

Julie B. Schram

Curriculum Vitae, January 25, 2017

University of Oregon, Oregon Institute of Marine Biology
63466 Boat Basin Rd., Charleston, OR 97420
Email: jschram@uoregon.edu
website: jbschram.weebly.com

EDUCATION

Ph.D Biology	University of Alabama at Birmingham, 2015
M.S. Biology	University of Alabama at Birmingham, 2010
B.S. Biology	Western Washington University, 2004

PROFESSIONAL APPOINTMENTS

University of Oregon, Oregon Institute of Marine Biology – Postdoctoral researcher 2016 - 2018
Lecturer – University of Oregon, Oregon Institute of Marine Biology
 Summer 2017 Adjunct Professor Ocean acidification
Lecturer – University of Alabama at Birmingham, Birmingham, Alabama
 Spring 2015 Instructor of record Advanced Invertebrate Zoology
Graduate Teaching Assistant – University of Alabama at Birmingham, Birmingham, Alabama
 Fall 2012, 2013, 2014, 2015 Invertebrate Zoology laboratory, Instructor of record
 Spring 2011 General Biology laboratory
 Fall 2010; Fall 2011 Microbiology laboratory
 Fall 2009; Spring, Summer 2010 Microbiology laboratory
 Fall 2008; Spring, Summer 2009 Human Physiology laboratory

RECENT PEER REVIEWED PUBLICATIONS

- Schram JB**, Schoenrock KM, McClintock JB, Amsler CD, Angus RA (2016) Seawater acidification more than warming presents a challenge for two Antarctic macroalgal-associated amphipods. *Mar Ecol Prog Ser.* 554, 81-97, [doi:10.3354/meps11814](https://doi.org/10.3354/meps11814).
- Schram JB**, Amsler, MO, Amsler CD, Schoenrock KM, McClintock JB, Angus RA (2016) Antarctic benthic grazer assemblages exhibit resistance following exposure to decreased pH. *Mar Biol* 163:106. doi: [10.1007/s00227-016-2894-y](https://doi.org/10.1007/s00227-016-2894-y)
- Schram JB**, Schoenrock KM, McClintock JB, Amsler CD, Angus RA (2016) Testing Antarctic resilience: The effects of elevated seawater temperature and decreased pH on two gastropod species. *ICES Journal of Marine Science.* 73 (3), 739-752. doi: [10.1093/icesjms/fsv233](https://doi.org/10.1093/icesjms/fsv233)
- Schoenrock KM, **Schram JB**, Amsler CD, McClintock JB, Angus RA, Vohra YK (2016) Climate change confers a potential advantage to fleshy Antarctic crustose macroalgae over calcified species. *J Exp Mar Biol Ecol* 474, 58-66, [doi:10.1016/j.jembe.2015.09.009](https://doi.org/10.1016/j.jembe.2015.09.009)

Schram JB, Schoenrock KM, McClintock JB, Amsler CD, Angus RA (2015) Multi-frequency observations of seawater carbonate chemistry on the central coast of the western Antarctic Peninsula. *Polar Research*. 34, 25582, <http://dx.doi.org/10.3402/polar.v34.25582>.

Schram JB, McClintock JB, Amsler, CD, Baker BJ (2015) Impacts of acute elevated seawater temperature on the feeding preferences of an Antarctic amphipod toward chemically deterrent macroalgae. *Mar Biol* 162, 542-433. doi: [10.1007/s00227-014-2590-8](https://doi.org/10.1007/s00227-014-2590-8)

Schoenrock KM, **Schram JB**, Amsler, CD, McClintock JB, Angus RA (2015) Climate change impacts on over-story *Desmarestia* spp. from the western Antarctic Peninsula. *Mar Biol* 162, 377-389. doi: [10.1007/s00227-014-2582-8](https://doi.org/10.1007/s00227-014-2582-8)

Harvey BP, Al-Janabi B, Broszeit S, Cioffi R, Kumar A, Aranguren-Gassis M, Bailey A, Green L, Gsottbauer CM, Hall EF, Lechler M, Mancuso FP, Pereira CO, Ricevuto E, **Schram JB**, Stapp LS, Stenberg S, Santa Rosa LT (2014) Evolution of Marine Organisms under Climate Change at Different Levels of Biological Organisation. *Water* 6, 3545 – 3574. doi:[10.3390/w6113545](https://doi.org/10.3390/w6113545)

Schram JB, Schoenrock KM, McClintock JB, Amsler, CD, Angus RA (2014) Multiple stressor effects of near-future elevated seawater temperature and decreased pH on righting and escape behaviors of two common Antarctic gastropods. *J Exp Mar Biol Ecol*. 457, 90-96. doi:[10.1016/j.jembe.2014.04.005](https://doi.org/10.1016/j.jembe.2014.04.005)

PUBLICATIONS SUBMITTED OR IN PREPARATION

Schram JB, Schoenrock KM, McClintock JB, Amsler, CD, Angus RA (in prep) Ocean warming and acidification exposure altered Antarctic macroalgal biochemical composition but not amphipod feeding preferences. *Mar Ecol Prog Ser*

