

ANGELA D. KENT

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Natural Resources and Environmental Sciences
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EDUCATION

Ph.D., Bacteriology **December, 2000**

University of Wisconsin-Madison

Dissertation: "Manipulating rhizosphere microbial community structure using antibiotic-producing bacteria."

Advisor: Eric Triplett

M.S., Bacteriology **August, 1996**

University of Wisconsin-Madison

B.A., Biology **May, 1992**

Grinnell College

EXPERIENCE

Associate Professor, Dept. of Natural Resources and Environmental Sciences 2011-present
University of Illinois at Urbana-Champaign

Assistant Professor, Dept. of Natural Resources and Environmental Sciences 2005-2011
University of Illinois at Urbana-Champaign

Research Associate, Civil and Environmental Engineering December 2003 - 2005
University of Wisconsin-Madison

Research Associate, Center for Limnology 2001-2005
University of Wisconsin-Madison

Research Assistant, Department of Bacteriology 1996-2000
University of Wisconsin-Madison

Research Assistant, Department of Medical Microbiology and Immunology 1992-1996
University of Wisconsin-Madison

RESEARCH EXPERIENCE

Postdoctoral Research: North Temperate Lakes Microbial Observatory, Center for Limnology, University of Wisconsin-Madison, 2001- present. Research advisors: Eric Triplett and Katherine McMahon

- Characterization of spatial and temporal variability in microbial community structure in temperate aquatic ecosystems
- Investigation of biogeochemical, physical and biological mechanisms that influence microbial community structure in aquatic systems
- Experimental manipulation of aquatic microbial food webs to examine the effect of trophic interactions on the composition and dynamics of microbial populations

- Characterization of microbial communities associated with mercury methylation activity in hypolimnetic waters
- Development of bioinformatics tools to aid microbial ecologists' ability to derive phylogenetic information from DNA fragment analyses ("community fingerprints")

Doctoral Research: Department of Bacteriology, University of Wisconsin-Madison, 1996- 2000.
Research advisor: Eric Triplett

- Microbial ecology of the plant rhizosphere
- Ecological impact of antibiotic production by rhizosphere microorganisms, in particular rhizobial and biocontrol inoculants
- Impact of phytopathogen colonization on the structure of rhizosphere microbial communities
- Improvement of the competitiveness and yield-increasing capacity of commercial rhizobial inoculants

Masters Research: Department of Medical Microbiology and Immunology, University of Wisconsin-Madison, 1992- 1996. Research advisor: Rodney Welch

- Investigation of the structure and function of the hemolysin (HlyA) protein of uropathogenic *E. coli*, with particular attention to the region containing the glycine-rich repeated amino acid sequences that are the signature motif for the RTX family of cytolytic toxins
- Development of a structural model of the carboxy-terminal region of the hemolysin protein containing the RTX motif
- Investigation of the role of Ca²⁺ binding in stabilization of the HlyA protein structure

PUBLICATIONS

Paver, S.F., K.R. Hayek, A. Giongo, K.A. Gano, J.R. Fagen, C.R. Brown, A.G. Davis-Richardson, D.B. Crabb, R. Rosario. E.W. Triplett, A.D. Kent. 201_. Taxon-specific responses to phytoplankton assemblages contribute to aquatic bacterial community succession. *Environ. Microbiol.*, *in revision*.

Amato, K. R., C.J. Yeoman, **A.D. Kent**, N Righini, A. Estrada, R.M. Stumpf, S. Yildirim, M. Torralba, M. Gillis, B.A. Wilson, K.E. Nelson, B.A. White, S.R. Leigh. 201_. Habitat Degradation Impacts Primate Gastrointestinal Microbiomes. *ISME J.*, *submitted*.

Peralta, A.L., J.W. Matthews, D. N. Flanagan, and **A.D. Kent**. 201_. Environmental factors at dissimilar spatial scales influence plant and microbial communities in restored wetlands. *Wetlands*, *in revision*.

