

ABIGAIL E. CAHILL, Ph.D.

Associate Professor
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EDUCATION AND TRAINING

- 2014-16 Postdoctoral Researcher, Université Aix-Marseille, Station Marine d'Endoume
Mediterranean Institute of Biodiversity and Marine and Continental Ecology
(IMBE)
Supervisor: Anne Chenuil
- 2014 Ph.D., Ecology and Evolution, Stony Brook University
Advisor: Jeffrey S. Levinton
- 2007 B.A., Colgate University, Magna Cum Laude
Majors: Biology (high honors) and French

PEER-REVIEWED PUBLICATIONS (* contributed equally; † undergraduate mentee)

Manuscripts published or in press:

- 2022 Aurelle, D., Thomas, S., Bally, M., Bondeau, A., Boudouresque, C.-F. **Cahill, A.E.**, Carlotti, F., Chenuil, A., Cramer, W., Davi, H., De Jode, A., Ereskovsky, A., Farnet da Ailva, A.-M., Fernandez, C., Gauquelin, T., Mirleau, P., Monnet, A.-C., Prevosto, B., Rossi, V., Sartoretto, S., Van Wambeke, F., and Fady, B. Biodiversity, climate change and adaptation in the Mediterranean. *Ecosphere*, 13: e3915.
- 2021 Breen, C.J. †, and **A.E. Cahill**. Population growth of microcrustaceans in water from habitats with differing salinities. *PeerJ*, 9: e12378.
- 2021 **Cahill, A.E.**, C.J. Breen †, I. Corona Avila †, C. Cortes †, R. Hernandez †, S. Jost †, B. Ruger †, R.M.H. Stander †, B. Tran †. The relationship between species richness and abiotic stress in the invertebrates of a rare inland salt marsh. *Ecology and Evolution*, 11: 14351-14365.
- 2020 Pearman, J.K., G. Chust, E. Aylagas, E. Villarino, J.R. Watson, A. Chenuil, A. Borja, **A.E. Cahill**, L. Carugati, R. Danovaro, R. David, X. Irigoien, S. Moncheva, N. Rodríguez-Ezpeleta, M.C. Uyerra, and S. Carvalho. Pan-regional marine benthic cryptobiome biodiversity patterns revealed by metabarcoding Autonomous Reef Monitoring Structures. *Molecular Ecology*, 29: 4882-4897.
Data associated with this manuscript have been published at the Sequence Read Archive at NCBI (PRJNA557002).
- 2019 Chenuil, A, **A.E. Cahill**, N. Delemontey, E. Du Salliant du Luc, and H. Fanton. Problems and questions posed by cryptic species. A framework to guide future studies. In: Casetta E, Marques da Silva J, Vecchi D. (eds) *From Assessing to Conserving Biodiversity*. History, Philosophy and Theory of the Life Sciences, vol 24. Springer, Cham, 77-106.
- 2019 De Jode A., R David, A. Haguenaer, **A.E. Cahill**, Z. Erga, D. Guillemain, S. Sartoretto, C. Rocher, M. Selva, L. Le Gall, J.-P. Féral, and A. Chenuil. From

