

ANTHONY V. PALUMBO

PRESENT POSITION

2009 – Present Division Directory, Biosciences Division, Oak Ridge National Laboratory (ORNL), P. O. Box 2008, Oak Ridge, TN 37830-6038. Phone 865-576-8002 Fax 576-8646, E-mail palumboav@ornl.gov Web: <http://www.esd.ornl.gov/programs/microbes/>

PREVIOUS POSITIONS

2007-2009 Deputy Division Directory, Biosciences Division
2001-2007 Distinguished Scientist and Group Leader, ESD
2000-2001 Section Head for Earth and Microbial Science Section, ESD
1999-2000 Science Team Leader for Biogeochemistry for ESD
1997-1999 Senior Staff and Member of the Research Council
1993-1996 Group Leader - Microbial Interactions Group, ESD, ORNL, Oak Ridge, TN.
1987-1997 Staff Member, Environmental Sciences Division
1983-1986 Research Associate, University of Tennessee, Knoxville, TN.
1981-1983 Research Associate, University of North Carolina, Chapel Hill, NC.
1979-1981 Postdoctoral Associate, Massachusetts Institute of Technology, Cambridge, Mass.
1977-1979 Biologist, National Marine Fisheries Service, Beaufort, NC.

EDUCATION

Rensselaer Polytechnic Institute	Biology	B. S. 1973
North Carolina State University	Marine Science	M. S. 1976; Ph.D. 1980

RESEARCH INTERESTS

Integration of physical, chemical, and biological remediation technologies; Microbial ecology in contaminated and pristine ecosystems; application of molecular techniques to microbial ecology.

PROFESSIONAL RECOGNITION AND AFFILIATIONS

Fellow of the American Academy for Microbiology.
Member of: American Society for Microbiology; American Society of Limnology and Oceanography; American Geophysical Union

Patent No. 5,807,697. Strong-Gunderson, J. M. and A. V. Palumbo. Biological Tracer Method.

Patent No. 629,146. Cochran, J., T. J. Phelps, J. M. McCarthy, and A. V. Palumbo. Position sensitive radioactivity detector for gas and liquid chromatography.

Patent No. 7,569,737. T. J. Phelps, C. Tsouris, A. V Palumbo, D. E. Riestenberg, and S. D. McCallum. Method for excluding salt and other soluble materials from produced water.

RECENT PUBLICATIONS (TOTAL = 147)

Campbell, J.H., C. M. Foster, T. Vishnivetskaya, A. G. Campbell, Z. K. Yang, A. Wymore, A. V Palumbo, E. J. Chesler and M. Podar. 2012. Host genetic and environmental effects on mouse intestinal microbiota. ISME Journal 6:2033-2044.

Brown, S. D., M. Podar, D. M. Klingeman, C. M. Johnson, Z. K. Yang, S. M. Utturkar, M.L. Land, J.J.

