
BRIAN P. HEDLUND, PH.D.

Associate Professor
School of Life Sciences
University of Nevada Las Vegas
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EDUCATION

- University of Washington** 1994 – 2000
Department of Microbiology Seattle, WA
• Ph.D. in Microbiology
• Thesis: Polycyclic aromatic hydrocarbon degradation by marine bacteria
- University of Illinois** 1990 – 1994
Biology Urbana-Champaign, IL
• B.S. in Biology
• Thesis: The application of genetic techniques for the study of methanogenic archaea

RESEARCH EXPERIENCE

- Assistant/Associate Professor** 2003 – present
University of Nevada Las Vegas Las Vegas, NV
School of Life Sciences
• Ecology of Great Basin hot springs; desert playas
- Postdoctoral Fellow** 2001 – 2002
Universität Regensburg Lehrstuhl für Mikrobiologie Regensburg, Germany
• Advisor: Karl O. Stetter, Ph.D.
• Cultivation of novel thermophiles from Yellowstone National Park
- Postdoctoral Fellow** 2000 – 2001
University of Washington Department of Microbiology Seattle, WA
• Advisor: James T. Staley, Ph.D.
• Marine polycyclic aromatic hydrocarbon catabolism; Verrucomicrobia
- Graduate Student** 1994 – 2000
University of Washington Department of Microbiology Seattle, WA
• Advisor: James T. Staley, Ph.D.
• Marine polycyclic aromatic hydrocarbon catabolism; Verrucomicrobia
- Undergraduate Researcher** 1992 – 1994
University of Illinois Department of Microbiology Urbana-Champaign, IL
• Advisor: Jordan Konisky, Ph.D.
• Early work into applying genetic approaches to methanogenic Archaea

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GRANTS & AWARDS

1. **NSF Early Career Development Award.** 2006-2011. CAREER: Linking novel thermophiles with ecosystem function: Study of a model spring in Nevada. \$841,632.
2. **NASA Space Grant.** 2010. Nevada's NASA Space Grant Summer Short Courses: Nevada Earth And Space Science Initiative III: Geobiology. \$195,000. (Co-PI with PI Fritsen and co-PIs Murray, Sun, and Crowther)
3. **DOE JGI Community Sequencing Program.** 2009-2010. Metagenomes of Great Boiling Spring Sediment and Water Microbial Communities. Funding for ~4 Gbp of DNA sequence and annotation.
4. **NSF REU supplement.** 2007, 2009: \$12,000
5. **UNLV Reseach Infrastructure Award Proposal.** 2006. A Broadly Equipped Gas Chromatography Suite to Enhance the Competitiveness of Research in Biology and Biogeoscience Research at UNLV. \$69,748 (with Co-PI Dennis Bazylnski)
6. **USGS.** 2005-2006. Microbial and Algal Impacts on Endocrine Disrupting Chemicals in Las Vegas Wash and Lake Mead, NV. \$58,000 (Co-PI with PI Duane Moser)
7. **UNLV Applied Research Initiative.** 2005-2006. Title: Investigation of the mechanism and microbial populations involved in the Cannibal sludge reduction process \$76,000 (with Co-PI April Gu)
8. **NASA EPSCoR.** 2005. Development of an Astrobiology Curriculum in Southern Nevada: A Collaboration between DRI and UNLV: ~\$15,000 (with Co-PIs Duane Moser and Henry Sun)
9. **UNLV Stimulation, Implementation, Transition & Enhancement Award.** 2004. Stimulation, Implementation, Transition & Enhancement Award. Development of the Center for Aridlands Biodiversity Research and Education (CABRE) at the University of Nevada, Las Vegas. \$7,500 (Co-PI with PI Brett Riddle)
10. **UNLV Stimulation, Implementation, Transition & Enhancement Award.** 2003. Evolution of microbial commensals of desert mammals. \$7,500
11. **UNLV New Investigator Award.** 2003-2004. Microbial Diversity Survey in High Temperature Hot Springs (>70°C) in the Basin and Range Region. \$15,000
12. **Alexander von Humboldt Postdoctoral Fellowship.** 2001-2002. Cultivation of Korarchaeota from Obsidian Pool, Yellowstone National Park. \$76,000
13. **Helen Raiboff Whiteley Endowment Fellowship.** 2000. Fellowship and award to the outstanding graduate student, Department of Microbiology, University of Washington. ~\$30,000
14. **NIH Molecular & Cellular Biology Graduate Fellowship.** 1999-2000 and 1995-1996. Diversity of marine polycyclic aromatic hydrocarbon catabolizing organisms in Puget Sound. ~\$30,000
15. **NOAA Graduate Fellowship.** 1997-1999. Diversity of marine polycyclic aromatic hydrocarbon catabolizing organisms in Puget Sound. ~\$60,000
16. **Sigma Xi Grants in Aid of Research,** 1995, 1997

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PRIMARY RESEARCH PUBLICATIONS

