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Education

Ph.D. Oceanography - Expected 2015
The Scripps Institution of Oceanography at the University of California San Diego
B.A. Chemistry, Highest Honors - 2010
Earlham College; Richmond, Indiana
Visiting student - 2008
University of Canterbury; Christchurch, New Zealand

Fields of Research

Ecological effects of iron limitation on phytoplankton and bacterioplankton
Molecular biomarkers of iron nutrition in the marine environment
Functional genomics of marine bacterial tonB dependent receptors

Research

Peer-Reviewed Journal Articles

Hogle, S.L., Dupont, C., Barbeau, K.A. Comparative genomics of the marine *Roseobacter* clade reveals a spectrum of metal acquisition strategies. *ISME J.* *submitted*
Hogle, S.L., Barbeau, K.A., Gledhill, M.A. Heme in the marine environment: from cells to the iron cycle. *Metallomics* 6:1107-1120. doi: 10.1039/C4MT00031E
Kharbush, J.J., Ugalde, J.A., **Hogle, S.L.**, Allen, E.E., Aluwihare, L.I. Composite Bacterial Hopanoids and Their Microbial Producers across Oxygen Gradients in the Water Column of the California Current. *Appl. Environ. Microbiol.* 79(23): 7491-7501. doi: 10.1128/AEM.02367-13
Roe, K.L., **Hogle, S.L.**, Barbeau, K.A. Utilization of heme as an iron source by marine Alphaproteobacteria in the *Roseobacter* clade. *Appl. Environ. Microbiol.* 79(18) 5753-5762, doi:10.1128/AEM.01562-13
Abbriano, R.M., Carranza, M.M., **Hogle, S. L.**, *et al.* Deepwater Horizon Oil Spill: A Review of the Planktonic Response. *Oceanography* 24(3):294-301, <http://dx.doi.org/10.5670/oceanog.2011.80>

Conference and Seminar Presentations

First Author and Presenter

S.L. Hogle, C. Dupont, B. Brahamsha, K.A. Barbeau. What do marine bacterial transporters tell us about ocean chemistry? Oral Presentation, Scripps Student Symposium, September 2014
S.L. Hogle, B. Brahamsha, K.A. Barbeau. Mechanisms for Trace Metal Assimilation in Marine *Roseobacters*. Poster presentation, Goldschmidt Meeting: Session 17e Trace Elements, Microbes, and Biogeochemical Cycles in the Ocean Environment, June 2014

S.L. Hogle, B. Brahamsha, K.A. Barbeau. An Outer Membrane Receptor Critical for Heme Utilization in a Marine *Roseobacter*. Poster presentation, TOS/ASLO/AGU 2014 Ocean Sciences Meeting, February 2014

S.L. Hogle, B. Brahamsha, K.A. Barbeau. Heterotrophic bacterioplankton utilize heme-based molecules for growth: a case study in the biological controls on a model iron-binding ligand. Oral presentation, ASLO 2013 Meeting, February 2013

S.L. Hogle, B.M. Hopkinson, K.A. Barbeau, C.L. Dupont. Comparative Prokaryotic Metagenomics Across Subsurface Chlorophyll Maxima in the Southern California Bight. Oral presentation, TOS/ASLO/AGU 2012 Ocean Sciences Meeting, February 2012

S.L. Hogle, G. Xue, L. Que Jr. A Synthetic [Fe(III)-O-Fe(IV)] Complex for Modeling Intermediate X of Ribonucleotide Reductase. Poster, American Chemical Society National Meeting, March 2010

Supporting Author

C.L. Dupont, J.P. McCrow, R. Valas, N. Walworth, **S.L. Hogle**, B. Palenik, Z. Johnson, K.A. Barbeau, A.E. Allen. Microbial Community Composition and Gene Expression Across the Southern California Bight. ASLO 2013 Meeting, February 2013

K.A. Barbeau, A.L. King, **S.L. Hogle**, B.M. Hopkinson, C.L. Dupont, E.L. Mann, Z.I. Johnson, A. E. Allen. Evidence for a Spectrum of Iron Limitation Effects Along a Transect of Sub-surface Oceanic Phytoplankton Communities. ASLO 2013 Meeting, February 2013

K.A. Barbeau, B.M. Hopkinson, K.L. Roe, **S.L. Hogle** Heme capture as an iron acquisition strategy in planktonic marine prokaryotes. American Chemical Society National Meeting, February 2012

B. M. Hopkinson, **S.L. Hogle**, K. A. Barbeau. Insights into Iron Speciation from the Iron Transporters in Marine Bacterial Genomes. TOS/ASLO/AGU 2012 Ocean Sciences Meeting; February 2012

K.L. Roe, K.A. Barbeau, **S.L. Hogle**, R. Castillo. Utilization of Heme as an Iron Source by Marine Roseobacters, ASLO National Meeting, February 2011

Field Experience

06/2011 - 07/2011: R/V Melville, California Current Ecosystem LTER Process Cruise, San Diego, CA

Mentoring

06/2014 - 08/2014: Leila Whitener - Northwest Indian College. Title: A novel approach to measuring heme in the marine environment. Project resulted in poster presentation at UCSD undergraduate research conference

04/2014 - 08/2014: Kelsey Dowdy - UCSB. Volunteer student, assisted with microbial community DNA extraction and high throughput sequencing library preparation

01/2012 - 06/2013: Aarani Arulmoli - UCSD. Title: Bacterial community composition in iron induced phytoplankton blooms. Project resulted in material for undergraduate thesis

Professional and Academic Affiliations

American Society for Limnology and Oceanography

American Chemical Society

Honors, Awards, & Fellowships

National Science Foundation Graduate Research Fellowship, 2011 - 2014.

University of California San Diego Director's Fellowship, 2010 - 2011

Phi Beta Kappa, Delta Chapter of Indiana, 2010

American Chemical Society Undergraduate Award in Inorganic Chemistry, 2010.

Thomas Clarkson Grave and Anna Hubbard Grave Graduate Scholarship in Natural Science, 2010.

NSF Research Experience for Undergraduates (University of Minnesota and the National Science Foundation), 2009.

Gertrude P. Hubbard Distinguished Student in the Natural Sciences Award (Earlham College), 2009.

Last updated: September 30, 2014