Paver, S.F., C.E. Nelson, **A.D. Kent**. 2012. Temporal succession of glycolate-utilizing bacterioplankton tracks changes in dissolved organic matter in a high-elevation lake. *FEMS Microbiol. Ecol.*, *in press*.

Rigonato, J., **A.D. Kent**, D.O. Alvarenga, F.D. Andreote, R.M. Beirigo, B. Vidal-Torrado, M.F. Fiore. 2012. Drivers of cyanobacterial diversity and community composition in mangrove soils in southeast Brazil. *Environmental Microbiology*, *in press*.

- Rigonato, J., D. Alvarenga, F.D. Andreote, A. Dias, I. Melo, **A.D. Kent**, M. Fiore. 2012. Cyanobacterial diversity in the phyllosphere of a mangrove forest. *FEMS Microbiology Ecology* 80:312-322.
- Yeoman, C.J., N. Chia, S. Yildirim, M.E. Berg Miller, **A.D. Kent**, R. Stumpf, S.R. Leigh, K.E. Nelson, B.A. White, and B.A. Wilson. 2011. Towards an evolutionary model of animal-associated microbiomes. *Entropy* 13(3): 570-594.
- Paver, S.F. and A.D. Kent.** 2010. Temporal patterns in glycolate-utilizing bacterial community composition correlate with phytoplankton population dynamics in humic lakes. *Microbial Ecology* 60:406-418.
- Peralta, A.L., J.W. Matthews, and A.D. Kent.** 2010. Microbial community structure and denitrification function in a wetland mitigation bank. *Applied and Environmental Microbiology* 76:4702-4215.
- Kent, A.D. and Z.L. Bayne.** 2010. Degraded water quality influences microbial community composition and perception of health risks in the Chattooga River. *DNA and Cell Biology*, 29: 509-517.
- Davis, S.C., W.J. Parton, F.G. Dohleman, C.M. Smith, S. Del Grosso, **A.D. Kent**, and E.H. DeLucia. 2010. Comparative biogeochemical cycles and sustainability of bioenergy crops. *Ecosystems*. 13:144-156
- Johnston, A.R., T.R. Gillespie, I.B. Rwego, T.L. Tranby-McLachlan, **A.D. Kent**, T.L. Goldberg. 2010. Molecular epidemiology of cross-species *Giardia duodenalis* transmission among people, livestock, and wild non-human primates in western Uganda. *PLoS Neglected Tropical Diseases* 4: e683. doi:10.1371/journal.pntd.0000683
- Matthews, J.W., A.L. Peralta, D.N. Flanagan, P.M. Baldwin, A. Soni, **A.D. Kent**, and A.G. Endress. 2009. Relative influence of landscape versus local factors on plant community assembly in restored wetlands. *Ecological Applications* 19: 2108-2123.
- Matthews, J.W., A.L. Peralta, A. Soni, P. Baldwin, **A.D. Kent**, and A.G. Endress. 2009. Local and landscape correlates of non-native species invasion in restored wetlands. *Ecography*, 32:1031-1039.
- Yannarell, A.C., and **A.D. Kent.** 2009. Bacteria, distribution and community structure. *Encyclopedia of Inland Waters*, Gene Likens (ed.). Oxford: Elsevier.
- Rusak, J.A., S.E. Jones, **A.D. Kent**, A.L. Shade, K.D. McMahon. 2009. Spatial synchrony in microbial community dynamics: testing among-year and lake patterns. *Verhandlungen der Internationalen Vereinigung für Theoretische und Angewandte Limnologie* 30(6): 936-940.
- Kent, A.D., A.C. Yannarell, J.A. Rusak, E.W. Triplett, and K.D. McMahon.** 2007. Synchrony in aquatic microbial community dynamics. *The ISME Journal* 1:38-47.
- Roesch, L.F.W., R.R. Fulthorpe, A. Riva, G. Casella, A.K.M. Hadwin, **A.D. Kent**, S.H. Daroub, F.A.O. Camargo, W.G. Farmerie, and E.W. Triplett 2007. Pyrosequencing enumerates and contrasts soil microbial diversity. *The ISME Journal* 1: 283-290.