1. **Vick, Trista J., Jeremy A. Dodsworth, Kyle C. Costa, Everett L. Shock, and Brian P. Hedlund.** In press. Microbiology and geochemistry of Little Hot Creek, a hot spring environment in the Long Valley Caldera. *Geobiology*.
2. **Sun, Henry J., Vienna Saccomanno, Brian P. Hedlund, and Christopher P. McKay.** 2009. Terrestrial life recognizes D-glucose, not L-glucose: preliminary evidence and implications for Martian life detection. *Astrobiology* 9: 443-446.
3. **Costa, Kyle C., Jason B. Navarro, Everett L. Shock, Chuanlun Zhang, Debbie Soukup, and Brian P. Hedlund.** 2009. Microbiology and geochemistry of Great Boiling and Mud Hot Springs in the United States Great Basin. *Extremophiles* 13: 447-459.
4. **Navarro, Jason B., Andrea Flores, Christian Ross, Michael R. Rosen, Hailiang Dong, Gengxin Zhang, Duane P. Moser, and Brian P. Hedlund.** 2009. Microbial community succession in an ephemeral hypereutrophic Mojave Desert playa lake. *Microb. Ecol.* 57: 307-320.
5. **Elkins, Jim G., Victor Kunin, Iain Anderson, Kerrie Barry, Eugene Goltsman, Alla Lapidus, Brian P. Hedlund, Phil Hugenholtz, Nikos Kyrpides, David Graham, Martin Keller, Gerhard Wanner, Paul Richardson, and Karl O. Stetter.** 2008. A korarchaeal genome reveals insights into the evolution of archaea. *Proc Natl Acad Sci.* 105: 8102-8107. (With accompanying two page commentary by Ken Nealson.)
6. **Zhang, Chuanlun L., Qi Ye, Zhiyong Huang, Wen-Jun Li, Jinqun Chen, Zhaoqi Song, Weidong Zhao, Christopher Bagwell, Bill Inskeep, Lei Gao, Juergen Wiegel, Christopher Romanek, and Brian P. Hedlund.** 2008. Global occurrence and biogeography of putative archaeal *amoA* genes in terrestrial hot springs. *Appl Environ. Microbiol.* 74: 6417-26.
7. **Costa, Kyle C., Duane P. Moser, Joy Hallmark, Jason B. Navarro, Debbie Soukup, Stephanie LaBahn, and Brian P. Hedlund.** 2008. Diversity of heterotrophic microorganisms and geochemistry in two ephemeral desert playa lakes. *Geomicrobiol. J.* 25:250-259.
8. **Huang, Zhiyong, Brian P. Hedlund, Juergen Wiegel, Jishong Zhou, and Chuanlun L. Zhang.** 2007. Molecular phylogeny of uncultivated Crenarchaeota in Great Basin hot springs of moderately elevated temperature. *Geomicrobiol. J.* 24: 535-542.
9. **Hedlund, Brian P. and James T. Staley.** 2006. Isolation and characterization of *Pseudoalteromonas* strains with divergent polycyclic aromatic hydrocarbon catabolic properties. *Env. Microbiol.* 8: 178-182.
10. **Rachel, Reinhart, Marcus Bettstetter, Brian P. Hedlund, Monica Häring, Alexandra Kessler, Karl O. Stetter, and David Prangishvili.** 2002. Remarkable morphological diversity of viruses and virus-like particles in hot terrestrial environments. *Arch Virol.* 147: 2419-2429.
11. **Hohn, Michael J., Brian P. Hedlund, and Harald Huber.** 2002. Detection of 16S rDNA sequences representing the novel phylum "Nanoarchaeota": indication for a world-wide distribution in high temperature biotopes. *Syst Appl Microbiol.* 25: 551-554.
12. **Jenkins, Cheryl, Ram Samudrala, I. Armstrong, Brian P. Hedlund, Giulio Petroni, N. Michailova, Nicholas Pinel, Ross Overbeek, Giovanna Rosati, and James T. Staley.** 2002. Genes for the cytoskeletal protein tubulin in the bacterial genus *Prostheco bacter*. *Proc Natl Acad Sci.* 99: 17049-17054.

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13. **Hedlund, Brian P. and James T. Staley.** 2002. Phylogeny of the genus *Simonsiella* and other members of the Neisseriaceae. *Int J Syst Evol Microbiol.* 52: 1377-1382.
14. **Hedlund, Brian P., Allison D. Geiselbrecht, and James T. Staley.** 2001. *Marinobacter* strain NCE312 has a *Pseudomonas*-like naphthalene dioxygenase. *FEMS Microbiol Lett.* 201: 47-51.
15. **Hedlund, Brian P. and James T. Staley.** 2001. *Vibrio cyclotrophicus* sp. nov., a polycyclic aromatic hydrocarbon (PAH)-degrading marine bacterium. *Int J Syst Evol Microbiol.* 51: 61-66.
16. **Ward, Naomi L., Fred A. Rainey, Brian P. Hedlund, James T. Staley, Wolfgang Ludwig, and Erko Stackebrandt.** 2000. Comparative phylogenetic analyses of members of the order Planctomycetales and the division Verrucomicrobia: 23S rRNA gene sequence analysis supports the 16S rRNA gene sequence-derived phylogeny. *Int J Syst Evol Microbiol.* 50: 1965-1972.
17. **Rockne, Karl J., Joanne C. Chee-Sanford, Robert A. Sanford, Brian P. Hedlund, James T. Staley, and Stuart E. Strand.** 2000. Anaerobic naphthalene degradation by microbial pure cultures under nitrate-reducing conditions. *Appl Environ Microbiol.* 66: 1595-1601.
18. **Hedlund, Brian P., Allison D. Geiselbrecht, Timothy J. Bair, and James T. Staley.** 1999. Polycyclic aromatic hydrocarbon degradation by a new marine bacterium, *Neptunomonas naphthovorans* gen. nov., sp. nov. *Appl Environ Microbiol.* 65: 251-259.
19. **Geiselbrecht, Allison D., Brian P. Hedlund, Mary A. Tichi, and James T. Staley.** 1998. Isolation of marine polycyclic aromatic hydrocarbon (PAH)-degrading *Cycloclasticus* strains from the Gulf of Mexico and comparison of their PAH degradation ability with that of Puget Sound *Cycloclasticus* strains. *Appl Environ Microbiol.* 64: 4703-4710.
20. **Hedlund, Brian P., John J. Gosink, and James T. Staley.** 1997. Verrucomicrobia div. nov., a new division of the bacteria containing three new species of *Prostheco bacter*. *Antonie van Leeuwenhoek* 72: 29-38.
21. **Hedlund, Brian P., John J. Gosink, and James T. Staley.** 1996. Phylogeny of *Prostheco bacter*, the fusiform caulobacters: members of a recently discovered division of the Bacteria. *Int J Syst Bacteriol.* 46: 960-966.

INVITED PUBLICATIONS*

* Reviewed by editors or suggested external reviewers.

