Curriculum Vitae

K. Eric Wommack

Delaware Biotechnology Institute, University of Delaware, 15 Innovation Way, Newark, DE 19711
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Education

Ph.D., Marine Estuarine Environmental Sciences. 1998. University of Maryland, College Park, MD. Rita R. Colwell, advisor.

M.Sc., Physiology. 1990. University of St. Andrews, St. Andrews, Scotland, U. K. Ian A. Johnson, advisor.

B.S., Biology (Hons.); B.A., Economics. 1987. Emory University, Atlanta, GA. William H. Murdy, advisor.

Appointments

2010- **Professor,**
Plant and Soil Sciences, College of Agriculture and Natural Resources and Delaware Biotechnology Institute.
Joint appointment: Marine Biology and Biochemistry Program, College of Earth, Ocean, and Environment, University of Delaware.
Secondary appointment: Biological Sciences, College of Arts and Sciences

2006-2010 **Associate Professor,**
Plant and Soil Sciences, College of Agriculture and Natural Resources and Delaware Biotechnology Institute.
Joint appointment: Marine Biology and Biochemistry Program, Graduate College of Marine Studies, University of Delaware.
Secondary appointment: Biological Sciences, College of Arts and Sciences

2001-2006 **Assistant Professor,**
Plant and Soil Sciences, College of Agriculture and Natural Resources and Delaware Biotechnology Institute.
Joint appointment: Marine Biology and Biochemistry Program, Graduate College of Marine Studies, University of Delaware.

1998-2001 **Postdoctoral Fellow,**
National Research Council, Ecosystems Research Division, Laboratory of Dr. David Lewis, U.S. Environmental Protection Agency, Athens, GA.
Laboratory of Dr. Robert Hodson, School of Marine Programs, University of Georgia, Athens, GA

Awards and Distinctions

Nominee, Excellence in Undergraduate Academic Advising and Mentoring Award, Univ. of Delaware. 2011

Travel award to attend International Marine Biotechnology Conference, Townsville, Australia (declined). 2000.

Invited participant. Dissertations Initiative for the Advancement of Limnology and Oceanography (DIALOG III) Symposium, Bermuda Biological Station. 1999.

Maryland Sea Grant Trainee fellow. 1992-94.

Vice-president, Center of Marine Biotechnology Graduate Student Association. 1993.

Office of Naval Research, University Research Initiative Fellow. 1990-91.

Marine Biological Laboratory Fellowship, Woods Hole, Massachusetts. 1990.

University of St. Andrews American Alumni Association Fellowship. 1988-89.

Bobby Jones Scholarship, University of St. Andrews, Scotland, U.K. 1987-88.

Sigma Xi Biological Honors Society, Emory University. 1987.

Summa Cum Laude, Biology, Emory University. 1987.

United States Coast Guard, Inland Operator Captain's License. 1987.

Eagle Scout, Boy Scouts of America. 1983.

Professional Society Memberships

American Society for Microbiology (ASM)

American Society of Limnology and Oceanography (ASLO)

International Society for Microbial Ecology (ISME)

Research and Scholarly activity

Published Manuscripts (67 total; 43 primary or corresponding author)

1. Simkus, Danielle N., Greg F. Slater, Barbara Sherwood Lollar, Kenna Wilkie, Thomas L. Kieft, Cara Magnabosco, Maggie C.Y. Lau, Michael J. Pullin, Sarah B. Hendrickson, **K. Eric Wommack**, Eric G. Sakowski, Esta van Heerden, Olukayode Kuloyo, Borja Linage, Gaetan Borgonie, Tullis C. Onstott. 2014. Variations in microbial carbon sources and cycling in the deep continental subsurface. Geochimica et Cosmochimca Acta. **Submitted**.
2. Labonté, Jessica M., Brandon K. Swan, Bonnie Poulos, Sergey Koren, Steven J. Hallam, Matthew B. Sullivan, Tanja Woyke, **K. Eric Wommack**, and Ramunas Stepanauskas. 2014. Single cell genomics-based analysis of virus-host interactions in marine surface bacterioplankton. Intl. Soc. Microb. Ecol. J. **Submitted**.
3. Weitz, Joshua S., Charles A. Stock, Steven W. Wilhelm, Lydia Bourouiba, Maureen L. Coleman, Alison Buchan, Michael J. Follows, Jed A. Fuhrman, Luis F. Jove2, Jay T. Lennon, Mathias Middelboe, Derek L. Sonderegger, Curtis A. Suttle, Bradford P. Taylor, T. Frede Thingstad, William H. Wilson, and K. Eric Wommack. 2014. A multitrophic model to quantify the effects of marine viruses on microbial food webs and ecosystem processes. Intl. Soc. Microb. Ecol. J. **In press**.
4. Sakowski EG, Munsell EV, Hyatt M, Kress W, Williamson SJ, Nasko DJ, Polson SW, **Wommack KE.** 2014. Ribonucleotide reductases reveal novel viral diversity and predict biological and ecological features of unknown marine viruses. Proc. Natl. Acad. Sci. **e-pub ahead of print**.
5. Ravel, J. and **K.E. Wommack.** 2014. All hail reproducibility in microbiome research. Microbiome 2:8
6. Marine, R., C. McCarren, V. Vorrasane, D. Nasko, and **K. E. Wommack*.** 2014. Caught in the middle with multiple displacement amplification: The myth of pooling as a means to avoid amplification bias in a metagenome. Microbiome. 2:3.
7. Marsan, D., **K. E. Wommack**, J. Ravel, and F. Chen. 2014. Draft Genome Sequence of Synechococcus sp. Strain CB0101 Isolated from the Chesapeake Bay Estuary. Genome Announcements 2:e01111-13