- Peralta, A.L., J.W. Matthews, D.N. Flanagan, and **A.D. Kent**. 2007. Microbial community structure and function in restored floodplain forest wetlands. Proceedings of the International Symposium on Soil Biodiversity and Ecology. Taipei, Taiwan.
- Shade, A.L., **A.D. Kent**, S.E. Jones, R.J. Newton, E.W. Triplett, and K.D. McMahon. 2007. Inter-annual dynamics and phenology of bacterial communities in a eutrophic lake. *Limnology and Oceanography* 52: 487-494.
- Jones, S.E., A.L. Shade, K.D. McMahon, **A.D. Kent**. 2007. Comparison of primer sets for use in automated ribosomal intergenic spacer analysis (ARISA) of aquatic bacterial communities: an ecological perspective. *Applied and Environmental Microbiology* 73:659-662.
- Kent, A.D.**, S.E. Jones, G.H. Lauster, J.M. Graham, R.J. Newton, and K.D. McMahon. 2006. Experimental manipulations of microbial food web interactions in a humic lake: shifting biological drivers of bacterial community structure. *Environmental Microbiology* 8:1448-1459.
- Newton, R. J., **A. D. Kent**, E. W. Triplett, and K. D. McMahon. 2006. Microbial community dynamics in a humic lake: differential persistence of common freshwater phylotypes. *Environmental Microbiology* 8:956-970.
- Balser, T., K. McMahon, D. Bart, D. Bronson, D.R. Coyle, N. Craig, M. Flores-Mangual, K. Forshay, S. Jones, **A. Kent**, A. Shade. 2006. Bridging the gap between micro- and macro-scale perspectives on the role of microbial communities in global change ecology. *Plant and Soil* 289:59-70.
- Watras, C.J., K.A. Morrison, **A.D. Kent**, N. Price, O. Regnell, C. Eckley, H. Hintelmann, and T. Hubacher. 2005. Sources of methylmercury to a wetland-dominated lake in northern Wisconsin. *Environmental Science and Technology* 39:4747-4758.
- Eckley, C., C. Watras, H. Hintelmann, **A.D. Kent**, and O. Regnell. 2005. Mercury methylation in the hypolimnetic waters of lakes with and without connection to wetlands in northern Wisconsin. *Canadian Journal of Fisheries and Aquatic Science* 62:400-411.
- Jacob, C., **A.D. Kent**, B.J. Benson, R.J. Newton, and K.D. McMahon. 2005. Biological databases for linking large microbial and environmental datasets. *Proc. 9th World Multiconference on Systematics, Cybernetics and Informatics* Vol VII: Informatics Systems Development II, July 14-18, 2002, Orlando, FL.
- Kent, A.D.**, S.E. Jones, A.C. Yannarell, J.M. Graham, G.H. Lauster, T.K. Kratz, and E.W. Triplett. 2004. Annual patterns in bacterioplankton community variability in a humic lake. *Microbial Ecology* 48(4):550-560.
- Graham, J.G., **A.D. Kent**, G.H. Lauster, A.C. Yannarell, L.E. Graham, T.K. Kratz, and E.W. Triplett. 2004. Seasonal dynamics of phytoplankton and protoplankton communities in a northern temperate humic lake: diversity in a dinoflagellate dominated system. *Microbial Ecology* 48(4):528-540.
- Iniguez, A.L., E.A. Robleto, **A.D. Kent**, and E.W. Triplett. 2004. Significant yield increase in *Phaseolus vulgaris* obtained by inoculation with a trifoliotoxin-producing, Hup⁺ strain of *Rhizobium leguminosarum* bv. phaseoli. *Crop Management*. Online: <http://www.plantmanagementnetwork.org/sub/cm/review/2004/yield/>

