

Daniel Isaac Speiser

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EDUCATION

2010 Ph.D, Biology
Duke University, Durham, NC (advisor: Sönke Johnsen)

2003 B.A, Biology
Carleton College, Northfield, MN

PROFESSIONAL EXPERIENCE

2014-present **Assistant Professor**
Department of Biological Sciences, Univ. of South Carolina, Columbia, SC, USA

Spring 2014 **Assistant Research Specialist**
Marine Science Institute, Univ. of California, Santa Barbara, CA, USA

2011-13 **Post-doctoral Fellow**
Marine Science Institute, Univ. of California, Santa Barbara, CA, USA

Fall 2010 **Instructor**
Marine, Earth, and Atmospheric Sciences, NC State Univ., Raleigh, NC, USA

FUNDED SCIENTIFIC RESEARCH PROPOSALS

2016-17 ASPIRE Proposal # 13010-16-41857 "Neurobiology of a dispersed visual system: How do chitons (Mollusca; Polyplacophora) process the images gathered by their hundreds of eyes?" **PI: Daniel Speiser (University of South Carolina)**, Co-PI: Fabienne Poulain (USC); **\$15,000 awarded to PI Speiser at USC.**

2015-19 NSF IOS Award #1457148 "Collaborative Research: Evolutionary Origins of Chiton Shell-eyes: Integrating Structure, Function, and Gene Expression within a Phylogenetic Context." **PI: Daniel Speiser (University of South Carolina)**, Co-PI Todd Oakley (UC Santa Barbara). Amounts awarded: **\$454,624 to PI Speiser at USC**, \$162,969 to Co-PI Oakley at UCSB.

2014-18 NSF DEB Award #1354831 "RUI: Collaborative Research: Timing and Molecular Origins of Recently Evolved Chiton Shell-Eyes: Phylogenomics of Chitonina." **PI: Doug Eernisse (CSU-Fullerton)**, Co-PI: Todd Oakley (UC Santa Barbara), **Co-PI: Daniel Speiser (University of South Carolina)**. ~\$350,000 awarded to Co-PIs Oakley and Speiser, ~\$750,000 awarded in total.

FUNDING AWARDS AND SCHOLARSHIPS

2007	Sigma Xi Grant-in-Aid of Research: \$400
2007	Student Travel Award for the 2007 World Congress of Malacology: \$1, 000
2006-09	National Science Foundation Graduate Student Research Fellowship: \$120,000
2005	Student Support for a summer course at Friday Harbor Marine Lab: \$1,500
2004-07	James B. Duke Fellowship, Biology Department, Duke University: \$20,000

SERVICE AND TEACHING AWARDS

2020	Winner of a Distinguished Undergraduate Research Mentor Award
2019	Nominated for a Michael J. Mungo Undergraduate Teaching Award.
2019	Nominated for 2020 Distinguished Undergraduate Research Mentor Award.
2019	Nominated for a 2020 Governor's Award: Young Researcher for Excellence in Scientific Research.
2019	Winner of a USC Breakthrough Star award.
2018	Nominated for a Distinguished Undergraduate Research Mentor Award.
2016	Winner of a Two Thumbs Up Award at USC (4/15/16).
2016	Nominated for a Distinguished Undergraduate Research Mentor Award.

PUBLICATIONS

Published: 28 papers (as of 15 April 2020).

- 2020 Chappell, D.R, and **D.I. Speiser**. Visual Ecology: Now you see, now you don't. *Current Biology* 30(2): R71-R73.
- 2019 Kingston, A.C.N, R.L. Lucia, L.T. Havens, T.W. Cronin, and **D.I. Speiser**. Vision in the snapping shrimp *Alpheus heterochaelis*. *Journal of Experimental Biology* 221 (21). DOI: 10.1242/jeb.209015
- 2019 Harris, O.K, A.C.N. Kingston, C.S. Wolfe, S. Ghoshroy, S. Johnsen, and **D.I. Speiser**. Core-shell nanospheres behind the blue eyes of the bay scallop *Argopecten irradians*. *Journal of the Royal Society Interface* 16: 20190383. DOI: 10.1098/rsif.2019.0383
- 2019 Miller, H.V, A.C.N. Kingston, Y.L. Gagnon, and **D.I. Speiser**. The mirror-based eyes of scallops demonstrate a light-evoked pupillary response. *Current Biology* 29(9): R313-R314. DOI: 10.1016/j.cub.2019.03.053
- 2019 Juarez, B.H, **D.I. Speiser**, and T.H. Oakley. Context-dependent evolution of ostracod morphology along the ecogeographical gradient of ocean depth. *Evolution* 73(6): 1213-1225. DOI:10.1111/evo.13748
- 2019 Kingston, A.C.N, J.D. Sigwart, D.R. Chappell, and **D.I. Speiser**. Monster or multiplacophoran: A teratological specimen of the chiton *Acanthopleura granulata* (Mollusca: Polyplacophora) with a valve split into independent and symmetrical halves. *Acta Zoologica*. DOI: 10.1111/azo.12289

