conducted regular visits to early childhood and Title 1 elementary schools in Mobile County, AL, New Hanover County, NC and Bermuda. Worked with teachers to develop lesson plans and conduct experiments in the classroom, in addition to holding Skype video conference calls with children while on research cruises.
- Coordinated ***Oceans ROCK***, Dobo Hall, UNCW. Involved presentations from graduate students and elementary students from Bellamy Elementary School. (August – Nov 2014).
- ***Science Olympiad*** coach for Dynamic Planet and Ecology teams from the Wilmington Academy of Arts and Science. (October 2015 - April 2016). Team finished 4th overall in North Carolina.
- ***Academic science media interviews:*** Conducted over 100 media interviews for local, domestic and international print and television media outlets concerning jellyfish blooms (stemming from the PNAS paper and NCEAS Global Jellyfish Project), the *Deepwater Horizon* oil spill and general environmental issues.
- ***Marine Science Day, Elderhostel & other outreach programs***
Demonstrated research, conducted tours, and gave presentations for a variety of public outreach programs at BIOS, DISL, VIMS and UNCW.

References

Available upon request.