8. Schmidt, H. F., E. G. Sakowski, S. J. Williamson, S. W. Polson, and **K. E. Wommack***. 2014. Shotgun metagenomics indicates novel family A DNA polymerases predominate within marine virioplankton. Int. Soc. Microb. Ecol. Journal. **8**:103–114
9. Santini, S., S. Jeudy , J. Bartoli , O.Poirot , M. Lescot , C. Abergel , V. Barbe, **K. E. Wommack**, A.A.M. Noordeloos , C. P.D. Brussaard , J. Claverie. 2013. The genome of Phaeocystis globosa virus PgV-16T highlights the common ancestry of the largest known DNA viruses infecting eukaryotes. Proc. Natl. Acad. Sci. 26: 10800–10805.
10. Srinivasiah, S., J. Lovett, S. Polson, J. Bhavsar, D. Ghosh, K. Roy, J. J. Fuhrmann, M. Radosevich, and **K. E. Wommack***. 2013. Direct assessment of viral diversity in soils using RAPD-PCR. Appl. Environ. Microbiol. 79: 5450–5457
11. Campbell, B., S. Polson, L. Allen, S. Williamson, C. Lee, **K. E. Wommack**, and S. Cary. 2013 Diffuse-flow environments within basalt- and sediment-based hydrothermal vent ecosystems harbor specialized microbial communities. Frontiers Extreme Microbiol. 4:182
12. **Wommack, K. E.***, and J. Ravel. 2013. Microbiome, demystifying the role of microbial communities in the biosphere. Microbiome 1:1
13. Jamindar, S., S. W. Polson, S. Srinivasiah, L. Waidner, and **K. E. Wommack***. 2012. Evaluation of two approaches for assessing the genetic similarity of virioplankton populations as defined by genome size. Appl. Env. Microbiol. **78:**8773-8783.
14. Lee, C. K., C. W. Herbold*, S. W. Polson, **K. E. Wommack**, S. J. Williamson, I. R. McDonald, S. C. Cary. 2012. Groundtruthing Next-Gen Sequencing for Microbial Ecology— Biases and Errors in Community Structure Estimates from PCR Amplicon Pyrosequencing. PLoS One **7**:44224.
15. Ng, T. F., R. Marine, C. Wang, P. Simmonds, B. Kapusinszky, L. Bodhidatta, B. S. Oderinde, **K. E. Wommack**, E. Delwart. 2012. High variety of known and new RNA and DNA viruses of diverse origins in untreated sewage. J. Virol. 86:12161–12175.
16. **Wommack, K.E.***, J. Bhavsar, S. Polson, J. Chen, M. Dumas, S. Srinivasiah, M. Furman, S. Jamindar, and D. J. Nasko. 2012. VIROME: a standard operating procedure for analysis of viral metagenome sequences. Stds. Genomic. Sci. **6:**421-433.
17. Mailloux, B., A. Dochenetz, M. Bishop, H. Dong, L. Ziolkowski, G. Slater, **K. E. Wommack**, E. G. Sakowski. 2012. A Carbon Free Filter for Collection of Large Volume Samples of Cellular Biomass from Oligotrophic Waters. J. Micro. Methods. **90:**145-151.
18. Helton, R. R., K. Wang, J. Kan, D. H. Powell, and **K. E. Wommack***. 2012. Interannual dynamics of viriobenthos abundance and morphological diversity in Chesapeake Bay sediments. FEMS Microbiol. Ecol. **79:**474-486
19. Marine R., S. W. Polson, J. Ravel, G. Hatfull, D. Russell, M. Sullivan, F. Syed, M. Dumas, and **K.E. Wommack***. 2011. Evaluation of a transposase protocol for rapid generation of shotgun high-throughput sequencing libraries from nanogram quantities of DNA. Appl. Environ. Microbiol. **77**:8071–8079.
20. M. D. Dumas, S. W. Polson, D. Ritter, J. Ravel, J. Gelb Jr., R. Morgan, **K.E. Wommack***. 2011. Impacts of poultry house environment on poultry litter bacterial community composition. PLoS One. **6:**e24785.
21. Wang K, **K. E. Wommack**, Chen F. 2011 . Abundance and distribution of Synechococcus spp. and cyanophages in the Chesapeake Bay. Appl Environ Microbiol.;77(21):7459–7468.