- 2018 Kingston, A.C.N, D.R. Chappell, and **D.I. Speiser**. Evidence for spatial vision in *Chiton tuberculatus*, a chiton with eyespots. *Journal of Experimental Biology* 221(19). DOI: 10.1242/jeb.183632
- 2017 Kingston, A.C.N, D.R. Chappell, H.V. Miller, S.J. Lee, and **D.I. Speiser**. Expression of G Proteins in the Eyes and Parietovisceral Ganglion of the Bay Scallop *Argopecten irradians*. *The Biological Bulletin* 233(1): 83-95. DOI: 10.1086/694448
- 2017 Ramirez, M.D, A.N. Pairett, M.S. Pankey, J.M. Serb, **D.I. Speiser**, A.J. Swafford, and T.H. Oakley. The Last Common Ancestor of Most Bilaterian Animals Possessed at Least Nine Opsins. *Genome Biology and Evolution* 8(12): 3640-3652. DOI: 10.1093/gbe/evw248
- 2017 Williams, S. T, A.E. Lockyer, P. Dyal, T. Nakano, C.K. Churchill, and **D.I. Speiser**. Colorful seashells: Identification of haem pathway genes associated with the synthesis of porphyrin shell color in marine snails. *Ecology and Evolution*, 7(23): 10379-10397. DOI:10.1002/ece3.3552
- 2016 **Speiser, D.I**, Y.L. Gagnon, R.K. Chhetri, A.L. Oldenburg, and S. Johnsen. Examining the Effects of Chromatic Aberration, Object Distance, and Eye Shape on Image-Formation in the Mirror-Based Eyes of the Bay Scallop *Argopecten irradians*. *Integrative and Comparative Biology* 56(5): 796-808. DOI: 10.1093/icb/icw099
- 2016 **Speiser, D.I**, and L.A. Wilkins. Neurobiology and Behaviour of the Scallop. In book: *Scallops: Biology, Ecology, Aquaculture, and Fisheries* 3rd Edition, eds. S.E. Shumway and G.J. Parsons. Elsevier Science, pp. 219-251.
- 2016 Williams, S.T, S. Ito, K. Wakamatsu, T. Goral, N.P. Edwards, R. A. Wogelius, T. Henkel, L.F.C. de Oliveira, L.F. Maia, S. Strekopytov, T. Jeffries, **D.I. Speiser**, and J.T. Marsden. Identification of Shell Colour Pigments in Marine Snails *Clanculus pharaonius* and *C. margaritarius* (Trochoidea; Gastropoda). *PLoS ONE* 11(7): e0156664. DOI: 10.1371/journal.pone.0156664
- 2015 Li, L, M.J. Connors, M. Kolle, G.T. England, **D.I. Speiser**, X. Xiao, J. Aizenberg, and C. Ortiz. Multifunctionality of chiton biomineralized armor with an integrated visual system. *Science* 350(6263): 952-956. DOI: 10.1126/science.aad1246
- 2015 Stahl, B.A, J.B. Gross, **D.I. Speiser**, T.H. Oakley, N.H. Patel, D.B. Gould, and M.E. Protas. A Transcriptomic Analysis of Cave, Surface, and Hybrid Isopod Crustaceans of the Species *Asellus aquaticus*. *PLoS ONE* 10(10): e0140484. DOI: 10.1371/journal.pone.0140484
- 2015 Oakley, T.H. and **D.I. Speiser**. How Complexity Originates: The Evolution of Animal Eyes. *Annual Review of Ecology, Evolution, and Systematics* 46: 237-260. DOI: 10.1146/annurev-ecolsys-110512-135907
- 2015 Battelle, B.A., K.E. Kempler, S.R. Saraf, C.E. Marten, D.R. Dugger, **D.I. Speiser**, and T.H. Oakley. Opsins in *Limulus* eyes: characterization of three visible light-sensitive opsins