RECENT AWARDS AND HONORS

- 2015 Samuel B. Barker Award for Excellence in Graduate studies – UAB Graduate School
- 2014 Travel Grant - Office of Polar Programs, funded by NSF and allocated by Scientific Committee on Antarctic Research (SCAR) for attendance of 2012 SCAR conference (\$2250)
- 2014 UAB Department of Biology – Travel Grant funding for attendance of 2012 SCAR conference (\$400)
- 2014 UAB Ireland Research Travel Award – Funding granted for travel to the Friday Harbor Laboratory Facility to perform gastropod shell material strength analysis (\$1000)
- 2014 1st Place – UAB Graduate Student Research Days – oral presentation competition
- 2013 Sigma Xi Grants-In-Aid of Research – Funding for mollusk shell x-ray diffraction (XRD) and scanning electron microscopy (SEM) elemental analysis (\$640)

INVITED TALKS

- 2017 Regional 2017 Meeting of IMSLIC, Oregon Institute of Marine Biology, Charleston, OR (31 March) – You are what you eat: Feeding assays provide insights into benthic trophic ecology dynamics
- 2017 Charleston Marine Life Center, Charleston, OR (28 January) – Ocean Acidification: What is it and what does it mean for marine life?
- 2016 Wasser Cluster, Lunz am See, Austria (20 April) Department seminar – Testing Antarctic tolerance: Invertebrate responses to seawater warming and acidification

SELECTED NATIONAL/INTERNATIONAL CONFERENCE PRESENTATIONS

- 2016 Western Society of Naturalists, Monterey, CA – Oral presentation: Algal diet mixtures influence isopod growth, tissue turnover, and coloration
- 2016 Gordon Research Series, Ocean Global Change Biology (17 - 22 July), Waterville Valley, NH – Invited talk: Trophic biomarkers reveal basal food web dynamics in changing environmental conditions
- 2016 Society for Integrative and Comparative Biology Annual Meeting (3-7 January), Portland, OR – Oral presentation: Seawater acidification rather than warming is a significant challenge for two common Antarctic macroalgal-associated amphipods
- 2015 Society for Integrative and Comparative Biology Annual Meeting (3-7 January), West Palm Beach, FL – Oral presentation: Glimpses of assemblage resilience through an Antarctic ocean acidification mesocosm experiment
- 2014 XXXIII SCAR (Scientific Committee on Antarctic Research) Open Science Conference (25 – 28 August), Auckland, New Zealand – Oral presentation: Impacts of ocean acidification on an Antarctic marine macroalgal-mesograzer community: insights from a laboratory mesocosm experiment; Poster presentation: Multi-frequency observations of seawater pH, alkalinity, and carbonate chemistry of coastal western Antarctic Peninsula
- 2014 Benthic Ecology Conference, Jacksonville, Florida – Oral presentation: A matter of taste: Impacts of decreased pH and elevated seawater temperature on feeding choices of an Antarctic amphipod
- 2014 Society for Integrative and Comparative Biology Annual Meeting (3-7 January), Austin, Texas – Poster presentation: Testing the waters: Seasonal seawater carbonate chemistry baseline informs biological ocean acidification experiments on the western Antarctic Peninsula

PROFESSIONAL EXPERIENCE

Data Management

Scientific diving certified, American Academy of Underwater Sciences (2012 – 2014, 2016 - present)

Temperature and CO₂ enrichment experimental design

Seawater carbonate chemistry analysis– Total alkalinity titration, Spectrophotometric pH, Dissolved Inorganic carbon

Invertebrate zoology & Phycology

Aquarium maintenance

Chlorophyll *a* analysis – fluorometry

Remote field technician: experience working on scientific research cruise (Palmer LTER annual cruise on Lawrence M. Gould, Maria Vernet lab, 07 Jan – 03 Feb 2006 & 07 Jan – 06 Feb 2007)

NON-ACADEMIC TEACHING EXPERIENCE

Marine Educator – Salish Sea Expeditions, inquiry based education aboard SSV Carlyn (2007) - grades 6 – 12

Marine Educator – Sound Experience, hands on education program aboard SSV Adventuress (2004 – 2007, 10 months) - K – 12, senior citizens, general public

PROFESSIONAL SERVICE

2016 Mentored undergraduate & graduate students in laboratory research
2015 Mentored undergraduate in laboratory research (Connor Stein)
2015 UAB Graduate Student Government (GSG) Mentoring and Advisory Council –program for graduate students mentoring new graduate students
2015 Junior Alabama Academy of Science Paper Reading volunteer judge
2014 Chair of the Community Service Committee – Graduate Student Government (GSG)
2014 Mentored undergraduate in laboratory research (Casey Phillips)
2013 – 2015 GSG Senator, member of the Community Service Committee
2013 Judge - Birmingham Elementary School Science Fair, Avondale elementary school (K-4)
2013 Mentor, Birmingham Elementary School Science Fair Mentorship program
2010 - 2013 UAB Biology Department Seminar Committee

EDUCATIONAL OUTREACH ACTIVITIES

2013 UAB in Antarctica –<http://www.uab.edu/antarctica/>
2012 PolarTrek - <http://www.polar trek.com/member/nell-herrmann>
2012 Antarctic Sun - <http://antarcticsun.usap.gov/science/contentHandler.cfm?id=2636>
2012 AL.com - http://blog.al.com/spotnews/2012/02/post_730.html

PROFESSIONAL MEMBERSHIPS

American Microscopical Society (2012 – Present)
American Society of Naturalists (2013 – Present)
Ecological Society of America (2013 – Present)
Society for Integrative & Comparative Biology (2011 - Present)
Sigma Xi (2012 - Present)