

James R. Henriksen

Department of Microbiology, University of Georgia
541 Biological Sciences Building, Athens, GA 30602
<http://jamesrh.myweb.uga.edu>
(706)542-4692 jamesrh@uga.edu

Education

- 2001-Present Ph.D. Candidate University of Georgia
Under the direction of Dr. William B. Whitman, Department of Microbiology
Recipient of a University-wide Graduate Fellowship.
- 1995-2000 Undergraduate Degrees University of Oklahoma
B.S. in Microbiology, with *cum laude* honors.
B.S. in Chemistry with a specialization in Biochemistry.
Recipient of National Merit Scholar and Oklahoma Academic Scholars Program scholarships.
Participant in the foreign exchange program at The University of Dundee, Scotland, UK from 1997 to 1998.

Publications

- E. C. Howard, **J. R. Henriksen**, A. Buchan, C. R. Reisch, H. Bürgmann, R. Welsh, W. Ye, J. M. González, K. Mace, S. B. Joye, R. P. Kiene, W. B. Whitman, and M. A. Moran. 2006. Bacterial Taxa That Limit Sulfur Flux from the Ocean. *Science*. 314(5799):649-652.
<http://dx.doi.org/10.1126/science.1130657>
- M. A. Moran, A. Buchan, J. M. González, J. F. Heidelberg, W. B. Whitman, R. P. Kiene, **J. R. Henriksen**, G. M. King, R. Belas, C. Fuqua, L. Brinkac, M. Lewis, S. Johri, B. Weaver, G. Pai, J. A. Eisen, E. Rahe, W. M. Sheldon, W. Ye, T. R. Miller, J. Carlton, D. A. Rasko, I. T. Paulsen, Q. Ren, S. C. Daugherty, R. T. Deboy, R. J. Dodson, A. S. Durkin, R. Madupu, W. C. Nelson, S. A. Sullivan, M. J. Rosovitz, D. H. Haft, J. Selengut, N. Ward. 2004. Genome sequence of *Silicibacter pomeroyi* reveals adaptations to the marine environment. *Nature*. 432(7019):910-3.
<http://dx.doi.org/10.1038/nature03170>
- J. M. González, J. S. Covert, W. B. Whitman, **J. R. Henriksen**, F. Mayer, B. Scharf, R. Schmitt, A. Buchan, J. A. Fuhrman, R. P. Kiene, M. A. Moran. 2003. *Silicibacter pomeroyi* sp. nov. and *Roseovarius nuhibens* sp. nov., dimethylsulfoniopropionate-demethylating bacteria from marine environments. *International Journal of Systematic and Evolutionary Microbiology*. 53(5):1261-1269.
<http://dx.doi.org/10.1099/ijs.0.02491-0>
- J. M. Senko, B. S. Campbell, **J. R. Henriksen**, M. S. Elshahed, T. A. Dewers, L. R. Krumholz. 2004. Barite deposition resulting from phototrophic sulfide oxidizing bacterial activity. *Geochimica et Cosmochimica Acta*. 68(4):773-780.
<http://dx.doi.org/10.1016/j.gca.2003.07.008>

Professional Experience

- 2001-Present Graduate Research University of Georgia
Research assistant in the lab of Dr. William B. Whitman. Graduate project on “DMSP degradation in a marine Roseobacter, *Silicibacter pomeroyi* DSS-3.” My mentors include both Dr. William B. Whitman and Dr. Mary Ann Moran.
Contact information:
Dr. William B. Whitman, Department of Microbiology, University of Georgia, Athens, GA 30602. (706) 542-4219. whitman@uga.edu.
Dr. Mary Ann Moran, Department of Marine Sciences, University of Georgia, Athens, GA 30602. (706) 542-6481. mmoran@uga.edu
- 2001-Present Bioinformatics Scripting and System Administrator University of Georgia
Designed and wrote custom scripts in Perl and Python for numerous small bioinformatic data processing tasks, web front ends to bioinformatic programs, and database searching and data analysis. Designed, setup, and administrated Linux servers for approximately 20 users and for universal use by the scientific community. Duties include web design, cgi programing, database setup and maintenance, computer security, and setup and use of a number of bioinformatics programs including a stand-alone web-based BLAST server, SEED, and PHYLIP.
Example of a custom web front-end to a command line bioinformatics program:
<http://libshuff.mib.uga.edu/>
- 2003 Workshop Attendee The Institute for Genomic Research
Attended The Institute for Genomic Research (TIGR) *Silicibacter* Genome User’s Workshop October 6-7, 2003, in Rockville, MD
- 2000-2001 Laboratory Technician University of Oklahoma, Department of Botany and Microbiology
Laboratory research involving genetic techniques for *Desulfovibrio desulfuricans* and an environmental study of the microbial geochemistry of a sulfide-rich terrestrial spring.
Contact information: Dr. Lee Krumholz, Department of Botany and Microbiology, University of Oklahoma, 770 Van Vleet Oval, Norman, OK, 73019 email: krumholz@ou.edu.