- unique to and co-expressed in median eye photoreceptors and a peropsin/RGR that is expressed in all eyes. *Journal of Experimental Biology* 218: 466-479.
DOI: 10.1242/jeb.116087.
- 2014 **Speiser, D.I**, M.S. Pankey, A.K. Zaharoff, B.A Battelle, H.D. Bracken-Grissom, J.W. Breinholt, S.M. Bybee, T.W. Cronin, A. Garm, A.R. Lindgren, N.H. Patel, M.L. Porter, M.E. Protas, A.S. Rivera, J.M. Serb, K.S. Zigler, K.A. Crandall, and T.H.Oakley. Using phylogenetically-informed annotation (PIA) to search for light-interacting genes in transcriptomes from non-model organisms. *BMC Bioinformatics* 15: 350.
DOI: 10.1186/s12859-014-0350-x.
- 2014 **Speiser, D.I**, D.G. DeMartini, and T.H. Oakley. The shell-eyes of the chiton *Acanthopleura granulata* (Mollusca, Polyplacophora) use pheomelanin as a screening pigment. *Journal of Natural History* 48: 2899-2911.
DOI: 10.1080/00222933.2014.959572.
- 2014 Gagnon, Y.L, **D.I. Speiser**, and S. Johnsen. Simplifying numerical ray-tracing for characterisation of optical systems. *Applied Optics* 53: 4784-4790.
DOI: 10.1364/AO.53.004784.
- 2013 Brandley, N.C, **D.I. Speiser**, and S. Johnsen. Eavesdropping on visual secrets. *Evolutionary Ecology* 27: 1045-1068. DOI: 10.1007/s10682-013-9656-9.
- 2013 Porter, M.L, **D.I. Speiser**, A.K. Zaharoff, R.L. Caldwell, T.W. Cronin and T.H. Oakley. The evolution of complexity in the visual systems of stomatopods: Insights from transcriptomics. *Integrative and Comparative Biology* 53: 39-49.
DOI: 10.1093/icb/ict060.
- 2013 **Speiser, D.I**, R.I. Lampe, V.R. Lovdahl, B. Carrillo-Zazueta, A.S. Rivera and T.H. Oakley. Evasion of predators contributes to the maintenance of male eyes in dimorphic *Euphilomedes* ostracods (Crustacea). *Integrative and Comparative Biology* 53: 78-88.
DOI: 10.1093/icb/ict025.
- 2011 Ramirez, M.D, **D.I. Speiser**, M.S. Pankey, and T.H. Oakley. Understanding the dermal light sense in the context of integrative photoreceptor cell biology. *Visual Neuroscience* 28: 265-279. DOI: 10.1017/S0952523811000150.
- 2011 **Speiser, D.I**, D. Eernisse, and S. Johnsen. A chiton uses aragonite lenses to form images. *Current Biology* 21: 665-670. DOI: 10.1016/j.cub.2011.03.033.
- 2011 **Speiser, D.I**, E.R. Loew, and S. Johnsen. Spectral sensitivity of the concave mirror eyes of scallops: Potential influences of habitat, self-screening and longitudinal chromatic aberration. *Journal of Experimental Biology* 214: 422-431.
DOI: 10.1242/jeb.048108.
- 2008 **Speiser, D.I**, and S. Johnsen. Comparative morphology of the concave mirror eyes of scallops (Pectinoidea). *American Malacological Bulletin* 26: 27-34.
DOI: 10.4003/006.026.0204.

2008 **Speiser, D.I.** and S. Johnsen. Scallops visually respond to the presence and speed of virtual particles. *Journal of Experimental Biology* 211: 2066-2070. DOI: 10.1242/jeb.017038.

SOCIETY PRESENTATIONS (AS FIRST AUTHOR AFTER 2010)