- Kent, A.D.**, D.J. Smith, B.J. Benson, and E.W. Triplett. 2003. A web-based phylogenetic assignment tool for analysis of terminal restriction length polymorphism profiles of microbial communities. *Applied and Environmental Microbiology* 69:6768-6776.
- Yannarell, A.C., **A.D. Kent**, G.H. Lauster, T.K. Kratz, and E.W. Triplett. 2003. Temporal patterns in bacterial communities in three temperate lakes of different trophic status. *Microbial Ecology* 46:391-405.
- Kent, A.D.** and E.W. Triplett. 2002. Microbial communities and their interactions in soil and rhizosphere ecosystems. *Annual Review of Microbiology* 56:211-236.
- Kent, A.D.**, M.L. Wojtasiak, E.A. Robleto, and E.W. Triplett. 1998. A transposable partitioning locus used to stabilize plasmid-borne hydrogen oxidation and tritolitoxin production genes in a *Sinorhizobium* strain. *Applied and Environmental Microbiology* 64:1657-1662.
- Welch R.A., M.E. Bauer, **A.D. Kent**, J.A. Leeds, M. Moayeri, L.B. Regassa, and D.L. Swenson. 1995. Battling against host phagocytes: the wherefore of the RTX family of toxins? *Infectious Agents and Disease* 4:254-272.

MANUSCRIPTS IN PREPARATION

- Kent, A.D.**, O. Regnell, C. Eckley, K.A. Morrison, H. Hintelman, and C.J. Watras. Microbial community composition and the methylation of mercury in the anoxic, hypolimnetic waters of northern Wisconsin lakes. Manuscript in preparation.

INVITED PRESENTATIONS

- Kent, Angela D.**, Angela R. Green, Caroline Chu, Glogerley T. Sales and Richard S. Gates. Management factors influence microbial ecology in commercial poultry housing. Invited oral presentation at the 97th Ecological Society of America Annual Meeting, Portland, OR. August 5-10, 2012.
- Kent, A.D.** Micro-managing sustainability: Ecology of the *Miscanthus*-associated microbiome. Invited presentation for the 28th New Phytologist Symposium: Functions and ecology of the plant microbiome. Rhodes, Greece, 18-21 May, 2012.
- Kent, A.D.** Micro-managing sustainability: Ecology of diazotrophic bacteria associated with perennial grasses. Invited presentation for the School of Biological Sciences, Illinois State University. Bloomington, IL. March 1, 2012.
- Kent, A.D.** Disentangling drivers of aquatic microbial community dynamics. Invited presentation at the Keystone Symposia on Molecular and Cellular Biology focused on Microbial Communities as Drivers of Ecosystem Complexity. Breckenridge, CO. March 25-30, 2011.
- Kent, A.D.** Micro-managing sustainability: Ecology of diazotrophic bacteria associated with perennial grasses. Invited presentation for the Molecular Biology, Microbiology, and Biochemistry Seminar, Southern Illinois University, Carbondale, IL. September 10, 2010.
- Kent, A.D.** Potential for nitrogen fixation to contribute to sustainability of biofuel feedstock production. Invited oral presentation at the 95th Ecological Society of America Annual Meeting, Pittsburgh, PA. August 1-6, 2010.

Kent, A.D. Assessing the effects of land use change on microbial communities and their activities. Oral presentation to the Illinois State Geological Survey, Champaign, IL. October 5, 2009.

Kent, A.D. Exploring the broader impacts of bioenergy: ACES Global Academy Immersion Trip to Brazil. Presentation at the ACES Academy for Global Engagement graduation reception. December 16, 2008.

Kent, A.D. Ecology and exploitation of endophytic diazotrophic bacteria in biofuel crops. Invited oral presentation at University of São Paulo Escola Superior de Agricultura Luiz de Queiroz (ESALQ), Piracicaba, Brazil. November 19, 2008.

Kent, A.D. Biological drivers of microbial community dynamics: Using molecular biology to understand links between phytoplankton and aquatic microbial communities. Invited oral presentation in the Young Investigators in Aquatic and Fisheries Science Seminar Series, University of Washington, Seattle, WA. October 16, 2008.

