

## ANDREAS P. TESKE

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### **Awarded fellowships and degrees:**

Hanse Institute for Advanced Study Fellowship, 2008 & 2011  
WHOI postdoctoral fellowship, Woods Hole, March 1996 - February 1998  
Ph.D., Microbial Ecology, Bremen University/Max-Planck-Institute for Marine Microbiology, Bremen, Germany, October 1992 - December 1995  
Diploma (Masters), Biochemistry, Hannover University, Germany, June 1991  
Fulbright Fellowship at Univ. of Illinois, Champaign-Urbana, with David Stahl and Carl Woese, July 1991 - July 1992  
Fellow of the German National Scholarship Foundation 1988 - 1991

### **Professional experience:**

Professor, Dept. of Marine Sciences, UNC Chapel Hill (since July 2007)  
Associate Professor, Dept. of Marine Sciences, UNC Chapel Hill (July 2002-2007)  
Assistant Scientist at the Woods Hole Oceanographic Institution, Biology Department (Feb. 1998 – Sept. 2002)  
Adjunct Scientist, WHOI (February 2003-2006) and MBL (since July 2002)

### **10 selected recent publications:**

- Salman, V., T. Yang, T. Berben, F. Klein, E. Angert, and A. Teske. 2015. Calcite-accumulating large sulfur bacteria of the genus *Achromatium* in Sippewissett Salt Marsh. The ISME Journal, online publication, doi:10.1038/ismej.2015.62.
- Ruff, E., J.F. Biddle, A. Teske, K. Knittel, A. Boetius, and A. Ramette. 2015. Global dispersion and local diversification of the methane seep microbiome. Proc. Natl. Acad. Sci. USA, 112:4015-4020.
- Teske, A., A.V. Callaghan, and D.E LaRowe. 2014. Biosphere frontiers of subsurface life in the sedimented hydrothermal system of Guaymas Basin. Frontiers in Microbiology, 5:362; doi:10.3389/fmicb.2014.00362.
- Yang, T., L. M. Nigro, T. Gutierrez, L. D'Ambrosio, S. B. Joye, R. Highsmith, A. Teske. 2014. Pulsed blooms and persistent oil-degrading bacterial populations in the water column during and after the Deepwater Horizon blowout. Deep-Sea Research Part II Topical Studies, online publication. <http://dx.doi.org/10.1016/j.dsr2.2014.01.014>
- MacGregor, B.J., J.F. Biddle, J.R. Siebert, E. Staunton, E. Hegg, A.G. Matthyse, and A. Teske. 2013. Why orange Guaymas Basin *Beggiatoa* spp. are orange: Single-filament genome-enabled identification of an abundant octaheme cytochrome with hydroxylamine oxidase, hydrazine oxidase and nitrite reductase activities. Appl. Environ. Microbiol. 79:1183-1190.
- Lever, M.A., O. Rouxel, J. C. Alt, N. Shimizu, S. Ono, R.M. Coggon, W.C. Shanks III, L. Lapham, M. Elvert, X. Prieto-Mollar, K-U. Hinrichs, F. Inagaki, and A. Teske. 2013. Evidence for microbial carbon and sulfur cycling in deeply buried Ridge Flank Basalt. Science 339:1305-1308
- Teske, A. 2012. Tracking microbial habitats in subseafloor sediments. Proc. Natl. Acad. Sci. USA 42:16756-16757.
- McKay, Luke J. Barbara J. MacGregor, Jennifer F. Biddle, Howard P. Mendlovitz, Dan Hoer, Julius S. Lipp, Karen G. Lloyd, and Andreas P. Teske. 2012. Spatial heterogeneity and

underlying geochemistry of phylogenetically diverse orange and white *Beggiatoa* mats in Guaymas Basin hydrothermal sediments. *Deep-Sea Research I*, 67:21-31.

Durbin, A.M., and A. Teske. 2012. Archaea in organic-lean and organic-rich marine subsurface sediments: an environmental gradient reflected in distinct phylogenetic lineages. *Frontiers in Microbiology* 3:168, doi: 10.3389/fmicb.2012.00168

Biddle, J. Z. Cardman, H. Mendlovitz, D. B. Albert, K. G. Lloyd, A. Boetius, and A. Teske. 2012. Anaerobic oxidation of methane at different temperature regimes in Guaymas Basin hydrothermal sediments. *The ISME Journal* 6:1018-1031.