2020 Society for Integrative and Comparative Biology meeting – Austin, TX, USA
2019 World Congress of Malacology meeting – Pacific Grove, CA, USA (Aug. 11-16, **invited**)
2019 International Conference on Invertebrate Vision – Backaskög, Sweden (Aug. 5-12)
2019 Society for Integrative and Comparative Biology meeting – Tampa, FL, USA
2018 Southeast Regional SICB meeting, Clemson, SC, USA
2018 International Conference of Neuroethology – Brisbane, Au (**symposium organizer**)
2018 Society for Integrative and Comparative Biology meeting – San Francisco, CA, USA
2017 National Shellfish Association meeting – Knoxville, TN, USA (**invited**)
2017 Society for Integrative and Comparative Biology meeting – New Orleans, USA (**invited**)
2016 Southeast Regional SICB meeting, Durham, NC, USA
2016 World Congress of Malacology meeting – Penang, Malaysia (**invited**)
2016 American Malacological Society Annual Meeting – Ensenada, Mexico (**invited**)
2016 Society for Integrative and Comparative Biology meeting – Portland, OR, USA (**invited**)
2015 Society for Integrative and Comparative Biology meeting – West Palm Beach, FL, USA
2014 Southeast Regional SICB meeting, Chapel Hill, NC, USA
2014 Society for Integrative and Comparative Biology meeting – Austin, TX, USA
2013 International Conference on Invertebrate Vision – Backaskög, Sweden
2013 World Congress of Malacology meeting – Azores, Portugal (**invited**)
2013 Society for Integrative and Comparative Biology meeting – San Francisco, CA, USA
2012 Society for Integrative and Comparative Biology meeting – Charleston, SC, USA
2011 Western Society of Malacology annual meeting – La Paz, Mexico
2011 Society for Integrative and Comparative Biology annual meeting – SLC, UT, USA
2010 Society for the Study of Evolution annual meeting – Portland, OR, USA
2010 Society for Integrative and Comparative Biology annual meeting – Seattle, WA, USA

INVITED WORKSHOPS

2017 21st International Pectinid Workshop – Portland, Maine
2015 20th International Pectinid Workshop – Galway City, Ireland
2014 Workshop on Distributed Sensing, Actuation, and Control for Bio-inspired Soft Robotics; University of Maryland, College Park, MD, USA.
2013 Emergent Design in Biological and Bioinspired Materials: Beyond the Rule of Mixtures; MIT Institute for Soldier Nanotechnologies, Boston, MA.

INVITED SEMINARS

- 2019 Seminar for the Department of Natural Sciences, University of South Carolina Beaufort, Bluffton SC, USA (8 November 2019). Invited by Assistant Professor Jena Chojnowski.
- 2019 Seminar for the Virginia Institute of Marine Science (VIMS) Eastern Shore Lab, Wachapreague, VA, USA (3 April 2019). Invited by Director Richard Snyder.
- 2018 Seminar for the Department of Invertebrate Zoology, Smithsonian National Museum of Natural History, Washington D.C., USA (2 May 2018). Invited by Research Zoologist Karen Osborn.
- 2018 Department of Biology seminar series, University of Maryland, College Park, MD, USA (30 April 2018). Invited by Associate Professor Alexa Bely.
- 2018 Hobcaw Research Symposium, Baruch Institute of Coastal Ecology and Forest Science, Georgetown, SC, USA (9 February 2018).
- 2017 Ecology, Evolution, and Organismal Biology seminar series, Iowa State University, Ames, IA (14 November 2017). Invited by Associate Professor Jeanne Serb.
- 2017 Department of Biology and Geology seminar series, University of South Carolina Aiken, Aiken, SC, USA (3 November 2017). Invited by Dr. Kelly Gibson.
- 2017 Population Biology Seminar Series, Duke University, Durham, NC, USA (21 September 2017). Invited by Julia Notar.
- 2017 Fort Johnson Marine Science Seminar Series, Fort Johnson, Charleston, SC, USA (15 September 2017). Invited by Dr. Peter Kingsley-Smith.
- 2017 Symposium on Molluscan Colour and Vision, Natural History Museum, London, England (27 April 2017). Invited by Dr. Susan Williams.
- 2017 Biology Department Seminar, Brigham Young University, Provo, UT, USA (12 April 2017). Invited by Professor Seth Bybee.
- 2016 Evolutionary Morphology Seminar Series, University of Chicago, Chicago, IL, USA (17 November 2016). Invited by Professor David Jablonski.
- 2016 Department of Biological Sciences, University of Alabama, AL, USA (14 October 2016). Invited by Assistant Professor Kevin Kocot.
- 2016 Oregon Institute of Marine Biology, Univ. of Oregon, Charleston, OR, USA (27 May 2016). Invited by Assistant Professor George von Dassow.
- 2016 Department of Biology, Dalhousie University, Halifax, Nova Scotia, Canada (10 March 2016). Invited by Postdoctoral Fellow Isabelle Tremblay.
- 2015 Whitney Laboratory for Marine Bioscience, University of Florida, Marineland, FL, USA (11 December 2015). Invited by Professor Mark Q. Martindale.
- 2015 Marine Sciences Program, University of South Carolina, Columbia, SC, USA (27 March 2015). Invited by Assistant Professor Howie Scher.