1. **Hedlund, Brian P. and Kyle C. Costa.** In press. Genus *Neptunomonas*. In Kenneth N. Timmis (ed.) *Microbiology of Hydrocarbons, Oils, Lipids, and Derived Compounds*, Springer Verlag, Heidelberg, Germany.
2. **Hedlund, Brian P. and Daisy A. Kuhn.** 2006. The genera *Simonsiella* and *Alysiella*. In M. Dworkin, S. Falkow, E. Rosenberg, K.-H. Schleifer, and E. Stackebrandt (eds.) *The Prokaryotes*, 3rd Edition, Volume 5. Springer Verlag, New York, USA, pp. 828-839.
3. **Stetter, K.O., M.J. Hohn, H. Huber, R. Rachel, E. Mathur, B. P. Hedlund, U. Jahn.** 2005. A novel kingdom of parasitic archaea. In W.P. Inskeep and T.R. McDermott (eds.) *Geothermal Biology and Geochemistry in Yellowstone National Park*, Montana State University Publications, Bozeman, MT, USA. pp. 249-259.
4. **Hedlund, Brian P.** 2005. Genus *Neptunomonas*. In D.J. Brenner, N.R. Krieg, J.T. Staley, and G.M. Garrity (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 2B, Springer Verlag, New York, USA, pp. 292-295.
5. **Hedlund, Brian P. and Tone Tønjum.** 2005. Genus *Simonsiella*. In D.J. Brenner, N.R. Krieg, J.T. Staley, and G.M. Garrity (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 2C, Springer Verlag, New York, USA, pp. 292-295.
6. **Hedlund, Brian P. and James T. Staley.** 2003. Microbial Endemism and Biogeography. In A.T.

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Bull (ed.) Microbial Diversity and Bioprospecting, ASM Press, Washington DC , USA . pp. 225-231.

7. **Staley, James T., John J. Gosink, and B.P. Hedlund.** 1996. New bacterial taxa from polar sea ice communities and culture collections, P. 114-118. *In* R.A. Sampson, J.A. Stalpers, D. van der Mai, and A.H. Stouthamer (eds.) Culture collections to improve the quality of life. Ponson and Looyen, Wageningen, The Netherlands.

BERGEY'S VOLUME 4 PUBLICATIONS*

* I am an editor for Volume 4 of the 2nd Edition of Bergey's Manual of Systematic Bacteriology. As such, I am editing all chapters, 34 in total, for two phyla of bacteria, Lentisphaerae and Verrucomicrobiae. Editors typically write family to phylum level descriptions. The chapters I'm authoring are between one and ten pages, as they would appear in the printed volume. These chapters finished or nearly finished and are due to copy editors on October 1, 2008.

1. **Brian P. Hedlund, Jang-Cheon Cho, Muriel Derien, and Kyle C. Costa.** In Press. Phylum Lentisphaerae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
2. **Brian P. Hedlund.** In Press. Genus *Prostheco bacter*. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
3. **Wung Yang Shieh and Brian P. Hedlund.** In Press. Genus *Alterococcus*. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
4. **Tom T.M. Vandekerckhove, Jason B. Navarro, August Coomans, and Brian P. Hedlund.** In Press. Genus *Xiphinematobacter*. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
5. **Jang-Cheon Cho, Muriel Derien, and Brian P. Hedlund.** In Press. Class Lentisphaera. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
6. **Jang-Cheon Cho and Brian P. Hedlund.** In Press. Order Lentisphaeralles. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
7. **Jang-Cheon Cho and Brian P. Hedlund.** In Press. Family Lentisphaeraceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
8. **Muriel Derien, Jang-Cheon Cho, and Brian P. Hedlund.** In Press. Order Victivallales. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
9. **Muriel Derien, Jang-Cheon Cho, and Brian P. Hedlund.** In Press. Family Victivallaceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) Bergey's Manual of Systematic Bacteriology, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
10. **Peter Janssen and Brian P. Hedlund.** In Press. Phylum Verrucomicrobia. *In* N.R. Krieg, J.T.

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- Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
11. **Peter Janssen and Brian P. Hedlund.** In Press. Class Verrucomicrobiae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 12. **Peter Janssen and Brian P. Hedlund.** In Press. Class Spartobacteria. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 13. **Jang-Cheon Cho, Peter Janssen and Brian P. Hedlund.** In Press. Class Opitutae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 14. **Peter Janssen and Brian P. Hedlund.** In Press. Order Verrucomicrobiales. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 15. **Jang-Cheon Cho, Jaewoo Yoon, and Brian P. Hedlund.** In Press. Order Puniceococcales. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 16. **Peter Janssen and Brian P. Hedlund.** In Press. Order Chthoniobacteriales. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 17. **Jang-Cheon Cho, Peter Janssen and Brian P. Hedlund.** In Press. Order Opitutaes. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 18. **Peter Janssen and Brian P. Hedlund.** In Press. Family Verrucomicrobiaceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 19. **Jang-Cheon Cho, Jaewoo Yoon, and Brian P. Hedlund.** In Press. Family Puniceococcaceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 20. **Peter Janssen and Brian P. Hedlund.** In Press. Family Chthoniobacteriaceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 21. **Tom T.M. Vandekerckhove, August Coomans, and Brian P. Hedlund.** In Press. Family Xiphinematobacteriaceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.
 22. **Jang-Cheon Cho, Peter Janssen and Brian P. Hedlund.** In Press. Family Opitutaceae. *In* N.R. Krieg, J.T. Staley, B.P. Hedlund, B.J. Paster, N. Ward, W. Ludwig, and W.B. Whitman (eds.) *Bergey's Manual of Systematic Bacteriology*, 2nd Edition, Volume 4, Springer Verlag, New York, USA.