- seascape ecology to population genomics and back. Spatial and ecological differentiation among cryptic species of the red algae *Lithophyllum stictiforme/L. cabiochiaie*, main bioconstructors of coralligenous habitats. *Molecular Phylogenetics and Evolution*, 137: 104-113.
- 2019 El Ayari, T., N.T. El Menif, B. Hamer, **A.E. Cahill**, and N. Bierne. The hidden side of a major marine biogeographic boundary: a wide mosaic hybrid zone at the Atlantic-Mediterranean divide reveals the complex interaction between natural and genetic barriers in mussels. *Heredity*, 122: 770-784.
- 2019 David R, M.C. Uyarra, S. Carvalho, H. Anlauf, A. Borja, **A.E. Cahill**, L. Carugati, R. Danavaro, A. De Jode, J.-P. Feral, D. Guillemain, M. Lo Martire, L. Thierry de Ville d'Avray, J.K. Pearman, and A. Chenuil. Lessons from photo analyses of Autonomous Reef Monitoring Structures as tools to detect (bio-) geographical, spatial, and environmental effects. *Marine Pollution Bulletin*, 141: 420-429.
- 2018 **Cahill, A.E.**, J.K. Pearman, A. Borja, L. Carugati, S. Carvalho, R. Danovaro, S. Dashfield, R. David, J.-P. Féral, S. Olenin, A. Siaulys, P. Somerfield, A. Trayanova, M.C. Uyarra, and A. Chenuil. A comparative analysis of metabarcoding and morphology-based identification of benthic communities across different regional seas. *Ecology and Evolution*, 8: 8908-8920.
Data associated with this manuscript have been published at the Sequence Read Archive at NCBI (SRP093498).
- 2017 **Cahill, A.E.**, DeJode, A., Dubois, S., Bouzaza, Z., Aurelle, D., Boissin, E., Chabrol, O., David, R., Egea, E., Ledoux, J.-B., Mériqot, B., Weber, A. A.-T., and Chenuil, A. A multispecies approach reveals hot-spots and cold-spots of diversity and connectivity in invertebrate species with contrasting dispersal modes. *Molecular Ecology*, 26: 6563-6577.
Data associated with this manuscript have been published at DataDryad (<https://doi.org/10.5061/dryad.dv4mg>) and GenBank at NCBI (Accession numbers MG063882–MG064453).
- 2016 Danovaro R.*, L. Carugati*, M. Berzano, **A.E. Cahill**, S. Carvalho, A. Chenuil, C. Corinaldesi, S. Cristina, R. David, A. Dell'Anno, N. Dzhenbekova, E. Garcès, J.M. Gasol, P. Goela, J.-P. Féral, I. Ferrera, R. Forster, A.A. Kurekin, E. Rastelli, V. Marinova, P. Miller, S. Moncheva, A. Newton, J.K. Pearman, S. Pitois, A. Reñé, N. Rodríguez-Ezpeleta, V. Saggiomo, S. Simis, K. Stefanova, C. Wilson, M. Lo Martire, S. Greco, S. Cochrane, and A. Borja. Implementing and innovating marine monitoring approaches for assessing marine environmental status. *Frontiers in Marine Science*, 3:213.
- 2016 **Cahill, A.E.**, and S.A. Koury. Larval settlement and metamorphosis in a marine gastropod in response to multiple conspecific cues. *PeerJ*, e2295.
- 2016 **Cahill, A.E.**, and J.S. Levinton. Genetic differentiation and lower genetic diversity at the northern range edge of two species with different dispersal modes. *Molecular Ecology*, 25: 515-526.
Data associated with this manuscript have been published at DataDryad (<http://dx.doi.org/10.5061/dryad.ct5q3>) and the Sequence Read Archive at NCBI (SRP058970).

- 2015 **Cahill, A.E.**, A. Juman ‡, A. Pellman-Isaacs ‡, and W.T. Bruno ‡. Physical and chemical interactions with conspecifics mediate sex change in a protandrous gastropod, *Crepidula fornicata*. *Biological Bulletin*, 229: 276-281.
- 2015 **Cahill, A.E.** Adult density affects larval settlement in the calyptraeid gastropod *Crepidula fornicata*. *Journal of Experimental Marine Biology and Ecology*, 465: 77-82.
- 2014 **Cahill, A.E.**, and F. Viard. Genetic structure in native and non-native populations of the direct-developing gastropod *Crepidula convexa*. *Marine Biology*, 161: 2433-2443.
- 2014 **Cahill, A.E.***, M.E. Aiello-Lammens*, M.C. Fisher-Reid, X. Hua, C.J. Karanewsky, H.Y. Ryu, G.C. Sbeglia, F. Spagnolo, J.B. Waldron, and J.J. Wiens. Causes of warm-edge range limits: systematic review, proximate factors, and implications for climate change. *Journal of Biogeography*, 41: 429-442.
This paper was highlighted by the journal in 2021 as one of the most-cited papers led by women published from 2009-2020.
- 2013 **Cahill, A.E.***, M.E. Aiello-Lammens*, M.C. Fisher-Reid, X. Hua, C.J. Karanewsky, H.Y. Ryu, G.C. Sbeglia, F. Spagnolo, J.B. Waldron, O. Warsi, and J.J. Wiens. How does climate change cause extinction? *Proceedings of the Royal Society B*, 280: 20121890.
- 2012 Hoch, J.M., and **A.E. Cahill**. Variation in size at sex-change among natural populations of the protandrous hermaphrodite, *Crepidula fornicata* (Gastropoda, Calyptraeidae). *Marine Biology*, 159: 897-905.