- 2015 School of Medicine, Univ. of South Carolina, Columbia, SC, USA (16 March 2015). Invited by Professor Janet Fisher.
- 2015 Department of Biology, Carleton College, Northfield, MN, USA (9 March 2015). Invited by Professor Mark McKone.
- 2013 Department of Biological Science, California State Univ., Fullerton, CA, USA. Invited by Professor Doug Eernisse.
- 2011 Evolution, Ecology, and Behavior Seminar, Univ. of Texas, Austin, TX, USA. Invited by Drs. Robin Hopkins and David Des Marais.

PROFESSIONAL SERVICE

Peer reviews of manuscripts (44 in total) have been provided for the following scientific journals:

- 2020 Current Biology.
- 2019 Current Biology; EvoDevo; Journal of Experimental Biology (4X); Marine Biology.
- 2018 Comparative Biochemistry and Physiology - Part A: Molecular & Integrative Physiology; Hydrobiologia; Integrative and Comparative Biology; Journal of Molluscan Studies; Journal of Shellfish Research.
- 2017 Biological Bulletin; BMC Biology; BMC Genomics; Hydrobiologia; Integrative and Comparative Biology; Journal of Experimental Biology (2X); Journal of Experimental Zoology Part B; Proceedings of the Royal Society B: Biological Sciences; Science.
- 2016 BMC Evolutionary Biology (2X); JEZ Part B: Molecular and Developmental Evolution; Journal of Molluscan Studies; Marine Biodiversity; Vision Research.
- 2015 BMC Evolutionary Biology; EvoDevo; ICES Journal of Marine Science; Zoologischer Anzeiger; Journal of Molluscan Studies; Marine Biology; Zoomorphology.
- 2014 BMC Evolutionary Biology; Chinese Journal of Oceanology and Limnology; Journal of Experimental Marine Biology and Ecology; Journal of Natural History; Journal of Shellfish Research.
- 2010-13 Acta Zoologica; Am. Malacological Bulletin; Molecular Biology and Evolution (2X).

Peer reviews of research proposals have been provided for the following scientific organizations:

- 2019 Austrian Science Fund (external mail reviewer).
- 2018 Human Frontier Science Program (external mail reviewer); Icelandic Research Fund (external mail reviewer).
- 2017 National Science Foundation Division of Integrative and Organismal Biology (Ad hoc); South Carolina IDeA Networks of Biomedical Research Excellence (SC INBRE).
- 2016 Biotechnology and Biological Sciences Research Council (BBSRC); Natural Environment Research Council of the UK (NERC); NSF Division of Environmental Biology (Ad hoc); NSF Division of Integrative and Organismal Biology (Ad hoc).

TEACHING EXPERIENCE

Spring 2020	Instructor, University of South Carolina, BIOL 635 Neurophysiology (Lecture/Seminar/Lab, 12 students).
Fall 2019	Instructor, University of South Carolina, BIOL 543 Comparative Physiology (Lecture, 35 students).
Spring 2019	Instructor, University of South Carolina, BIOL 635 Neurophysiology (Lecture/Seminar/Lab, 12 students).
Fall 2018	Instructor, University of South Carolina, BIOL 543 Comparative Physiology (Lecture, 45 students).
Spring 2018	Instructor, University of South Carolina, BIOL 635 Neurophysiology (Lecture/Seminar/Lab, 12 students).
Fall 2017	Instructor, University of South Carolina, BIOL 543 Comparative Physiology (Lecture, 57 students).
Spring 2017	Instructor, University of South Carolina, BIOL 635 Neurobiology (Lecture/Seminar/Lab, 12 students).
Fall 2016	Instructor, University of South Carolina, BIOL 543 Comparative Physiology (Lecture, 72 students).
Spring 2016	Instructor, University of South Carolina, BIOL 635 Neurobiology (Lecture/Seminar/Lab, 12 students).
Fall 2015	Instructor, University of South Carolina, BIOL 543 Comparative Physiology (Lecture, 66 students).
Spring 2015	Instructor, University of South Carolina, BIOL 543 Comparative Physiology (Lecture, 83 students).
Summer 2013	Instructor, Univ. of Calif. Santa Barbara, EEMB 194 Seminar: Visual Ecology .
Spring 2013	Reader, Univ. of Calif. Santa Barbara, EEMB 102 Macroevolution .
Fall 2012	Co-Instructor, Univ. of Calif. Santa Barbara, EEMB 112 Invertebrate Zoology .
Fall 2010	Instructor, NC State University, MEA 200 Introduction to Oceanography .
Spring 2006, '10	Teaching Assistant, Duke University, Principles of Animal Physiology .
Summer 2002, '03	Rhetoric Assistant, Carleton College Summer Writing Program.