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INVITED RESEARCH SEMINARS

1. Montana State University Department of Microbiology. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? April 2008.
2. Montana State University Thermal Biology Institute. Playa Lakes: Insights into Mars' Last Aquatic Systems? April 2008.
3. Pacific Lutheran University Department of Biology. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? February 2008.
4. University of Georgia Department of Marine Sciences. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? September 2007.
5. California Institute of Technology Environmental Science & Engineering. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? February 2007.
6. Black Hills State University. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? November, 2006.
7. Miami University Department of Biology. Novel thermophiles from Yellowstone National Park. February 2003.
8. University of Nevada Las Vegas. Novel thermophiles from Yellowstone National Park. February 2003.
9. St. Lawrence University. Novel thermophiles from Yellowstone National Park. February 2003.
10. Universität Regensburg, Germany Department of Microbiology and Archaea Studies Diversity of marine polycyclic aromatic hydrocarbon catabolizing bacteria. March 2000.
11. Western Oregon University Department of Biology. Diversity of marine polycyclic aromatic hydrocarbon catabolizing bacteria. November 1998.

SELECTED MEETING PRESENTATIONS*

* Presenting author is underlined. These are selected presentations since 2003 only.

1. Dolores A. Huang, Jeremy A. Dodsworth, and Hedlund, B.P. 2009. Researching nitrite oxidation at high temperatures. UNLV Undergraduate Research Symposium, August, 2009. (Local meeting)
2. Jenny Lam, Jeremy A. Dodsworth, and Brian P. Hedlund. 2009. Exploring diversity of nitrate reducing thermophiles in Nevada hot springs. UNLV Undergraduate Research Symposium, August, 2009. (Local meeting)
3. Hedlund, B.P. and J.A. Dodsworth. 2008. Great Basin Hot Spring Cafe: Who's The Clientele, What's On The Menu, And Who's Eating What? China-US Collaborative Research on Geomicrobiological Processes in Extreme Environments Wuhan, China, Oct. 10th – 16th, 2008. (Invited talk. International meeting; 2 hours)
4. Hedlund, B.P. and J.A. Dodsworth. 2008. Does the water residence time matter in hot spring microbiology? China-US Collaborative Research on Geomicrobiological Processes in Extreme Environments Beijing, China, Oct. 10th – 16th, 2008. (Invited talk. International meeting; 20 minutes)
5. Skinner, R., J.A. Dodsworth, and B.P. Hedlund. Genomic foundations of carbon fixation in bacteria living in hot springs. Kentucky Academy of Sciences, November, 2008. (**Best poster presentation**; Regional meeting)
6. Skinner, R., J.A. Dodsworth, and B.P. Hedlund. Genomic foundations of carbon fixation in bacteria living in hot springs. UNLV Undergraduate Research Symposium, August, 2008. (Local meeting)
7. McDonald, A., and B.P. Hedlund. Linking nitrate reduction in Great Basin hot springs to specific organisms. UNLV Undergraduate Research Symposium, August, 2008. (Local meeting)
8. Chaires, M., J.A. Dodsworth, and B.P. Hedlund. Nitrogen cycling processes in Great Basin Hot Springs. UNLV Undergraduate Research Symposium, August, 2008. (Local meeting)

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9. Miller-Coleman, R.L., K.C. Costa, E.L. Shock, and B.P. Hedlund. Diversity and Biogeography of Korarchaeota in hot springs. American Society for Microbiology Annual Meeting, May, 2008, Boston. (Poster presentation; International meeting)
10. Zhang, C.L., Y. Qi, Z. Huang, W.-J. Li, J. Chen, Z. Song, W. Zhao, B.P. Hedlund, C. Bagwell, W.P. Inskeep, L. Gao, J. Wiegel, and C. Romanek. Ammonia-Oxidizing Archaea in Terrestrial Hot Springs. Yellowstone Research Coordination Network Meeting, January 2008, Mammoth Lodge, WY. (Oral presentation 20 minutes; National meeting)
11. Hedlund, B.P., K. C. Costa, T.J. Vick, J.A. Dodsworth, E.L. Shock, H. Hartnett, J. Wiegel, C. Romanek, and C.L. Zhang. Geochemistry and microbiology of Great Basin hot springs – are they different from Yellowstone springs? Yellowstone Research Coordination Network Meeting, January 2008, Mammoth Lodge, WY. (Oral presentation 20 minutes; National meeting)
12. Hedlund, B.P. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? International Conference on Thermophiles, September 2007, Bergen, Norway (Oral presentation 20 minutes; International meeting; Invited)
13. Vick, T.J., K.C. Costa, E.L. Shock, and B.P. Hedlund. Microbiology and Geochemistry of Little Hot Creek, Long Valley Caldera, California. American Society for Microbiology Annual Meeting, May, 2007, Toronto. (Poster presentation; International meeting)
14. Zhang, C.L., Y. Qi, Z. Huang, W.-J. Li, J. Chen, Z. Song, W. Zhao, B.P. Hedlund, C. Bagwell, W.P. Inskeep, L. Gao, J. Wiegel, and C. Romanek. Global Occurrence of Archaeal *amoA* Genes in Terrestrial Hot Springs. American Society for Microbiology Annual Meeting, May, 2007, Toronto. (Oral presentation 20 minutes; International meeting)
15. Costa, K.C., E.L. Shock, J.B. Navarro, C.L. Zhang, D. Soukup, and B.P. Hedlund. Thermodynamic Modeling as a Predictive Tool for Determining Energy Availability in Great Basin Hot Springs. American Society for Microbiology Annual Meeting, May, 2007, Toronto. (Poster presentation; International meeting)
16. Vick, T.J., K.C. Costa, E.L. Shock, and B.P. Hedlund. Microbiology and Geochemistry of Little Hot Creek, Long Valley Caldera, California. American Society for Microbiology Annual Meeting Arizona/NV Regional ASM Meeting, Flagstaff, April, 2007. (Oral presentation 20 minutes; Regional meeting)
17. de Leon, J.M., J. Wallace, A. Villosio, D.P. Moser, M.J. Marshall, B.P. Hedlund. Distribution of *Shewanella* species from diverse aquatic habitats of the western United States. American Society for Microbiology Annual Meeting Arizona/NV Regional ASM Meeting, Flagstaff, April, 2007. (Poster presentation; Regional meeting)
18. Costa, K.C., E.L. Shock, J.B. Navarro, C.L. Zhang, D. Soukup, and B.P. Hedlund. Thermodynamic Modeling as a Predictive Tool for Determining Energy Availability in Great Basin Hot Springs. Arizona/NV Regional ASM Meeting, Flagstaff, April, 2007. (**Best student presentation**; poster; Regional meeting)
19. Costa, K.C., E.L. Shock, J.B. Navarro, C.L. Zhang, D. Soukup, and B.P. Hedlund. Thermodynamic Modeling as a Predictive Tool for Determining Energy Availability in Great Basin Hot Springs. NSF Microbial Observatories/Microbial Interactions and Processes, March, 2007, Washington, DC. (Poster presentation; national meeting)
20. Hedlund, B.P. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? International Conference on Thermophiles, February 2007, Santa Fe, NM (Oral presentation 20 minutes; International meeting; Invited)
21. Costa, K.C., E.L. Shock, J.B. Navarro, C.L. Zhang, D. Soukup, and B.P. Hedlund. Thermodynamic Modeling as a Predictive Tool for Determining Energy Availability in Great Basin Hot Springs. UNLV Undergraduate Research Symposium, August, 2007. (Local meeting)