- Mosher, R. A. Hurt, T. J. Phelps, A. V. Palumbo, A. P. Arkin, T. C. Hazen, D. A. Elias. 2012. Draft genome Sequences for two metal-reducing *Pelosinus fermentans* strains isolated from a Cr(VI)-contaminated site and for type strain R7. *Journal of Bacteriology* 194:5147-5148. DOI: 10.1128/JB.01174-12.
- Kostka, J., S. Green, L. Rishishwar, O. Prakash, L., Katz, L. Marino-Ramirez, I. King Jordan, C. Munk, N. Ivanova, N. Mikhailova, D. Watson, S.D. Brown, A.V. Palumbo, and S. Brooks. 2012. Genome sequences for six Rhodanobacter strains isolated from soils and the terrestrial subsurface with variable denitrification capabilities. *Journal of Bacteriology*. 194:4461-4462.
- Hurt, R. A., S. D. Brown, M. Podar, A. V. Palumbo, and D. A. Elias. 2012. Sequencing intractable DNA to close microbial genomes. *PLoS ONE* 7(7): e41295. doi:10.1371/journal.pone.0041295
- Brown, S. D., A. V. Palumbo, N. Panikov, T. Ariyawansa, D. M. Klingeman, C. M. Johnson, M. L. Land, S. M. Utturkar, and S. S. Epstein. 2012. Draft Genome Sequence for Microbacterium laevaniformans (Actinobacteria) strain OR221, a bacterium tolerant to metals, nitrate and low pH. *Journal of Bacteriology* 194:3279-3280. DOI: 10.1128/JB.00474-12.
- Moberly, J. G., C. Miller., S.D. Brown, A. Biswas, C. C. Brandt, A. V. Palumbo, D. A. Elias. 2012. Role of Physiology and Gene Expression in Desulfovibrio africanus strain Walvis Bay Mercury Methylation. *Environ. Sci. and Tech.* 46:4926-4932.
- Mosher, J. J., T. A. Vishnivetskaya, D. A. Elias, M. Podar, S. C. Brooks, S. D. Brown, C. C. Brandt and A. V. Palumbo. 2012. Characterization of the Deltaproteobacteria in contaminated and uncontaminated surface stream sediments and identification of potential mercury methylators. *Aquatic Microbial Ecology*. 66:271-282.
- Akob, D. M., S. H. Lee, M. Sheth, K. Küsel, D. B. Watson, A. V. Palumbo, J. E. Kostka, and Kuk-Jeong Chin. 2012. Gene expression correlates with process rates quantified for sulfate- and Fe(III)-reducing bacteria in U(VI)-contaminated sediments. *Frontiers in Terrestrial Microbiology*. 3:280.
- Layton, A. C., A. E. Smartt, A. Chauhan, S. Ripp, D. E. Williams, W. Burton, S. Moser, J. Phillips, A. V. Palumbo, and G. S. Saylor. 2012. Ameliorating risk: Culturable and metagenomic monitoring of the 14 year decline of a genetically engineered microorganism at a bioremediation field site. *J. Bioremed. Biodegrad.* S1:1:009 doi: 10.4172/2155-6199.S1-009. <http://dx.doi.org/10.4172/2155-6199.S1-009> .
- Mosher, J. J., T. J. Phelps, M. Podar, R. A. Hurt Jr., J. H. Campbell, M. M. Drake, J. G. Moberly, C. W. Schadt, S. D. Brown, T. C. Hazen, A. P. Arkin, A. V. Palumbo, B. A. Faybishenko, and D. A. Elias. 2012. Microbial community succession during lactate amendment and electron acceptor limitation reveals a predominance of metal-reducing *Pelosinus* spp. *Appl. Environ. Microbiol.* 78:2082-2091.
- Akob, D. M., L. Kerkhof, K. Küsel, D. B. Watson, A. V. Palumbo, and J. E. Kostka. 2011. Linking specific heterotrophic bacterial populations to bioreduction of uranium and nitrate using stable isotope probing in contaminated subsurface sediments. *Appl. Environ. Microbiol.* 22: 8179-8200.
- Brown, Steven D., J. D. Wall, A. M. Kucken, C. C. Gilmour, M. Podar, C. C. Brandt, H. Teshima, C. S. Han, J. C. Detter, M. L. Land, S. Lucas, J. Han, L. Pennacchio, M. Nolan, S. Pitluck, T. Woyke, L. A. Goodwin, A. V. Palumbo, and D. A. Elias. 2011. Genome sequence of mercury-methylating and pleomorphic *Desulfovibrio africanus* strain Walvis Bay. *Journal of Bacteriology* 193: 4037-4038.
- Vishnivetskaya, T. A., J. J. Mosher, A. V. Palumbo, M. Podar, S. D. Brown, S. C. Brooks, Z. K. Yang, B. Gu, G. Southworth, M. M. Drake, C. C. Gilmour, J. D. Wall, C. C. Brandt and D. A. Elias. 2011. Mercury and other heavy metals influence bacterial community structure in contaminated Tennessee streams. *Appl. Environ. Microbiol.* 77:302-311.