Teaching Experience

- Spring 2008 Teaching Assistant University of Georgia
Teaching assistant for a 300 student section of a 3000 level undergraduate general microbiology course, and led 3 weekly 20 student discussion sections. Designed and built an AJAX web application for use by students as a study aid and for pedagogical research.
Contact information: Dr. Wendy Dustman, Department of Microbiology, University of Georgia, 541 Biological Sciences Building, Athens, GA 30602. (706) 542-2622. email: wdustman@uga.edu.
- Fall 2007 Teaching Assistant University of Georgia
Sole instructor in two 16 student sections of a 3000 level undergraduate general microbiology lab.
Contact information: Dr. Wendy Dustman, Department of Microbiology, University of Georgia, 541 Biological Sciences Building, Athens, GA 30602. (706) 542-2622. email: wdustman@uga.edu.

**Teaching
Experience
(Continued)**

Summer 2006 Mentor University of Georgia
Mentored Marquitta Smith, an undergraduate student participating in the NSF REU program in the laboratory of Dr. Whitman.

Fall 2005 -
Spring 2006 Mentor University of Georgia
Mentored John Henry Theiss, an undergraduate student participating in UGA's undergraduate research program in the laboratory of Dr. Whitman.

Fall 2004 -
Spring 2005 Teaching Assistant University of Georgia
Sole instructor in two 16 student sections of a 3000 level undergraduate general microbiology lab.
Contact information: Dr. Wendy Dustman, Department of Microbiology, University of Georgia, 541 Biological Sciences Building, Athens, GA 30602. (706) 542-2622. email: wdustman@uga.edu.

Fall 2003 Teaching Assistant University of Georgia
Assisted an instructor with computer and technical aspects of a graduate level course, Genomic and Bioinformatics for the Microbial Ecologist. Duties included generating a class webpage, setup and testing of programs and computers.
Class webpage: <http://anaerobe.mib.uga.edu/MARS8990/>

**Professional
Memberships**
2001-Present

American Society for Microbiology

Presentations

J. R. Henriksen, M. A. Moran, W. B. Whitman. May 22, 2007. Dimethylsulfoniopropionate (DMSP) metabolism in *Silicibacter pomeroyi*. 107th American Society for Microbiology General Meeting, Toronto, ON, Canada. Poster presentation.

J. R. Henriksen, E. C. Howard, A. Buchan, C. R. Reisch, H. Bürgmann, R. Welsh, W. B. Whitman, and M. A. Moran. March 3 2007. Bacterial genes in the marine sulfur cycle. Microbial Observatories / Microbial Interactions and Processes Principal Investigators' Meeting and Workshop, Washington DC. Invited graduate student speaker.

J. R. Henriksen, E. Howard, M. A. Moran, W. B. Whitman. October 24, 2006. A bacterial sulfur pathway with global significance: Dimethylsulfoniopropionate (DMSP) degradation by *Silicibacter pomeroyi*. Academy for the Environment Symposium, Athens, GA. Poster presentation.

J. R. Henriksen. 2002. Genome of the marine Roseobacter *Silicibacter pomeroyi* DSS-3, a model organism for studying sulfur bio-transformations. Southeastern branch of the American Society for Microbiology regional meeting, Invited oral presentation.

L. R. Krumholz, J. M. Senko, B. Campbell, **J. R. Henriksen**, E. L. Grossman, T. A. Dewers. 2001. Barite precipitation occurs as a result of photosynthetic sulfide oxidation at a sulfide-bearing spring. 101st. American Society for Microbiology general meeting. Poster presentation.