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22. Ball, C. and B.P. Hedlund. Chemostat cultivation of highly thermophilic methanotrophs from a Great Basin hot spring. UNLV Undergraduate Research Symposium, August, 2007. (Local meeting)
23. Hallmark, J., J.B. Navarro, A. Flores, D. P. Moser, and B. P. Hedlund and B.P. Hedlund. Cultivation-intensive study of a Mojave recharge playa during a wet cycle.. UNLV Undergraduate Research Symposium, August, 2007. (Local meeting)
24. Clements, K. and B.P. Hedlund. Identification of thermophilic archaea and bacteria in a Nevada hot spring using fluorescent in situ hybridization. UNLV Undergraduate Research Symposium, August, 2007. (Local meeting)
25. Hedlund, B.P. Great Basin Hot Spring Cafe: Who's The Clientele And What's On The Menu? Hot Life in the Desert Meeting, February 2006, Tempe, AZ (Oral presentation 20 minutes; Small national meeting)
26. Navarro, J.B. A. Flores, D.P. Moser, and B.P. Hedlund. Cultivation-intensive study of a Mojave recharge playa during a wet cycle. American Society for Microbiology Annual Meeting, May, 2006, Orlando. (Poster presentation; International meeting)
27. Navarro, J.B., C. Vanier, and B.P. Hedlund. Molecular Census of a Thermophilic Microbial Community in Great Boiling Spring, Nevada, American Society for Microbiology Annual Meeting, May, 2006, Orlando. (Poster presentation; International meeting)
28. Hedlund, B.P. Exploring Thermophilic Biodiversity In Great Boiling Spring, NV. A preview to life in Great Basin springs. NSF RIDGE 2000 Meeting, June 2006, Mammoth, CA (Oral presentation 20 minutes; National meeting)
29. Hedlund, B.P. Life in Great Boiling Spring, NV. NSF EPSCoR Conference on Life in Extreme Environments, Las Vegas, NV, January, 2006. (Oral presentation 20 minutes; National meeting)
30. Flores, A., J.B. Navarro, D.P. Moser and B.P. Hedlund. Cultivation-intensive study of a Mojave recharge playa during a wet cycle. Arizona/NV Regional ASM Meeting, Las Vegas, February, 2006. (Poster presentation; Regional meeting)
31. Cho, S. and B.P. Hedlund. Use of microrespirometry to measure microbial electron donor preference in hot springs. Undergraduate Research Symposium, August, 2006. (Poster presentation; Local meeting)
32. Navarro, J.B. and B.P. Hedlund. Thermophilic microbial ecology and biogeochemistry of Great Boiling Spring. Arizona/NV Regional ASM Meeting, Las Vegas, February, 2006. (Poster presentation; Regional meeting)
33. Foley, T. and B.P. Hedlund. Evolution of microbial commensals of desert mammals. Arizona/NV Regional ASM Meeting, Las Vegas, February, 2006. (Poster presentation; Regional meeting)
34. Hedlund, B.P., E. Murphy, J.B. Navarro. Microbial Diversity of a White Floc Microbial Community in Darrough's Spring, a 95.5-81°C Spring in Central Nevada. American Society for Microbiology Annual Meeting, June, 2005. (Poster presentation; International meeting)
35. Navarro, J.B. and B.P. Hedlund. Exploring Thermophilic Biodiversity In Great Boiling Spring, NV. Wind River Conference on Prokaryotic Biology, June, 2005. (Poster presentation; National meeting)
36. Flores, A., J.B. Navarro, D.P. Moser and B.P. Hedlund. Microbial community and geochemistry analysis of Silver Lake Playa. Wind River Conference on Prokaryotic Biology, June, 2005. (Poster presentation; National meeting)
37. Foley, T. and B.P. Hedlund. Evolution of microbial commensals of desert mammals. Wind River Conference on Prokaryotic Biology, June, 2005. (Poster presentation; National meeting)
38. Flores, A., J.B. Navarro, D.P. Moser and B.P. Hedlund. Cultivation-intensive study of a Mojave recharge playa during a wet cycle. McNair Fellowship Annual Symposium, June, 2005. (Oral presentation 20 minutes; Local meeting)
39. Navarro, J.B., and B.P. Hedlund. Thermophilic microbial ecology and biogeochemistry of Great Boiling Spring. BRIN/NSF EPSCoR Undergraduate Research Symposium, August, 2005. (Poster presentation; Local meeting)