POSTDOCTORAL MENTEES AT THE UNIVERSITY OF SOUTH CAROLINA

Dr. Alex Kingston	Fall 2015-present
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GRADUATE MENTEES AT THE UNIVERSITY OF SOUTH CAROLINA

Nicholas Steichmann (PhD)	Starting Fall 2019	
Daniel Chappell (PhD)	Fall 2015 - present	
Natalie Sanchez (MS)	Fall 2016 – Fall 2018	Graduated Fall '18
Jamie Clark (MS)	Fall 2017 – Fall 2018	Graduated Fall '18

UNDERGRADUATE MENTEES AT THE UNIVERSITY OF SOUTH CAROLINA

Loann Koch ('22 Marine Science)	2019-present	
Tyler Horan ('22 Biology)	2019-present	Magellan Award winner (2020)
Michael Areheart ('20 Biology)	2019-present	
Rebecca Lucia ('20 Biology)	2018-present	Magellan Award winner (2019)
Alex Siegfried ('20 Biochemistry)	2017-present	Magellan Award winner (2020)
Grace Lady ('21 Biology)	2019	
Lauren Kunselman ('19 Biology)	2018-2019	Magellan Award winner (2018)
Courtney Rulison ('19 Biology)	2017-2018	
Olivia Harris ('18 Biology)	2015-2018	Magellan Award winner (2017)
Taylor Hollingsworth ('18 Biology)	2017-2018	Magellan Award winner (2017)
Jamie Clark ('17 Biology)	2015-2017	Magellan Award winner (2016)
Hayley Miller ('17, Biology)	2015-17	Magellan Award winner (2015)
Luke Havens ('16, Biology)	2015-16	Magellan Award winner (2015)
Caitlin Wolfe ('15, Biology)	2015	

STUDENT COMMITTEES AT THE UNIVERSITY OF SOUTH CAROLINA (current)

Taylor Carter (PhD student, in progress, Ely Lab, Dept. of Biology).

Lauren Faulk (MS student, Stone Lab, Dept. of Biology).

Nicole Fipps (MS student, Boggs Lab, Dept. of Biology).

Eilea Knotts (PhD student, Pinckney Lab, Dept. of Biology).

Kristiaan Merritt (PhD student, Richardson Lab, Dept. of Biology).

Lindsey Schwartz (PhD student, Hilbish Lab, Dept. of Biology).

Ojaswee Shrestha (MEERM student, Boggs Lab, Dept. of Biology).

Habeeb al-Sudani (PhD student, Quattro Lab, Dept. of Biology).

Megan Wesley (MS student, Quattro Lab, Dept. of Biology).

STUDENT COMMITTEES AT OTHER INSTITUTIONS (current and former)

Luke Havens (PhD student, in progress, Lohmann Lab, UNC Chapel Hill, USA).

John Kirwan (PhD student, graduated, Nilsson Lab, Lund University, Sweden).

Julia Notar (PhD student, in progress, Johnsen Lab, Duke University, USA).

Dalton Smedley (PhD student, in progress, Serb Lab, Iowa State University, USA).

Rebecca Varney (PhD student, in progress, Kocot Lab, University of Alabama, USA).

SERVICE ACTIVITIES AT USC

On-going service activities

2018-present	Future Hires Committee , Department of Biological Sciences.
2017-present	Curriculum Committee , Department of Biological Sciences.
2016-present	Carolina and McNair Scholars , mentor for students.
2015-present	Graduate Studies Committee , Department of Biological Sciences.
2015-present	Undergraduate Awards Committee , Dept. of Biological Sciences.