Manuscripts submitted, in review, or in revision:

Cahill, A.E., E. Meglecz, and A. Chenuil. Biological traits, year of description and biogeography predict presence of cryptic species. Submitted to *Systematic Biology*.

Stander, R.M.H. ‡, and **A.E. Cahill**. The ecological impacts of road salt and potentially safer alternative deicers on freshwater invertebrates. In revision for *Environmental Pollution*.

GRANTS AND FELLOWSHIPS

- 2022 Faculty Development Grant, Albion College
- 2021 Faculty Development Grant, Albion College
- 2020 Faculty Development Grant, Albion College
- 2019 Faculty Development Grant, Albion College
- 2018 Faculty Development Grant, Albion College
- 2017 Faculty Development Grant, Albion College
- 2012 National Science Foundation Doctoral Dissertation Improvement Grant
- 2012 Conchologists of America Grants to Malacology
- 2011 Clench/Turner Special Award, Conchologists of America
- 2011 Melbourne R. Carriker Student Research Award, American Malacological Society
- 2011 Grant in Aid of Research, Society for Integrative and Comparative Biology
- 2010 Graduate Dean's Fellowship, Stony Brook University
- 2010 Lerner Gray Fellowship, American Museum of Natural History
- 2009 National Science Foundation International Research Experience for Students

- 2009 Melbourne R. Carriker Student Research Award, American Malacological Society
 2009 Graduate Student Fellowship, Friday Harbor Laboratories, Friday Harbor, WA
 2008 National Science Foundation Graduate Research Fellowship

TEACHING EXPERIENCE

As Instructor

- 2019 Briton Path, Albion College (Bridge class for at-risk first-year students)
 2016 – Invertebrate Zoology, Albion College
 Ecology, Evolution, and Biodiversity, Albion College
 Marine Biology, Albion College
 Ecological Genetics, Albion College
 Fundamentals of Genetics (R-based lab component), Albion College
 Fundamentals of Environmental Studies, Albion College
 2014 Evolution, Stony Brook University (online version)
 2013 Statistics and Data Analysis: A Conceptual Approach, Stony Brook University

As Teaching Assistant

- 2012 Invertebrate Zoology, Stony Brook University
 2011, 13, 14 Marine Ecology, Stony Brook University
 2007, 08, 10 Fundamentals of Scientific Inquiry in the Biological Sciences I & II, Stony Brook University

Mentoring

Undergraduate research mentees

Albion College

- Chris Breen (2018-20)
 Irene Corona Avila (2019-21)
 Cesar Cortes (2017-19)
 Katie Ferrero (2019)
 Hattie Folsom (2021)
 Jess Garcia-Lopez (2020-22)
 Rosemary Hernandez (2018-22)
 Kaley Holmer (2020)
 Saige Jost (2018-22)
 Brian Lomeli-Garcia (2021-)
 Alyvia Martinez (2021-)
 Patrick Mayo (2020-21)
 Miles Newman (2021-)
 Marianna Rice (2018)
 Breh Ruger (2019-)
 Rachel Stander (2017-21)
 Mark Tran (2019-)

Stony Brook University

- Khosnur Alam (2011)
 William Bruno (2013)
 Priyanga Jeyasri (2011)
 Alia Juman (2012-13)
 Aaron Pellman-Isaacs (2013)
 Thomas Ralicky (2012-13)
 Kaitlyn Smith (2012)
 John Tay (2013)
 Annamaria Viazzo (2011)
 Annastacia Woytash (2011-12)