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40. Foley, T. and B.P. Hedlund. Evolution of microbial commensals of desert mammals. BRIN/NSF EPSCoR Undergraduate Research Symposium, August, 2005. (Poster presentation; Local meeting)
41. Flores, A. J.B. Navarro, D.P. Moser and B.P. Hedlund. Microbial community and geochemistry analysis of Silver Lake Playa. BRIN/NSF EPSCoR Undergraduate Research Symposium, August, 2005. (Poster presentation; Local meeting)
42. Hedlund, B.P. 2004. Extremophiles and astrobiology: Study of hyperthermophiles in Nevada. NASA Ames Academy Meeting. Reno, June 2004. (Oral presentation 20 minutes; Regional meeting)
43. Hedlund, B.P. 2004. Microbial diversity survey in high temperature hot springs in the basin and range region. UNLV New Investigator Award Open Forum. Las Vegas December 2004. (Oral presentation 20 minutes; local meeting)
44. Hedlund, B.P. 2004. Moving into Nevada: Biology of Hyperthermophilic Microbial Communities in the Basin and Range. Wind River Conference on Prokaryotic Biology. Estes Park, CO July 2004. (Oral presentation 20 minutes; national meeting).
45. Hedlund, B.P. 2004. Moving into Nevada: Biology of Hyperthermophilic Microbial Communities in the Basin and Range. Nevada EPSCoR Meeting. June 2004, King's Beach, CA. (Oral presentation 20 minutes; regional meeting)
46. Hedlund, B.P. 2004. Hot Stuff: New microbial life from Obsidian Pool, Yellowstone National Park. AZ-NV American Society for Microbiology Annual Meeting, Tucson, AZ. (Oral presentation 30 minutes; regional meeting)
47. Millanes, J., S. Christiensen, and B.P. Hedlund. 2004. Evolution of microbial commensals of desert mammals. 2004. Wind River Conference on Prokaryotic Biology. Estes Park, CO July 2004. (Poster presentation; national meeting).
48. Rodriguez-Perez, M.D., J. B. Navarro, and B.P. Hedlund. 2004. Exploring biodiversity in an iron hot spring. Wind River Conference on Prokaryotic Biology. Estes Park, CO July 2004. (Poster presentation; national meeting).
49. Murphy, E. and B. P. Hedlund. Molecular Survey of a Macroscopic White Floc-forming Microbial Community in Darrough's Hot Spring, a 95°C Spring in Central Nevada. Wind River Conference on Prokaryotic Biology. Estes Park, CO. (Poster presentation; national meeting).
50. Murphy, E. and B.P Hedlund. 2004. Molecular survey of a macroscopic white floc-forming microbial community in Darrough's Hot Spring, a 95°C spring in central Nevada. AZ-NV American Society for Microbiology Annual Meeting, Tucson, AZ. (**Best undergraduate oral presentation**; regional meeting).
51. Rodriguez-Perez, M.D. and B.P. Hedlund. 2004. Exploring biodiversity in an iron hot spring. AZ-NV American Society for Microbiology Annual Meeting, Tucson, AZ. (**Best undergraduate poster presentation**; regional meeting)
52. Murphy, E. and B. P. Hedlund. Molecular Survey of a Macroscopic White Floc-forming Microbial Community in Darrough's Hot Spring, a 95°C Spring in Central Nevada. BRIN Annual Meeting, Las Vegas, Aug. 2004. (Poster presentation; local meeting)
53. Navarro, J. B. and B. P. Hedlund. Exploring Thermophilic Life: A Molecular Survey of Bacteria in Great Boiling Spring. , Las Vegas, Aug. 2004. (Poster presentation)
54. Rodriguez-Perez, M.D., J.B. Navarro, and B.P. Hedlund. Exploring Biodiversity in a Hot Iron Spring. 29th Annual West Coast Undergraduate Research Conference, San Diego, April 2004. (Poster presentation; regional meeting)
55. Hedlund, B.P. Genies in a Bottle: New Microbial Life from Obsidian Pool, Yellowstone, Growing in an 85°C Chemostat. Nevada EPSCoR Conference on Integrative Approaches to Abiotic Stress. Mt. Charleston, NV, May 2003 (Oral presentation 15 minutes; regional meeting).

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TEACHING EXPERIENCE

Assistant/Assoc. Professor

Fall 2003 – Present

University of Nevada Las Vegas School of Life Sciences

Las Vegas, NV

Courses taught: Biology 251 (General Microbiology; taught 3 times)
 Biology 351 (Microbiology; taught 2 times)
 Biology 418/618 (Microbial Ecology; taught 3 times)
 Biology 423 (Field Microbial Ecology)
 Biology 493/796 (Topics in Microbiology; taught every semester)
 Biology 493/796 (Astrobiology; taught 1 time)

Lecturer

2000-2001

University of Washington Department of Microbiology

Seattle, WA

Course taught: Microbiology 402 (microbiology lab for majors)

Teaching Assistant

1994-1995

University of Washington Department of Microbiology

Seattle, WA

Courses taught: Microbiology 402 (microbiology lab for majors)
 Microbiology 302 (microbiology lab for non-majors)
 Biology 201 (biology lab for majors)

Advising

Postdoctoral Fellow

 Jeremy Dodsworth (2008-present)

Graduate Students

 MAS Committee for Carrie Laughead (2004-2006)

 MAS Committee for George McNeill (2004-2006)

 PhD Rotation advisor for Ryan McDonald (2005)

 PhD Rotation advisor for Bilaal Zaatiti (2005)

 PhD Committee for Yasmin Younas (2005)

 PhD Committee for Tristy Vick (2005-2008)

 MS Committee for Robin Miller (2005-2008)

 MS Committee for Caitlin Murphy (2007-2009)

Undergraduate Students*

* All of the undergraduate students listed below have presented work at at least one meeting and have earned fellowship support for at least one semester.