Past service activities

2019-20	Faculty Search Committee for Assistant Professor of Molecular and Cellular Neurobiology.
2019-20	Faculty Search Committee for Assistant Professor of Neurobiology of Autism and Neurodevelopmental Disorders.
2019	Administered Qualifying Exams for 1 st year Evolutionary & Ecological Biology (EEB) graduate students (4/24/2019).
2019	Co-hosted Departmental Speaker: Dr. Erica Westerman, University of Arkansas (3/31/19 – 4/2/2019).
2019	Lectured for PHPH 740: Neuroscience (3/4/19).
2019	Guest lectures for MSCI 510: Invertebrate Zoology (2/15 and 2/18).
2019	Contributed to an ASPIRE III proposal submitted by Dr. Michael Shtutman (2/25/19).
2019	Contributed to an ASPIRE III proposal submitted by Dr. Soumitra Ghoshroy (2/25/19).
2018-19	Faculty Search Committee for Assistant Professor of Evolutionary Biology
2018	Guest lecture for MSCI 450: Biological Oceanography (11/28/18).
2018	Guest lecture for BIOL 553: Genomics (4/26/18).
2018	Administered Qualifying Exams for 1 st year Evolutionary & Ecological Biology (EEB) graduate students (4/9/18).
2018	Reviewed Magellan Scholar proposals (4/6/18).
2018	Hosted Departmental Speaker: Dr. Melissa Hughes, CoC (4/6/18).
2018	NeuroNet Presentation (3/28/2018).
2018	Contributed to an ASPIRE III proposal submitted by Dr. Michael Shtutman (2/23/18).
2017-18	Faculty Search Committee for Assistant Professor of Population Ecology.
2017	Guest lecture for MSCI 450: Biological Oceanography (11/13/17).
2017	Led tours of the EWS seawater lab for SEOE Parent's Day (10/6/17).

- 2017 Reviewed ASPIRE-I proposals for the Office of the VPR.
- 2017 Reviewed Magellan Scholar proposals (3/30/17).
- 2017 Administered Qualifying Exams for 1st year Integrative Biology (IB) graduate students (3/22/17).
- 2017 Lectured for PHPH 740: Neuroscience (2/20/17).
- 2017 Hosted Departmental Speaker: Dr. Christine Bedore, GSU (1/23/17).
- 2016-17 **Faculty Search Committee** for Assistant Professor of Discipline-Based Education Research in Biology.
- 2016 Guest lectures for MSCI 450: Biol. Oceanography (11/7 and 11/9).
- 2016 Led a tour of the EWS seawater lab for SEOE Parent's Day (9/16/16).
- 2016 Hosted Departmental Speaker: Kevin Kocot, U of Alabama (4/25/16).
- 2016 Guest lecture for Bert Ely's PREP/IMSD students (2/10/16).
- 2015 Hosted Departmental Speaker: Jeanne Serb, Iowa State (4/13/15)
- 2015 Helped host Departmental Speaker: Todd Oakley, UCSB (3/23/15)
- 2014 Helped organize and lead BIOL 801

SELECTED OUTREACH ACTIVITIES (since 2016)

- 2019-present Assistant Editor for the journal *Integrative and Comparative Biology*.
- 2018 Co-organized a symposium titled "Neuroethology of Distributed Visual Systems: How do many-eyed animals perceive the world?" for the 2018 International Conference of Neuroethology (held 15-20 July 2018 in Brisbane, Australia).
- 2017 Organized and co-edited a virtual symposium for the journal *Biological Bulletin* on "New insights from genetic datasets on the function and evolution of visual systems" (symposium published August 2017).
- 2017 Reviewed proposals for the NSF's Spring 2017 Animal Evolution of Developmental Mechanisms Review Panel (March 8-10 in Arlington, VA, USA).
- 2017 Interviewed by Carl Zimmer (for the *NY Times*) and Ed Yong (for *The Atlantic*) regarding an article about scallop eyes in *Science* (among other media requests).
- 2016 Contributed material for an exhibit at The Natural History Museum of London titled "Colour and Vision" (<http://www.nhm.ac.uk/visit/exhibitions/colour-and-vision-exhibition.html>).
- 2016 Consulted on an article in Science News titled "Some animals 'see' the world through oddball eyes" (published 5/18/2016, story by Susan Milius).
- 2016 Consulted on the "Smallest Mollusk Museum" (an outreach and education project by Amanda Schochet).
- 2016 Contributed to a National Geographic article on eye diversity in invertebrates with a story by Ed Yong and photos by David Liittschwager (<https://www.nationalgeographic.com/magazine/2016/02/evolution-of-eyes/>).