Kent, A.D. Understanding links between phytoplankton and aquatic microbial communities. Invited oral presentation at International Workshop on Aquatic Microbial Community Dynamics, Uppsala University, Sweden. September 29 – October 4, 2008.

Kent, A.D. Examining drivers of microbial community dynamics in aquatic ecosystems. Invited oral presentation to the Ecology, Evolutionary and Behavior program at Indiana University, Bloomington, IL. December 7, 2007.

Peralta, A.L., J.W. Matthews, D.N. Flanagan, and **A.D. Kent**. 2007. Microbial community structure and function in restored floodplain forest wetlands. Invited oral presentation for the International Symposium on Soil Biodiversity and Ecology. Taipei, Taiwan, September 9-14, 2007.

Kent, A.D., A.C. Yannarell, J.A. Rusak, E.W. Triplett, K.D. McMahan. Synchrony in aquatic microbial community dynamics. Invited colloquium presentation at the 107th General Meeting of the American Society for Microbiology, in Toronto, Ontario. May 21-25, 2007.

Kent, A.D. Comparing microbial community composition in natural and managed aquatic ecosystems. Invited presentation, Managing Cetaceans for Optimal Health workshop, Shedd Aquarium, Chicago, Illinois, May 17-18, 2007.

Kent, A.D. Opening the “black box” of microbial ecology: examining drivers of microbial community dynamics in aquatic ecosystems. Program in Ecology & Evolutionary Biology, University of Illinois at Urbana-Champaign. December 6, 2006.

Kent, A.D. Using the tools of informatics for planning collaborative research. Gamma Sigma Delta Graduate Fellowship Recognition Reception, University of Illinois at Urbana-Champaign. November 2, 2006.

Kent, A.D. Two microbial tales: bacterial dynamics and mercury methylation in Wisconsin waters. Institute of Marine Sciences, University of North Carolina at Chapel Hill, May 20, 2005.

Kent, A.D., K.D. McMahan, L. Torrey. Integrating the three pillars: drawing upon the DELTA learning community to design, implement, and assess an interactive "virtual lab" to support a variety of learning styles. University of Wisconsin-Madison, April 27, 2005.

Kent, A.D., C. Jacob, A.C. Yannarell, R.J. Newton, B.J. Benson, E.W. Triplett, and K.D. McMahon. Linking fingerprints, phylogeny and environmental data at the North Temperate Lakes Microbial Observatory. Oral presentation at the 3rd Annual Microbial Observatories PI Workshop, Big Sky, MT. September 12-14, 2004.

PRESENTATIONS

Peralta, A.L., J.W. Matthews, E. Johnston, S. Ludmer, and **A.D. Kent**. Abiotic controls on community structure and function of nitrogen cycling microorganisms in wetland ecosystems. Oral presentation at the 96th Annual Meeting of the Ecological Society of America, Austin TX. August 7-12, 2011.

Paver, S.F., K.R. Hayek, E.W. Triplett and **A.D. Kent**. Phytoplankton succession and lake bacterial community dynamics. Oral presentation at the 96th Annual Meeting of the Ecological Society of America, Austin TX. August 7-12, 2011.

Chang, Y., W.R. Hill, and **A.D. Kent**. Bacterial community composition in stream biofilms is influenced by algal response to light and nutrient ratios. Poster presentation at the 111th General Meeting of the American Society for Microbiology, New Orleans, LA. May 21-24, 2011.

Hayek, K. S. Paver, **A. Kent**. Influence of light and carbon source on bacterial community structure. Poster and oral presentation at the 111th General Meeting of the American Society for Microbiology, New Orleans, LA. May 21-24, 2011. *First author is an ASM Undergraduate Research Fellow.*

Lemke, M.J. and **A.D. Kent**. Comparison of Microbial Community Dynamics in Sediments from an Established and a Restored Illinois River Floodplain Lake. Poster presentation at the 111th General Meeting of the American Society for Microbiology, New Orleans, LA. May 21-24, 2011.

