

**Roland Hatzenpichler, PhD**

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**A. Professional Preparation**

- University of Vienna Vienna, Austria Microbiology & Genetics Master of Natural Sciences, 2006
- University of Vienna Vienna, Austria Microbial Ecology Doctor of Natural Sciences (PhD), 2011  
*Pre-doctoral fellowship of the Austrian Academy of Sciences* 2007-2009
- California Institute of Technology Pasadena, CA Geobiology 2011-2016  
*O.K. Earl Postdoctoral Scholar in Geobiology* 2011-2012  
*Erwin Schrödinger Postdoctoral Scholar* 2012-2014  
*NSF Center for Dark Energy Biosphere Investigations Senior Postdoctoral Scholar* 2014-2016

**B. Appointments**

- Nov 2016 - present, Assistant Professor, Department of Chemistry and Biochemistry. Montana State University (MSU), Bozeman.** Affiliated faculty at Thermal Biology Institute (MSU) and Center for Biofilm Engineering (MSU)
- Aug-Oct 2016, Assistant Research Professor, Department of Microbiology and Immunology, MSU

**Awards**

- 2017, NASA Early Career Fellowship**
- 2011, Doc Award for outstanding PhD thesis by the City of Vienna, Austria

**C. Products**

**in total, 16 publications; 2 ms in preparation** **~1,800 citations, h-index: 11, i-10 index: 12**

**(i) Five most relevant publications**

**\* corresponding author** **equal contribution**

- Hatzenpichler R\*** et al. *Visualizing in situ translational activity for identifying and sorting slow-growing archaeal-bacterial consortia*. Proc Natl Acad Sci USA, 113: E4069-E4078 (2016)  
 ► Discussed in Nature Microbiol “News & Views”
- Hatzenpichler R\*** and Orphan VJ. *Detection of protein-synthesizing microorganisms in the environment via bioorthogonal non-canonical amino acid tagging (BONCAT)*. Book chapter for *Hydrocarbon and Lipid Microbiology Protocols, Vol. 7: Single-cell and single-molecule methods*. Springer Protocols Handbooks, doi: 10.1007/8623\_2015\_61 (2015)
- Hatzenpichler R\*** et al. *In situ visualization of newly synthesized proteins in environmental microbes using amino acid tagging and click chemistry*. Environ Microbiol, 16: 2568-2590 (2014)  
 ► Cover article ► Discussed in Environ Microbiol “Research Highlight”
- Lebedeva EV, Hatzenpichler R**, et al. *Enrichment and genome sequence of the group I.1a ammonia-oxidizing archaeon “Ca. Nitrosotenuis uzonensis” representing a clade globally distributed in thermal habitats*. PLoS One, 8: e80835 (2013)
- Hatzenpichler R** et al. *A moderately thermophilic ammonia-oxidizing crenarchaeote from a hot spring*. Proc Natl Acad Sci USA, 105: 2134-2139 (2008)

**(ii) Five other significant publications**

**\* corresponding author**

- McKay LJ, **Hatzenpichler R**, et al. *Occurrence and expression of novel methane cycling genes by diverse archaeal phyla in hot spring sediments*. Sci Rep 7: 7252 (2017)

- Marlow JJ and **Hatzenpichler R**. *Assessing metabolic activity at methane seeps: a testing ground for slow-growing environmental systems*. Book chapter in *Life at Vents and Seeps*. 223-259 (2017)
- Ma L, Kim J, **Hatzenpichler R**, et al. *Gene-targeted microfluidic cultivation validated by isolation of a gut bacterium listed in Human Microbiome Project's Most Wanted taxa*. *Proc Natl Acad Sci USA*, 111: 9768–9773 (2014)
- **Hatzenpichler R\***. *Diversity, physiology, and niche differentiation of ammonia-oxidizing archaea*. *Appl Environ Microbiol*, 78: 7501-7510 (2012)  
► Review article
- Spang A, **Hatzenpichler R**, et al. *Distinct gene set in two different lineages of ammonia-oxidizing archaea supports the phylum Thaumarchaeota*. *Trends Microbiol* 18:331-40 (2010)  
► Cover article ► Most cited *Trends Microbiol* article in interval 2010-2015

#### D. Synergistic Activities

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- **2015-present, Associate Editor, *Frontiers in Microbiology: Microbial Physiology and Metabolism***. Impact factor: 4.08 (2017)
- 2014-2017, Member of Junior Advisory Group of the American Society of Microbiology (ASM)
- 2016, member of General Meeting Planning Committee for *ASM Microbe 2016*, Boston, MA
- regular *ad hoc* reviewer for The ISME Journal, FEMS Microbiology Reviews, Environmental Microbiology, Environmental Microbiology Reports, Nature Communications, Applied and Environmental Microbiology, Frontiers in Microbiology, FEMS Microbiology Ecology, PLoS One, Microbiology, Scientific Reports, Antonie van Leeuwenhoek Journal of Microbiology, Environmental Science and Technology, mSphere
- **reviewer for grant and fellowship applications** to NASA's Exobiology & Evolutionary Biology (panellist in 2015, 2018), NASA Astrobiology Institute (CAN8), NASA's Earth and Space Sciences Graduate Fellowship program, Montana NASA EPSCoR Program, NSF Biological Oceanography, the Environmental Molecular Sciences Laboratory (PNNL), and the French National Research Agency
- **2016-present, 12 invited seminars and 4 invited conference talks since start of faculty position**
- 2008-2016, 24 invited seminars and 8 invited conference talks prior to faculty position

#### E. Mentoring

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- Viola Krukenberg, postdoc, 2017-present; studying anaerobic carbon-cycling potential of microbes in Guaymas basin sediments through activity-based cell sorting and single cell genomics
- Rachel Lange Spietz, postdoc, 2018-present; 3D organization of metabolically active cells in marine sediments through the lens of bioorthogonal labeling and isotope probing
- Mackenzie Lynes, graduate student, 2017-present; ecophysiology of microbial dark matter in hot springs of Yellowstone National Park
- Nick Reichart, graduate student, 2017-present; ecophysiology of microbial dark matter in hot springs and development of novel bioorthogonal labeling approaches