 Jason Navarro (2004-2006)(currently technician in protein crystallography lab UNLV)

 Andrea Flores (2004-2006)(currently working at Colorado Health Sciences Center, Denver)

 Tim Foley (2004-2006)(currently physician's assistant)

 Miren Guenechea (2004-2006)(currently MD student University of Nevada)

 Joy Hallmark (2006-present)

 Kyle Costa (2006-2008)(currently PhD candidate at University of Washington, Microbiology)

 Sujin Cho (summer 2006)(currently undergraduate at Cornell University)

 Stephanie Christiensen (2004-2006)(currently MD student University of Nevada)

 Manuel Diogo Rodriguez Perez (2003- 2004)(current position unknown)

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Janet Millanes (2003-2005)(currently technician at Nevada Cancer Institute)
Erin Murphy (2003-2005)(current position unknown)
Kelsey Clements (summer 2007)(currently undergraduate Bates College)
Cameron Ball (summer 2007)(currently undergraduate Washington University)
Mitchell Chaires (2007-present)
Austin McDonald (2008-present)
Jenny Lam (2008-present)
Rachel Skinner (summer 2008)(currently undergraduate Transylvania University)
Jessica Guy (2009-present)
Carrie Glenney (2009)
Dee Huang (2009)

PROFESSIONAL SERVICE

Grant Proposal Review

Grant Panel Member (off campus): 2008-
Panel member for DOE ERSP Program (8/08)
Panel member for NASA Exobiology Program (1/08 and 1/09)
Panel member for NSF/USDA Microbial Genome Sequencing Program (5/09)

Grant proposal ad hoc reviewer: 2003-
National Science Foundation Panels: Genes and Genome Systems panel (MCB), Microbial
Observatories/Microbial Interactions and Processes panel (MCB), Advances in Bioinformatics
(DBI), Population and Community Ecology Cluster (DEB), Geobiology and Low Temperature
Geochemistry (EAR), Environmental Genomics
Murdock Life Sciences grant proposals

Peer Review of Scientific Writings and Editorial Positions

Publication Peer Reviewer 2003-
Reviewed more than 75 papers for the following journals: *Applied and Environmental Microbiology*,
Archives of Microbiology, *Botanical Studies*, *Biofilms*, *Chemosphere*, *Environmental Microbiology*, *FEMS*
Microbiology Ecology, *Geobiology*, *Geochimica et Cosmochimica Acta*, *Geomicrobiology Journal*,
Extremophiles, *International Journal of Systematic and Evolutionary Microbiology*, *Journal of Arid*
Environments, *Journal of Virology*, *Microbial Ecology*, *Microbiology Molecular Biology Reviews*, *Oikos*.

Associate Editor for Bergey's Manual Trust 2005-2010
I am an editor for Volume 4 of the 2nd Edition of Bergey's Manual of Systematic Bacteriology. As such, I
am editing all chapters, 34 in total, for two phyla of bacteria, Lentisphaerae and Verrucomicrobiae.
Editors typically write family to phylum level descriptions. The chapters I'm authoring are between one
and ten pages, as they would appear in the printed volume.

Editorial Board Applied and Environmental Microbiology 2009-2012
I am now serving a three year term on the editorial board. As such, I will be expected to review up to
three manuscripts per month.

Book Reviewer 2003-

BRIAN P. HEDLUND, PH.D.

- Staley, Gunsalus, Lory, and Perry's *Microbial Life*
- Prokaryotes and the Origin of Metabolic Diversity. *In* N.A. Campbell (author) *Biology*, 6th Edition, Benjamin Cummings, USA
- Metabolism: Energy Release and Conservation. *In* Prescott/Harley/Klein (authors) *Microbiology*, 6nd Edition, McGraw Hill, USA
- Archaea, Bacteria, and Viruses. *In* Rost/Barbour/Stocking/Murphy (authors) *Plant Biology*, 2nd Edition, Brooks/Cole, Belmont, CA, USA
- Intrinsic and Extrinsic Parameters of Foods of Foods that Affect Microbial Growth. *In* Jay (author) *Modern Food Microbiology*
- Kenneth N. Timmis (ed.) *Microbiology of Hydrocarbons, Oils, Lipids, and Derived Compounds*, Springer Verlag, Heidelberg, Germany.

Service to Professional Societies

2003-

- President of Arizona-Southern Nevada Branch of American Society for Microbiology (2006-2007)
- Organizer of annual meeting of the Arizona-Southern Nevada Branch of the American Society for Microbiology, Las Vegas (2006)
- Branch councilor for Arizona-Southern Nevada Branch of American Society for Microbiology (2007-2008)

Professional Memberships

- | | |
|---|-----------------------|
| • American Society for Microbiology | <i>1995 – Present</i> |
| • Sigma Xi | <i>1995 – Present</i> |
| • American Society for Limnology and Oceanography | <i>2007 – Present</i> |
| • American Geophysical Union | <i>2008 – Present</i> |

Service to University of Nevada System

- NASA EPSCoR Director Search Committee
- Nevada Space Grant Faculty Coordinator
- Reviewer for NASA EPSCoR Proposals
- Panel member for Nevada Space Grant Workforce Development Proposals

Service to UNLV

- Panel member for UNLV Presidential Research Awards (7/07)
- Committee for Furnishing & Delivering Compressed and Liquid Gases RFP #443-VK
- 2003-present Research Mentor, NSF-EPSCoR, BRIN/INBRE, and NSF Microbial Ecology Summer REU programs
- 2003-present Faculty Marshall for May commencement

Service to College of Sciences

- Math-Science Achievement Award Committee (2004-2005)
- Graduate Student Committee Member (outside Department/School)
 - MAS Committee for Cory Patterson (Geoscience)(2004)
 - Ph.D. Thesis committee for Amy Brock (Geoscience)(2004-present)
 - MS Committee for Mike Howell (Geoscience) (2005-present)
 - MS Committee for Maureen Yanovitz (Geoscience)(2005-2008)

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Service to Department/School