Li, D., D.P. Keymer, **A.D. Kent**. Ecology of nitrogen-fixing bacteria associated with a perennial grass biofuel crop. Poster presentation at the 111th General Meeting of the American Society for Microbiology, New Orleans, LA. May 21-24, 2011.

Peralta, A.L., J.W. Matthews, **A.D. Kent**. Assessment of abiotic controls on microbial community structure and function: Linking microbial community structure and water quality function in restored floodplain wetlands. Oral presentation at the Midwest Society for Ecological Restoration Chapter Annual Meeting, University of Illinois, Springfield, IL. April 1-3, 2011.

Amato, K.R, **A.D. Kent**, R.I. Mackie, A. Estrada, P.A. Garber. The gut microbes and foraging behavior of wild, black howler monkeys (*A. pigra*) in Palenque National Park, Mexico. Poster presentation at the 13th International Symposium on Microbial Ecology, Seattle, WA. August 22-27, 2010.

Paver, S., K. Hayek, **A. Kent**. Algal populations influence lake bacterial community structure. Poster presentation at the 13th International Symposium on Microbial Ecology, Seattle, WA. August 22-27, 2010.

Paver, S., **A. Kent**. Particle attachment as a habitat filter for lake freshwater bacterial assemblages. Poster presentation at the 13th International Symposium on Microbial Ecology, Seattle, WA. August 22-27, 2010.

- Peralta, A.L., J.W. Matthews, **A.D. Kent**. Linking microbial community structure to water quality function: Investigating nitrogen cycling influenced by hydrology in wetland ecosystems. Poster presentation at the 13th International Symposium on Microbial Ecology, Seattle, WA. August 22-27, 2010.
- Porter, M, L. Rodriguez, J. Andrus, **A. Kent**, J. Zilles. Temporal dynamics of fungal communities in denitrifying biofilters receiving agricultural runoff. Poster presentation at the 13th International Symposium on Microbial Ecology, Seattle, WA. August 22-27, 2010.
- Keymer, D.P., Y. Mao, R.I. Mackie, and **A.D. Kent**. Species-specific bacterial assemblages associated with potential bioenergy grasses. Poster presentation at the 13th International Symposium on Microbial Ecology, Seattle, WA. August 22-27, 2010.
- Lemke, M, J. **A.D. Kent**, F. Velho, M. Randle, D. Kellerhals. Microbial communities in two Illinois River floodplain lakes differing in restoration status. Poster presentation at the 95th Ecological Society of America Annual Meeting, Pittsburgh, PA. August 1-6, 2010.
- Kent, A.D.**, D.P. Keymer, Y. Mao. Ecology of nitrogen-fixing bacteria associated with a perennial grass biofuel crop. Invited oral presentation at the 95th Ecological Society of America Annual Meeting, Pittsburgh, PA. August 1-6, 2010.
- Kent, A.D.** Micro-managing wetland restoration. Oral presentation in a special session at the 95th Ecological Society of America Annual Meeting, Pittsburgh, PA. August 1-6, 2010.
- Peralta, A.L., J.W. Matthews, and **A.D. Kent**. Investigating variation in microbial community composition along a moisture gradient. Poster presentation at the Emiquon Science 2010 Conference, Dickson Mounds Museum, Lewistown, IL. March 4, 2010.
- Lemke, M. F. Velho, **A.D. Kent**, K. Dungey, D. Kellerhaus, and M. Randle. Water quality and microbial ecology of Thompson Lake. Poster presentation at the Emiquon Science 2010 Conference, Dickson Mounds Museum, Lewistown, IL. March 4, 2010.
- Kent, A.D.**, A.R. Green, C. Chu, G.T. Sales, and R.S. Gates. Microbial community composition, pathogen prevalence, and environmental conditions within cage and cage-free egg laying facilities. Oral presentation at the International Poultry Scientific Forum, Atlanta, GA. January 25-26, 2010.
- Chu, C., G. Sales, N. Gottel, R. Gates, A. Green, **A.D. Kent**. Microbial ecology and environmental quality in egg-laying facilities. Poster presentation at the 2009 Merck-Merial NIH National Veterinary Scholars Symposium. North Carolina State University, Raleigh, NC. August 6 - 8, 2009.
- Kent, A.D.**, N.R. Gottel, and J.M. Cooper. Ecology of microbial assemblages associated with a perennial grass biofuel crop. Oral presentation at the 94th Ecological Society of America Annual Meeting, Albuquerque, NM. August 2-7, 2009.
- Chang, Y., W.R. Hill, and **A.D. Kent**. Bacterial community composition in stream biofilms is influenced by algal response to light and nutrient ratios. Poster presentation at the 94th Ecological Society of America Annual Meeting, Albuquerque, NM. August 2-7, 2009.
- Kent, A.D.** Assessing the effects of land use change on microbial communities and their activities. Oral presentation at the 2009 Great Lakes Regional Biogeochemistry Conference, Kellogg Biological Station, Hickory Corners, MI. May 28-29, 2009.

