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EDUCATION

1997 University of Texas Southwestern Medical Center Ph.D. Molecular Biology
1988 University of Cluj, Romania M.S. Biology

PROFESSIONAL POSITIONS

2007 – Present Research Scientist, Biosciences Division, Oak Ridge National Laboratory (ORNL).
2007 – Present Adjunct Professor, Genome Sciences and Technology Graduate Program, ORNL /
University of Tennessee, Knoxville, TN.
2006 – Present Adjunct Professor, Biology Department, Portland State University, Portland, OR.
2006 – 2007 Visiting Scholar, Pharmacology Department, University of California San Diego,
CA.
2000 – 2006 Bioinformatics Staff Scientist, Diversa Corporation, San Diego, CA.
1999 – 2000 Postdoctoral Fellow, Salk Institute for Biological Science, La Jolla, CA.
1997 – 1999 Postdoctoral Scholar, Woods Hole Oceanographic Institution, Woods Hole, MA.
1991 – 1997 Graduate Research Assistant, University of Texas Southwestern Medical Center,
Dallas, TX.
1989 – 1991 Teach Assistant, Genetics Department, University of Cluj, Romania.

PROFESSIONAL SERVICE, AFFILIATIONS, AND HONORS

Honors: University of California AIDS Research Program Fellowship, 1999.
Townsend Postdoctoral Scholarship Award, Woods Hole Oceanographic Institution, 1997.
Nominata Award, University of Texas Southwestern Medical Center Graduate School, 1996.
Sigma Xi Graduate Student Award, 1995.
Reviewer: JGI Community Sequencing Program, 2008.
NIH Human Microbiome Demonstration Project RFA-RM-08-012, 2008.
NASA Exobiology Program, 2009.

SELECT RECENT PUBLICATIONS (from >30)

Reysenbach A.L., N. Hamamura, M. Podar, E. Griffiths, S. Ferreira, R. Hochstein, J. Heidelberg, J. Johnson, D. Mead, A. Pohorille, M. Sarmiento, K. Schweighofer, R. Seshadri, and M.A. Voytek. 2009. Complete and draft genome sequences of six members of the Aquificales. *J Bacteriol.* 191:1992-1993.
Podar M., I. Anderson, K.S. Makarova, J.G. Elkins, N. Ivanova, M. Wall, A. Lykidis, K. Mavrommatis, H. Sun, M.E. Hudson, W. Chen, C. Deciu, D. Hutchison, J.R. Eads, A. Anderson, F. Fernandes, E. Szeto, A. Lapidus, N.C. Kyrpides, M.H. Saier Jr., P.M. Richardson, R. Rachel, H. Huber, J.A. Eisen, E.V. Koonin, M. Keller, and K.O. Stetter. 2008. A genomic analysis of the archaeal system *Ignicoccus hospitalis*-*Nanoarchaeum equitans*. *Genome Biol.* 9:R158.
Elkins, J.G., M. Podar, D.E. Graham, K.S. Makarova, Y. Wolf, L. Randau, B.P. Hedlund, C. Brochier, V. Kunin, I. Anderson, A. Lapidus, E. Goltsman, K. Berry, E.V. Koonin, P. Hugenholtz, N. Kyrpides, G. Wanner, P. Richardson, M. Keller, and K.O. Stetter. 2008. A korarchaeal genome reveals new insights into the evolution of the Archaea. *Proc. Natl. Acad. Sci. U.S.A.* 105:8102-8107.
Podar M., M.A. Wall, K.S. Makarova, and E.V. Koonin. 2008. The prokaryotic V4R domain is the likely ancestor of a key component of the eukaryotic vesicle transport system. *Biology Direct* 3:2.