- Graduate Student Committee Member (Department Biological Sciences/School of Life Sciences)
 - Ph.D. Thesis committee for Dustin Harrison (2008-present)
 - Ph.D. Thesis committee for Chris Hensley (2009-present)
 - MS Thesis member for Kameron Entekin (2003-2005)
 - Ph.D. Thesis committee for Linh Nguyen (2003-2007)
 - MAS Committee for Janie Sherwood (2004-2005)
 - MS Committee for Eun Hae Kim (2005-2008)
 - PhD Committee for Rob Bryson (2007-present)
 - MS Committee for Susanna Blunt (2007-present)
- Graduate Admissions Committee (2003-present)(Chair from 2005-2007)
- Search Committees
 - Chair of the Search Committee for Microbiologist (hired Helen Wing) (2004)
 - Member of the Search Committee for Microbiologist (hired Dennis Bazylnski) (2006)
- Member, Personnel Committee (2005-2006)
- Member, Ad hoc committee on ICBM Graduate Program/Curriculum Committee
- Member, Ad hoc committee on ICBM Undergraduate Program/Curriculum Committee
- Bios Symposium presentation judge (2005)
- Defacto member of the Juanita Greer White Endowed Lecture Committee (2008)

COMMUNITY OUTREACH*

* This compilation does not include many individual interactions with students or groups of students, including isolated trips to elementary and high school science fairs (including judging) and advising various students and groups of students on science fair projects. I feel these individual interactions have a very limited impact and frankly they're hard for me to keep track of. Below, I've focused on outreach activities with both teachers and students, particularly those that are repeated for long term. For example, students and teachers from Pyramid Lake Junior and Senior High School have been on two week long field trips involving many lectures and demonstrations and allowing students to participate directly in my field research. This kind of meaningful prolonged outreach is in the spirit of my NSF CAREER award and I feel it has greater potential to have a lasting impact. Students are encouraged to participate for multiple summers.

Outreach-oriented Field Trips

- Led one week research field trip with 8 Pyramid Lake Paiute high school students and 2 high school teachers (27 people total). Featured on The Research Channel half our production entitled "Behind the Research: A Study of a Model Hot Spring" (summer 2007)
(<http://www.researchchannel.org/search/sitesearch.aspx>)
- Led one week research field trip with 11 Pyramid Lake Paiute high school students and 2 high school teachers (23 people total). (summer 2008)
- Teacher for NASA workshop for primary/secondary educators on astrobiology, Carson City/Reno, NV (June 2004). 30 minute presentation on life in extreme environments and then co-let (with Duane Moser and Henry Sun) a field trip to Mono Lake. Trip website: <http://www.unlv.edu/faculty/hedlund/Outreach>
- Co-leader SREL/UNLV field trip to Nevada/California hot springs to educate high school teachers and students (May 2005). Trip website: http://www.uga.edu/srel/Nevada_Hot_Springs/travel-1-2005.htm

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Public/Outreach Seminars

1. Some Like It Hot: Microbiology of Boiling Springs in Nevada and Beyond. UNLV Forum Lecture, April 2008. (50 minute lecture)
2. Bioprospecting Nevada's geothermal ecosystems: Gold, fool's gold, (or both)? Southern Nevada Biotechnology and Bioscience Consortium, March 2008. (50 minute lecture)
(<http://nevbio.blogspot.com/2008/03/nevbio-meeting-drbrian-hedlund-march.html>)
3. NASCAR's tiny clean up crew: Bacteria clean up the race's mess. Nevada Science Bowl. Feb. 2004. (20 minute lecture)
4. A Brief History of Life on Earth (and Elsewhere?) Teacher for NASA workshop for primary/secondary educators on astrobiology, June, 2006. Led 2 hour talk/discussion with ~60 teachers.
5. Astrobiology. Teacher for workshop for primary/secondary educators on cross-disciplinary science, June 2007. Led 1 hour talk/discussion with ~15 teachers.

Popular Media

- Research featured on UNLV Academic Café: "Hunt for hot spring microbes" (May 2004). This was a ~7 minute interview for a 30 minute program that aired on UNLV TV in Las Vegas.
- Featured in 30 minute TV program Desert Survivors: "Life in a hot spring". Aired on UNLV TV in Las Vegas. (<http://sciences.unlv.edu/desertsurvivors/>)
- Featured on half hour program on The Research Channel entitled "Behind the Research: A Study of a Model Hot Spring", August 30, 2007. (<http://www.researchchannel.org/search/sitesearch.aspx>)
- Research featured on Science Daily, "Archaea In Hot Springs Use Ammonia For Energy: May Shed Light On Early Evolution" May 25, 2007.
(<http://www.sciencedaily.com/releases/2007/05/070523093947.htm>)
- Research featured on the cover of the Las Vegas Review Journal: "Hot Pursuit: Expert Detects Rare Life Forms", September 29, 2006. (http://www.reviewjournal.com/lvrj_home/2006/Sep-29-Fri-2006/news/9917570.html)
- Research featured on cover of Silverado News, "Hot stuff in the desert", October 2, 2006.
- Research featured in the Las Vegas Review Journal: "College of Sciences: UNLV Gets National Attention", August 13, 2007. (<http://www.lvrj.com/news/9121541.html>)
- Research featured on Genetic Archaeology: "Discovery Of Ecological And Metabolic Roles Of Archaea In Hot Springs May Shed Light On Early Evolution", May 24, 2007.
- Research featured on College of Sciences Newsletter, "National Science Foundation (NSF) Faculty Early Career Development Award, Assistant Professor Brian Hedlund" July 2006.
(http://www.geneticarchaeology.com/Research/Discovery_Of_Ecological_And_Metabolic_Roles_Of_Archaea_In_Hot_Springs_May_Shed_Light_On_Early_Evolution.asp)
(<http://sciences.unlv.edu/enewsletter/2006/jul-2006.html>)
- Research featured on cover article for UNLV Magazine "Hot Springs Research Moves Full Steam Ahead", spring 2007. (<http://magazine.unlv.edu/Issues/Spring07/5shot.html>)