Peralta, A.L., J.W. Matthews, **A.D. Kent**. Investigating microbially-mediated nitrogen cycling during early floodplain development. Poster presentation at the 2009 Great Lakes Regional Biogeochemistry Conference, Kellogg Biological Station, Hickory Corners, MI. May 28-29, 2009.

Gottel, N.R., J.M. Cooper; **A.D. Kent**. Ecology of microbial assemblages associated with a perennial grass biofuel crop. Poster presentation at the 109th General Meeting of the American Society for Microbiology, Philadelphia, PA. May 17-21, 2009.

Kent, A.D., A.L. Peralta, D.N. Flanagan, J.W. Matthews. A Soil Microbial Ecology Perspective of Wetland Restoration. Poster presentation at the 109th General Meeting of the American Society for Microbiology, Philadelphia, PA. May 17-21, 2009.

Paver, S.F. and **A.D. Kent**. Contribution of Phytoplankton-Associated Bacteria to Aquatic Microbial Community Dynamics. Poster presentation at the 109th General Meeting of the American Society for Microbiology, Philadelphia, PA. May 17-21, 2009.

Peralta, A.L., J.W. Matthews, **A.D. Kent**. Investigating microbially-mediated nitrogen cycling during early floodplain development. Poster presentation at the 94th Ecological Society of America Annual Meeting, Albuquerque, NM. August 2-7, 2009. Refereed. **Kent, A.D.**, S.F. Paver, Y. Chang. Molecular characterization of microbial food web interactions. Poster presentation at the 12th International Symposium on Microbial Ecology, Cairns, Australia. August 17-22, 2008.

Peralta, A.L., D.N. Flanagan, J.W. Matthews, A.G. Endress, **A.D. Kent**. A microbial community ecology approach to wetland mitigation assessment. Poster presentation at the 12th International Symposium on Microbial Ecology, Cairns, Australia. August 17-22, 2008.

Miller, T.R., S.F. Paver, **A.D. Kent**, K.D. McMahon. Molecular characterization of glycolate-degrading freshwater bacteria. Poster presentation at the 12th International Symposium on Microbial Ecology, Cairns, Australia. August 17-22, 2008. Refereed.

Peralta, A.L., D.N. Flanagan, J.W. Matthews, A.G. Endress, **A.D. Kent**. A microbial community ecology approach to wetland mitigation assessment. Poster presentation at the 93rd Ecological Society of America Annual Meeting, Milwaukee, Wisconsin. August 3-8, 2008.

Kent, A.D., A.L. Peralta, D.N. Flanagan, J.W. Matthews. Wetland assessment from a soil microbial ecology perspective. Oral presentation at the 2008 ASLO Summer Meeting, St. John's, Newfoundland, Canada. June 8-13, 2008.

Paver, S.F., Y. Chang, **A.D. Kent**. Molecular characterization of microbial food web interactions. Poster presentation at the 2008 ASLO Summer Meeting, St. John's, Newfoundland, Canada. June 8-13, 2008.