Thesis committees, internships, directed studies

- 2021-2022 Thesis director, Jess Garcia-Lopez (Macroinvertebrates as Environmental Bioindicators in South Central Michigan and Urban West Coast)
Thesis reader, Saige Jost (Evaluating the storm export of dissolved organic carbon from an urban environment to the Kalamazoo River, Albion, MI)
Directed study supervisor, Jess Garcia-Lopez (Wetland spp diversity)
Directed study supervisor, Hattie Folsom (Farmer survey and HABs)
- 2020-2021 Thesis director, Rachel Stander (The ecological impacts of road salt and potentially safer alternative deicers on freshwater invertebrates)
Thesis reader, Angela Meyers (The Representation of Taxa and Sensory Modalities in Contemporary Mate-Choice Literature and Implications for Future Research and Conservation Efforts), Alexis Wilkerson (Seasonal Comparison of Bacterial Occurrences and their Hydrolytic Enzymatic Activities Among Different Soil Types using Combinations of Standard Microbiological and Molecular Approaches)
Directed study supervisor, Patrick Mayo (Aphid genetic diversity)
- 2020 Directed study supervisor, Rachel Stander (Scientific writing)
Directed study supervisor, Kaley Holmer (Ecology of invasive aphids)
Thesis reader: Hunter Penrod (Literature Review of Possible Nootropic Effects on Learning and Memory on *Lumbricus terrestris*)
- 2019-2020 Thesis director: Chris Breen (Survivability and Reproduction in *Daphnia*, Copepods, and Ostracods Under Changing Salinities)
Thesis reader: Logan Bohlinger (Aesthetic Harvest: Reestablishing an Aesthetic Basis for Environmentalism Utilizing a Cognitive Scientific Approach), Margaret Whitlock (The Navigator: Sailing the Caribbean and Charting My Path)
- 2019 Directed study supervisor, Chris Breen (Salt marsh invertebrates)
Directed study supervisor, Katie Ferrero (Investigating aphid “superclone” status)
Internship supervisor, Natalia Krepostman (Shedd Aquarium)
- 2017-18 Thesis reader: Megan Reilly (Identifying allelic patterns in equine muscle types using microsatellite genetic markers)
- 2016-17 Thesis reader: Elise Anderson (Testing the impact of herbivory on secondary metabolites), Julia Armitage (Vernal pool conservation and its effects on amphibian populations)

Other miscellaneous mentoring activities

- 2008-13 Writing-to-win program mentor: helping URM graduate students prepare grant applications. Successfully coached one student to an NSF Graduate Research Fellowship and one to a GRF honorable mention.
Head instructor starting in 2010.

TEACHING RESOURCES

- 2020 **Cahill, A.E.** Hardy-Weinberg Equilibrium: a swirl resource. Make Teaching with R in Undergraduate Biology Less Excruciating 2020, QUBES Educational Resources. [doi:10.25334/ZQSM-5S44](https://doi.org/10.25334/ZQSM-5S44)

ABSTRACTS (‡ undergraduate mentee; § presenting author when not listed first)