### **Synergistic activities:**

- **Chair and Co-Chair** functions: Gulf of Mexico Oil Spill & Ecosystem Research Conf, Feb 16-19, 2015, Houston, TX, Microbial ecosystem Trajectories in Gulf of Mexico Environments, co-hosted with J. Kostka; Gulf of Mexico Oil Spill & Ecosystem Research Conf., New Orleans, January 21-23, 2013, "Biodegradation pathways and environmental impacts of hydrocarbon discharge" with J. Kostka & A. Penn; ASM Division N Chair (Microbial Ecology) July 2004-July 2005; Co-Chair with J. Kostka: "The Shallow Subsurface Biosphere" at ASM General Meeting, Boston, June 1-5, 2008, Co-chair with T. Ferdelman: "The Subsurface Biosphere" at Goldschmidt Conf., Davos, Switzerland, August 18-23, 2002
- **Deep Subsurface Biosphere** work, with 3 examples: 1) setting up the current microbiology laboratory on JOIDES Resolution as a community resource for seagoing microbiologists since May 2000, with NSF funding; 2) Theme team leader in NSF-funded C-DEBI (Dark Energy Biosphere Institute) Science and Technology Center (PI, K. Edwards, USC); 3) Three-year service on NSF-Ridge 2000 Steering Committee
- **Advisory and editorial board** activities: Advisory editorial board of *Geobiology* (since 2003); Editorial Board member for *FEMS Microbiology Ecology*, *Applied and Environmental Microbiology*, and the *ISME Journal* (all since 2007); Specialty Editor (*Extreme Microbiology*) for *Frontiers in Microbiology* (since 2010); frequent reviewer
- **ICOMM (International Census of Marine Microbes)** work on microbial diversity of the deep subsurface; participant and discussion leader as ICOMM workshops (MBARI, Nov. 2003 and Amsterdam, May 2008); providing raw data and metadata for ICOMM database
- **Speaking and teaching activities:** MBL Microbial Diversity course; 2007-2014; Zephyr Foundation outreach July 2010-2015; Gordon Conference on Organic Geochemistry, August 2010; Joint Oceanographic Institutions Distinguished Speaker 2007-2008; Teaching regular first-year freshman seminars at UNC (extremophiles & Astrobiology) since 2002

**Ph.D. advisor:** Bo B. Jørgensen, Aarhus University, Aarhus, Denmark

**Postdoctoral advisor:** Holger W. Jannasch, WHOI (Deceased)

**Graduate advisees:** Ph.D. Student advisees—Michael S. Atkins (1998-2000; WHOI); Karen G. Lloyd (2002- 2009), Mark Lever (2002 - 2008), Alan Durbin (Masters, 2005 – 2009), Lindsay D'Ambrosio (Masters; 2008 - 2011), Luke J. McKay (2008-2014), Lisa Nigro (2009-), Tingting Yang (2009-2014), John Paul Balmonte (2011-), Andrew Hyde (2015-) (all at UNC)

**PhD/MSc committee member:** Lara Gulmann (2000-2004), John Tolli (WHOI, 2000-2003); Vanja Klepac (MIT, 2000-2004); Vanessa Madrid (LSU, 2001-2006), Melissa Southwell (UNC Chapel Hill, 2004-2007), Kyoko Kubo (Bremen University, 2008-2011), Lindsay D'Ambrosio (UNC, 2010-2012), Derek Lundberg (UNC Biology Dept, 2009-2014), Avery Brooks (UNC, 2013-2014), Megumi Shimizu (Duke Marine Lab, 2011-), Adrienne Hoarfrost (UNC, 2012-)

**Postdoctoral advisees:** Virginia Edgcomb (WHOI/MBL), Michael S. Atkins (WHOI/MBL), Stefan Sievert (WHOI), Konstantinos A. Kormas (WHOI), Antje Lauer, Ketil Sørensen, Dina Leech, Jennifer Biddle, Cassandre Lazar, Verena Salman, Andrew Buckley (all UNC)