Flanagan, D.N., J.W. Matthews, **A.D. Kent**. Can constructed wetlands replace natural wetlands? A study into microbial community structure and function in constructed vs. natural wetlands. Poster presentation at the Society of Wetland Scientists 2008 Conference, Washington, DC. April 4-5, 2008.

Kent, A.D. Mentoring undergraduate researchers: turning curiosity into scientific inquiry. Poster presentation at the UIUC Undergraduate Research Symposium, Urbana, Illinois. April 29, 2008.

Flanagan, D.N., J.W. Matthews, **A.D. Kent**. Can constructed wetlands replace natural wetlands? A study into microbial community structure and function in constructed vs. natural wetlands. Poster presentation at the 100th Annual Meeting of the Illinois State Academy of Sciences, Urbana, Illinois. April 4-5, 2008.

Peralta, A.L., J.W. Matthews, **A.D. Kent**. Wetland mitigation bank assessment from a soil microbial ecology perspective. Poster presentation at the 100th Annual Meeting of the Illinois State Academy of Sciences, Urbana, Illinois. April 4-5, 2008.

Kent, A.D. Ecology and exploitation of endophytic diazotrophic bacteria in biofuel crops. Poster presentation at the 2008 Energy Biosciences Institute research retreat. Bodega Bay, California, February 1 – 3, 2008.

Kent, A.D., A.C. Yannarell, K.D. McMahon. Synchrony in aquatic microbial community dynamics. Poster presentation at the 2007 FIBR Interdisciplinary Workshop: Do Species Matter in Microbial Communities? Bozeman, Montana, July 30 – August 1, 2007.

Kent, A.D., A.C. Yannarell, J.R. Rusak, E.W. Triplett, and K.D. McMahon. Synchrony and temporal concordance in microbial community succession in a suite of north temperate humic lakes. Oral presentation at the 11th International Symposium on Microbial Ecology, Vienna, Austria. August 20-25, 2006.

Kent, A.D., C.J. Watras, C. Eckley, O. Regnell, K.D. McMahon, H. Hintelmann. Microbial community structure is correlated with mercury methylation in northern Wisconsin lakes. Oral presentation at the Mercury 2006 meeting, Madison, WI. August 6-11, 2006.

Kent, A.D., E.W. Triplett, K.D. McMahon. Synchrony and temporal concordance in phytoplankton and bacterioplankton community succession in a suite of north temperate humic lakes. Presented at the 2006 ASLO Summer Meeting, Victoria, British Columbia. June 4-9, 2006.

Kent, A.D., C.J. Watras, C. Eckley, O. Regnell, K.D. McMahon, H. Hintelmann. Microbial community composition and mercury methylation in the anoxic hypolimnia of stratified Wisconsin lakes. Presented at the 18th Annual Cell and Molecular Biology/Molecular Biophysics Research Symposium, University of Illinois at Urbana Champaign, October 14, 2005.

Kent, A.D., C.J. Watras, C. Eckley, O. Regnell, K.D. McMahon, H. Hintelmann. Microbial community composition and mercury methylation in the anoxic hypolimnia of stratified Wisconsin lakes. Oral presentation at the 2005 ASLO Summer Meeting, Santiago de Compostela, Spain. June 19-24, 2005.

Kent, A.D., C.J. Watras, C. Eckley, O. Regnell, K.D. McMahon, H. Hintelmann. Microbial community composition and mercury methylation in the anoxic hypolimnia of stratified Wisconsin lakes. Oral presentation at the 2005 Annual Meeting of the International Association for Great Lakes Research, Ann Arbor, MI. May 23-27, 2005.

Kent, A.D., C.J. Watras, O. Regnell, C. Eckley, K.D. McMahon, H. Hintelmann. Microbial community structure is correlated with mercury methylation in northern Wisconsin lakes. Presented at the 2005 ASLO Aquatic Sciences Meeting, Salt Lake City, UT. February 20-25, 2005.

Shade, A.L., **A. D. Kent**, E. W. Triplett, K. D. McMahon. Freshwater bacterioplankton communities exhibit interannual patterns in composition in a eutrophic temperate lake. Poster

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