- 2022 **Cahill, A.E.**, Meglecz, E., and Chenuil, A. Determinants of the prevalence of cryptic species in marine animals. Oral presentation, Society for Integrative and Comparative Biology, Phoenix, Arizona.
- 2022 Garcia-Lopez, J. ‡, and **A.E. Cahill**. Macroinvertebrates as benthic bioindicators of the Kalamazoo River and *Zizania aquatica*. Poster presentation, Society for Integrative and Comparative Biology, Phoenix, Arizona.
- 2022 Tran, B.V. ‡, Chenuil, A., and **A.E. Cahill**. Diversity and distribution of marine cryptic species across the world's oceans. Poster presentation, Society for Integrative and Comparative Biology, Phoenix, Arizona.
- 2021 **Cahill, A.E.**, Rollinson, E.J., Corona Avila, I. ‡, Ferrero, K. ‡, Holmer, K. ‡, Mayo, P. ‡, Deecher, E., Billman, B., and Siryani, N. Abundance and genetic variation in populations of the introduced milkweed aphid in eastern North America. Oral presentation, Society for Integrative and Comparative Biology, virtual.
- 2021 Stander, R.M.H. ‡, and **A.E. Cahill**. Effects of road salt and its alternatives on freshwater invertebrates. Oral presentation, Society for Integrative and Comparative Biology, virtual.
- 2020 **Cahill, A.E.**, Breen, C. ‡, Stander, R. ‡, Jost, S. ‡, and Hernandez, R. ‡. Seasonal differences dominate spatial ones in an inland salt marsh community. Poster presentation, Society for Integrative and Comparative Biology, Austin, Texas.
- 2020 Breen, C.J. ‡, and **A.E. Cahill**. Survivability and reproduction in *Daphnia*, copepods, and ostracods under changing salinities. Poster presentation, Society for Integrative and Comparative Biology, Austin, Texas.
- 2019 Stander, R. ‡, and **A.E. Cahill**. Sodium chloride pollution and deicer alternatives' effects on aquatic life in freshwater environments. Poster presentation, Mid-Michigan Symposium for Undergraduate Research Experiences, Lansing, Michigan.
- 2019 Breen, C. ‡, and **A.E. Cahill**. Measuring survivability and reproduction in *Daphnia* and ostracods under changing salinities. Poster presentation, Mid-Michigan Symposium for Undergraduate Research Experiences, Lansing, Michigan.
- 2019 **Cahill, A.E.**, C. Breen ‡, C. Cortes ‡, R. Stander ‡. A salt marsh in Michigan? Characterization of invertebrates in a rare habitat type using molecular and morphological methods. Oral presentation, Society for Integrative and Comparative Biology, Tampa, Florida.
- 2018 **Cahill, A.E.**, and Anne Chenuil. Cryptic species in the marine environment: patterns and processes. Oral presentation, Marine Evolution, Strömstad (Sweden).
- 2018 **Cahill, A.E.**, and A. Chenuil. Cryptic species in the marine environment: a review of the evidence and the way forward. Poster presentation, Society for Integrative and Comparative Biology, San Francisco, California.
- 2017 **Cahill, A.E.**, J.K. Pearman, A. Borja, L. Carugati, S. Carvalho, R. Danovaro, S. Dashfield, R. David, J.-P. Féral, S. Olenin, A. Siaulys, P. Somerfield, A. Trayanova, M.C. Uyarra, and A. Chenuil. Community composition of hard-bottom macroinvertebrates in seven regional seas as measured using traditional and metabarcoding methods. Society for Integrative and Comparative Biology.
- 2016 **Cahill, A.E.**, J.K. Pearman, A. Borja, L. Carugati, S. Carvalho, R. Danovaro, S. Dashfield, R. David, J.-P. Féral, S. Olenin, A. Siaulys, P. Somerfield, A.

- Trayanova, M.C. Uyarra, and A. Chenuil §. Comparing community composition in artificial sampling units from the Red Sea to the Baltic Sea : morphology and metabarcoding complementarity. 5th annual meeting of the European project DEVELOPMENT Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status (DEVOTES).
- 2016 **Cahill, A.E.**, A. Borja, L. Carugati, S. Carvalho, R. Danovaro, S. Dashfield, R. David, J.-P. Féral, S. Olenin, J.K. Pearman, A. Siaulys, P. Somerfield, A. Trayanova, M.C. Uyarra, and A. Chenuil §. Community composition of macroinvertebrates in the Mediterranean Sea and other regional seas. Poster presentation, Mediterranean Science Commission, Kiel, Germany.
- 2016 **Cahill, A. E.**, Aurelle, D., Boissin, E., Bouzaza, Z., DeJode, A., Egea, E., Erga, Z., David, R., Dubois, S., Ledoux, J.-B., Mérigot, B., Weber, A., and Chenuil, A. Determinants of connectivity in the marine environment: a multispecies approach. Society for Integrative and Comparative Biology.
- 2015 **Cahill, A.E.** Variation in community composition in the Bay of Marseille as measured with Artificial Substrate Units (ASUs). 4th annual meeting of the European project DEVELOPMENT Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status (DEVOTES).
- 2015 **Cahill, A. E.**, Aurelle, D., Boissin, E., DeJode, A., Egea, E., Erga, Z., David, R., Dubois, S., Ledoux, J.-B., Mérigot, B., Weber, A., and Chenuil, A. Determinants of connectivity in the marine environment: a multispecies approach. 5th annual meeting of the working group Marine French Connection (MarCo).
- 2015 **Cahill, A. E.**, Aurelle, D., Boissin, E., DeJode, A., Egea, E., Erga, Z., David, R., Dubois, S., Ledoux, J.-B., Mérigot, B., Weber, A., and Chenuil, A. Determinants of connectivity in the marine environment: a multispecies approach. European Society of Evolutionary Biology (poster).
- 2014 **Cahill, A.E.** Physical and chemical interactions mediate sex change in a protandrous gastropod. *Evolution*.
- 2013 **Cahill, A.E.** Population differentiation in *Crepidula convexa*: genotypes, phenotypes, and latitude. *Evolution* (poster).
- 2013 **Cahill, A.E.**, O'Donnell, K.L.§, and O'Neal, M. Vodcasts as a weekly preparation for introductory labs in undergraduate biology: a comparison of student performance in a phylogenetics lab. *Evolution* (poster).
- 2013 **Cahill, A.E.** Metamorphosis of *Crepidula* larvae in response to varying conspecific densities and settlement cue concentrations. Society for Integrative and Comparative Biology.
- 2012 **Cahill, A.E.** Local adaptation to thermal regime in early life stages of calyptraeid gastropods with different developmental modes. *Evolution* (poster).
- 2012 **Cahill, A.E.** Response of *Crepidula* larvae to temperature as a function of geography and developmental mode: existence of local adaptation. Society for Integrative and Comparative Biology.
- 2011 **Cahill, A.E.** Response of *Crepidula* larvae to temperature as a function of geography and developmental mode: existence of local adaptation. Workshop: The Effects of Climate Change on Vulnerable Life Traits of Aquatic Ectotherms: Towards an Integrated Approach.