- Warnecke, F., P. Luginbühl, N. Ivanova, M. Ghassemian, T.H. Richardson, J. Stege, G. Djordjevic, N. Aboushadi, R. Sorek, S. Tringe, M. Podar, H.G. Martin, V. Kunin, D. Dalevi, J. Madejska, E. Kirton, D. Platt, E. Szeto, A. Salamov, K. Barry, N. Mikhailova, N. Kyrpides, E. Matson, E. Ottesen, X. Zhang, A. McHardy, M. Hernández, C. Murillo, C. Acosta, I. Rigoutsos, G. Tamayo, B. Green, C. Chang, E. Rubin, E. Mathur, D. Robertson, P. Hugenholtz, and J.R. Leadbetter. 2007. Metagenomic and functional analysis of hindgut microbiota of a wood-feeding higher termite. *Nature* 450:560-565.
- Podar, M. 2007 Two component systems in microbial communities: Approaches and resources for generating and analyzing metagenomic data sets. *Methods in Enzymology* 422:32-46.
- Podar, M. and A.L. Reysenbach. 2006. New opportunities revealed by biotechnological explorations of extremophiles. *Curr. Opin. Biotech.* 17:1-6.
- Podar, M., C. Abulencia, M. Wachter, D. Hutchinson, K. Zengler, J. Garcia, L. Hausser, and M. Keller. 2007. Targeted access to the genomes of low abundance organisms in complex microbial communities. *Appl. Environ. Microbiol.* 73:3205-3214.
- Randau, L., K. Calvin, M. Hall, J. Yuan, M. Podar, H. Li, and D. Söll. 2005. The heteromeric *Nanoarchaeum equitans* splicing endonuclease cleaves non-canonical bulge-helix-bulge motifs of joined tRNA halves. *Proc. Natl. Acad. Sci. U.S.A.* 102:17934-17939.
- Podar, M., J. Eads, and T.H. Richardson. 2005. Evolution of a microbial nitrilase gene family: An environmental genomics study. *BMC Evol. Biol.* 5:42-48.
- Giovannoni, S., J. Tripp, S. Givan, M. Podar, K. Vergin, L. Bibbs, J. Eads, T. Richardson, M. Noordewier, M. Rappé, J. Short, and E. Mathur. 2005. Genome streamlining in a cosmopolitan oceanic bacterium. *Science* 309:1242-1245.
- Tringe, S.G., C. Mering, A. Kobayashi, A.A. Salamov, K. Chen, H.W. Chang, M. Podar, J.M. Short, E.J. Mathur, J.C. Detter, P. Bork, P. Hugenholtz, and E.M. Rubin. 2005 Comparative metagenomics of microbial communities. *Science* 308:554-557.
- Waters, E, M.J. Hohn, I. Ahel, D.E. Graham, M.D. Adams, M. Barnstead, K.Y. Beeson, L. Bibbs, R. Bolanos, M. Keller, K. Kretz, X. Lin, E. Mathur, J. Ni, M. Podar, T. Richardson, G.G. Sutton, M. Simon, D. Söll, K.O. Stetter, J. Short, and M. Noordewier. 2003. The genome of *Nanoarchaeum equitans*: Insights into early archaeal evolution and derived parasitism. *Proc. Natl. Acad. Sci. U.S.A.* 100:12984-12988.
- Podar, M., L. Mullineaux, H. Hon-Ren, P.S. Perlman, and M.L. Sogin. 2002 Bacterial group II introns in a deep-sea hydrothermal vent environment. *Appl. Environ. Microbiol.* 68:6392-6398.
- Podar, M., S.H.D. Haddock, M. Sogin, and G.R. Harbison. 2001 A molecular phylogenetic framework for phylum Ctenophora using 18S rRNA genes. *Mol. Phylogen. Evol.* 21:218-230.
- Podar, M., P.S. Perlman, and R.A. Padgett. 1998. The two steps of group II introns splicing are mechanistically distinguishable. *RNA* 4:890-900.
- Podar, M., V.T. Chu, A.M. Pyle, and P.S. Perlman. 1998. Group II intron splicing in vivo by first step hydrolysis. *Nature* 391:915-918.
- Podar, M., J. Zhou, M. Zhang, J.S. Franzen, P.S. Perlman, and C.L. Peebles. 1998. Domain 5 binds near a highly conserved dinucleotide in the joiner linking domains 2 and 3 of a group II intron. *RNA* 4:151-166.
- Podar, M., P.S. Perlman, and R.A. Padgett. 1995. Stereochemical selectivity of group II intron splicing, reverse splicing and hydrolysis reactions. *Mol. Cell. Biol.* 15:4466-4478.
- Padgett, R.A., M. Podar, S.C. Boulanger, and P.S. Perlman. 1994. The stereochemical course of group II intron self-splicing. *Science* 266:1685-1688.