- 2011 **Cahill, A.E.** Response of *Crepidula* larvae to temperature as a function of geography and developmental mode: existence of local adaptation. Workshop: Adaptation to Climate Change from a Spatial Perspective (poster).
- 2011 **Cahill, A.E.,** K.L. O'Donnell, and M.H. O'Neal III. Vodcasts as a weekly preparation for inquiry labs in undergraduate biology. National Meeting of the Society for the Advancement of Biology Education Research (poster).
- 2011 **Cahill, A.E.,** Viard, F. Population genetic structure in native and non-native populations of a direct-developing gastropod. Benthic Ecology Meeting.
- 2011 **Cahill, A.E.** The role of adult density in larval settlement of *Crepidula fornicata* and *C. plana*. Society for Integrative and Comparative Biology (poster).
- 2010 **Cahill, A.E.,** S. Crickenberger., R.N. Crim, and R.L. Selden. Dispersal limitation and post-settlement survival of an introduced ascidian (*Botrylloides violaceus*) in San Juan Islands, WA. Society for Integrative and Comparative Biology.
- 2009 **Cahill, A.E.** Propagule pressure: the link between species introductions and neutral ecological theory. Benthic Ecology Meeting.
- 2007 **Cahill, A.** Variations in response to calcium addition in New York State. National Conference on Undergraduate Research.
- 2005 **Cahill, A.,** F. Frey, R. Brereton, M. Bukoski, and Z. Zimmer. Maintenance of floral-color variation in *Claytonia virginica*. I. The role of pollinator-mediated selection estimated through female reproductive success and pollinator visitation rates. Northeast Ecology and Evolution Conference (poster).

INVITED LECTURES

- 2021 Freshwater habitats, but make them salty: Invertebrate communities in inland salt marshes. Biology Department, Colgate University.
- 2019 A salt marsh in Michigan? Characterization of invertebrates in a rare habitat type using molecular and morphological methods. Biology Department, Beloit College.
- 2019 A salt marsh in Michigan? Characterization of invertebrates in a rare habitat type using molecular and morphological methods. Biology Department, East Stroudsburg University.
- 2019 A salt marsh in Michigan? Characterization of invertebrates in a rare habitat type using molecular and morphological methods. Biology Department, Colgate University.
- 2017 From Long Island Sound to the Mediterranean Sea: understanding dispersal and connectivity in marine environments. Annis Water Resources Institute, Grand Valley State University.
- 2016 Understanding dispersal and connectivity in marine invertebrates. Biology Department, Salisbury University.
- 2015 Understanding dispersal and connectivity in marine invertebrates. Biology Department, Albion College.
- 2015 Understanding how climate change affects species distributions. Institut des Sciences d'Evolution Montpellier, Université Montpellier 2.
- 2014 The role of developmental mode and population-level processes in shifting distributions: a study of calyptraeid gastropods. Wilson Lab, Brooklyn College.
- 2013 Chemical ecology in a marine system: larval settlement and sex determination in *Crepidula fornicata*. Department of Biology, Muhlenberg College.

INTERNAL STUDENT PRESENTATIONS (‡ undergraduate mentee)

- 2022 Besant Z. ‡, E.A. Blackmon ‡, A. Martinez ‡, J. Rodriguez-Salas ‡, B. Ruger ‡, D. Shepard ‡, S. Stovall ‡, S. Swingewood ‡, M. Wood ‡, and **A.E. Cahill**. Identifying suitable habitat patches for monarch butterflies and milkweed on Albion's campus. Elkin Isaac Research Symposium (poster).
- 2022 Besant Z. ‡, E.A. Blackmon ‡, A. Martinez ‡, J. Rodriguez-Salas ‡, B. Ruger ‡, D. Shepard ‡, S. Stovall ‡, S. Swingewood ‡, M. Wood ‡, and **A.E. Cahill**. Waiter, what's in this sushi? Using DNA barcoding to identify fish species in Albion's restaurants. Elkin Isaac Research Symposium (poster).
- 2022 Garcia Lopez, J.‡, and **A.E. Cahill**. Macroinvertebrates as environmental bioindicators in south central Michigan and urban west coast. Elkin Isaac Research Symposium.
- 2022 Folsom, H.‡, and **A.E. Cahill**. Farmer surveys examining fertilizer use and knowledge of HABs. Elkin Isaac Research Symposium (poster).
- 2022 Lomeli-Garcia, B.‡, and **A.E. Cahill**. Regional genetic diversity of aphid "superclone." Elkin Isaac Research Symposium (poster).
- 2022 Martinez, A. ‡, M. Newman ‡, and **A.E. Cahill**. Monitoring invertebrate biodiversity inside and outside of rice beds. Elkin Isaac Research Symposium (poster).
- 2021 Corona Avila, I.‡, and **A.E. Cahill**. Investigating genetic diversity of oleander aphids in the United States. Elkin Isaac Research Symposium.
- 2021 Hernandez, R.‡, and **A.E. Cahill**. Phylogenetics and distribution of *Culicoides* larvae in a Michigan inland salt marsh. Elkin Isaac Research Symposium.
- 2021 Garcia Lopez, J.‡, and **A.E. Cahill**. Environmental bioindicators in the Kalamazoo River and wild rice. Elkin Isaac Research Symposium (poster).
- 2021 Jost, S.‡, and **A.E. Cahill**. Invertebrate species morphology and analysis throughout different environments. Elkin Isaac Research Symposium.
- 2021 Mayo, P.‡, and **A.E. Cahill**. The ecology and impact of a genetic "superclone." Elkin Isaac Research Symposium.
- 2021 Ruger, B.‡, Tran, B.‡, Hernandez, R.‡, Jost, S.‡, and **A.E. Cahill**. Macroinvertebrate species diversity in the Maple River salt marsh. Elkin Isaac Research Symposium (poster).
- 2021 Stander, R.‡, and **A.E. Cahill**. Effects of road salt and its alternatives on freshwater invertebrates. Elkin Isaac Research Symposium.
- 2019 Breen, C.‡, and **A.E. Cahill**. Ecological investigation of salt marsh invertebrates using metabarcoding. Albion College Biology Department Research Symposium and Elkin Isaac Research Symposium.
- 2019 Cortes, C.‡, Stander, R.‡, and **A.E. Cahill**. Salinity's effects on species diversity in Maple River State Game Area. Albion College Biology Department Research Symposium and Elkin Isaac Research Symposium.
- 2019 Cortes, C.‡, Hernandez, R.‡, Jost, S.‡, Stander, R.‡, and **A.E. Cahill**. Invertebrate community composition in an inland salt marsh. Albion College Biology Department Research Symposium and Elkin Isaac Research Symposium (poster).
- 2019 Ferrero, K.‡, and **A.E. Cahill**. Investigating aphid "superclone" status. Albion College Biology Department Research Symposium and Elkin Isaac Research Symposium.

- 2018 Breen C. ‡, Cortes C. ‡, Rice M. ‡, Stander R. ‡, **A.E. Cahill**. Invertebrate communities in wetland habitats. Albion College Biology Department Research Symposium (poster).
- 2014 Bruno, W.T. ‡, Pellman-Isaacs, A. ‡, **Cahill, A.E.**, and Levinton, J.S. An analysis of sex change in *Crepidula fornicata* in different social environments. Undergraduate Research and Creative Activities Research Celebration, Stony Brook University (poster).
- 2013 Juman, A.‡, **Cahill, A.E.**, and Levinton, J.S. Physical and chemical interactions affect sex transformation in a protandrous marine snail. Undergraduate Research and Creative Activities Research Celebration, Stony Brook University (poster).
- 2013 Ralicky, T.‡, **Cahill, A.E.**, and Levinton, J.S. Effect of diet on *Crepidula* longevity. Undergraduate Research and Creative Activities Research Celebration, Stony Brook University (poster).
- 2012 Woytash, S.‡, **Cahill, A.E.**, and Levinton, J.S. How *Crepidula fornicata* settlement patterns differ in response to local adult densities. Undergraduate Research and Creative Activities Research Celebration, Stony Brook University (poster).

HONORS AND AWARDS

- 2022 Arthur Anderson New Teacher of the Year Award, Albion College
- 2013 Outstanding Service Award, Dept. of Ecology & Evolution, Stony Brook University
- 2013 Top Graduate Student Award, Stony Brook University
- 2007 Phi Beta Kappa membership
- 2007 Christopher J. Oberheim Award for research in biology, Colgate University
- 2007 Charles A. Choquette Award for excellence in French, Colgate University
- 2005 Beta Beta Beta biological honor society
- 2003 Alumni Memorial Scholar, Colgate University

PROFESSIONAL MEMBERSHIPS

- 2011- Society for the Study of Evolution
- 2009- Society for Integrative and Comparative Biology
- 2008- Ecological Society of America

PROFESSIONAL SERVICE

Panelist for the National Science Foundation (2017, 2018, 2019, 2020)

Ad-hoc reviewer for the National Science Foundation, the Institut français de recherche pour l'exploitation de la mer

Reviewer for *Biological Bulletin*, *Biological Journal of the Linnean Society*, *Biology Letters*, *BMC Ecology and Evolution*, *BMC Evolutionary Biology*, *Climatic Change*, *Conservation Biology*, *Current Zoology*, *Ecological Entomology*, *Ecological Indicators*, *Ecology and Evolution*, *Environmental DNA*, *Global Change Biology*, *Helgoland Marine Research*, *Heredity*, *Hydrobiologia*, *Integrative and Comparative Biology*, *International Journal of Molecular Science*, *Invertebrate Biology*, *Journal of Biogeography*, *Journal of Experimental Marine Biology and Ecology*, *Journal of Oceanology and Limnology*, *Journal of Shellfish Research*, *Marine Biodiversity Records*, *Marine Biology Research*, *Marine Pollution Bulletin*, *Molecular*

Ecology, Nautilus, Oxford University Press, PLoS ONE, Proceedings of the Royal Society B, Revista de Biología Marina y Oceanografía, Scientific Data, Scientific Reports, Zoological Journal of the Linnean Society

Society-level service (Society for Integrative and Comparative Biology)

- 2021 - **Chair**, Hyman Memorial Scholarship Committee to support student research, Division of Invertebrate Zoology
2018-19 **Organizer**, Libbie Hyman Auction to support student research, Division of Invertebrate Zoology
2011-14 **Student representative**, Division of Ecology and Evolution

College-level service (Albion)

- 2022 **Co-Organizer**, The Role of Higher Education in Nurturing Sustainable Communities Conference
2021 - **Chair**, Committee on Student Learning Outcomes (Member since 2019)
Co-Advisor, Mortarboard
2020 - **Representative** of Albion College on the Great Lakes College Association Academic Council
Faculty Director, Global Crossroads grant from GLCA
Secretary/Treasurer, Phi Beta Kappa (served as **Vice President** in the 2018-19 academic year and as **President** in 2019-20)
2017 - **Member**, Internal Review Board at Albion College
Member, Library committee at Albion College
Member, Sister City Committee in Albion and at Albion College
Member, Women, Gender, & Sexuality Studies at Albion College

Department-level service (Albion College Biology; selected)

- 2017-2020 **Creator & Organizer**, seminar series, Biology Department at Albion College

Department-level service (prior to Albion; selected)

- 2015-16 **Organizer**, journal club of the group Interactions, Diversité, Evolution et Adaptation (IDEA) at the IMBE.
2012-13 **Student representative** on the search committee for an outside department chair, Department of Ecology and Evolution, Stony Brook University.