22. Winget, D. M., R. R. Helton, K. E. Williamson, S. Bench, S. J. Williamson, **K. E. Wommack***. 2011. Cycles within cycles: patterns of virioplankton production within an estuarine ecosystem. Proc. Natl. Acad. Sci. **108:**11506-11511.
23. **K. E. Wommack***, S. Srinivasiah, M. Liles, J. Bhavsar, S. Bench, K. E. Williamson, and S. W. Polson. 2011. Metagenomic contrasts of viruses in soil and aquatic environments. *In*, Frans J. de Bruijn, ed., Handbook of Molecular Microbial Ecology II: Metagenomics in Different Habitats. John E. Wiley & Sons. New York
24. Sakowski E., W. Kress, and **K. E. Wommack***. 2011. Bacteriophage and viral ecology as seen through the lens of nucleic acid sequence data. *In*, Christian J. Hurst ed., Studies in Viral Ecology, Wiley-Blackwell, Cambridge.
25. Polson, Shawn W, Wilhelm, Steven W, **Wommack, K E.*** 2010. Unraveling the viral tapestry (from inside the capsid out). Intl. Soc. Microb. Ecol. J. **5**:165-168.
26. **Wommack, K.E***. 2010. Viral ecology: Old questions, new challenges. Microbiol. Today. May, 2010. p. 96-99.
27. Parsley, L. C., Consuegra E. J., Thomas S. J., Bhavsar, J, Land A. M., Bhuiyan N. N., Mazher M. A., Waters R. J., **Wommack K. E.**, Harper W. F., Jr., and Liles M. R. 2010. Census of the Viral Metagenome within an Activated-Sludge Microbial Assemblage. Appl. Environ. Microbiol. 76:2673-2677.
28. **Wommack, K.E.***, T. Sime-Ngando, D. M. Winget, S. Jamindar, and R. R. Helton. 2010. Filtration-based methods for the collection of viral concentrates from large water samples, p. 110–117. In S. W. Wilhelm, M. G. Weinbauer, and C. A. Suttle [eds.], Manual of Aquatic Viral Ecology. Amer. Soc.Limnolo. Oceanogr.
29. Williamson, Kurt E. , S. Srinivasiah, and **K. E. Wommack**. 2010. Viruses in Soil Ecosystems *In* Handbook of Soil Science, E. Paul and P. Nannipier eds.
30. Schoenfeld, T., Liles, M., **Wommack, K.E.**, Polson, S.W., Godiska, R., and Mead, D. 2009. Functional viral metagenomics and the next generation of molecular tools. Trends Microbiol 18: 20-29.
31. Winget, D.M., and **K.E. Wommack***. 2009. Diel and daily fluctuations in virioplankton production in coastal ecosystems. Env. Microbiol. 11:2904-14.
32. Ghosh, D., K. Roy, K. E. Williamson, S. Srinivasiah, **K. E. Wommack**, M. Radosevich. 2009. Acyl-homoserine lactones can induce lysogenic bacteria: an alternative paradigm for prophage induction. Appl. Environ. Microbiol. 75:7142-7152.
33. Chen F., K. Wang, S. Huang, H. Cai, M. Zhao, N. Jiao, **K. E. Wommack**. 2009. Diverse and dynamic populations of cyanobacterial podoviruses in the Chesapeake Bay unveiled through DNA polymerase gene sequences. Env. Microbiol. 11:2884-2892.
34. **Wommack, K.E.*** 2009. Exploring the vast genetic wilderness: dsDNA viruses. *In* Crystal Ball-2009 Env. Microbiology Repts 1:3-26.
35. Eissler Y., K. Wang, F. Chen, **K. E. Wommack**, and D. W. Coats. 2009. Ultrastructural characterization of the lytic cycle of an intra-nuclear virus infecting the diatom *Chaetoceros wighamii* (Bacillariophyceae) from Chesapeake Bay, USA. J. Phycol. 45: i787-797.
36. Helton R. R. and **K.E. Wommack***. 2009. Seasonal dynamics and metagenomic characterization of estuarine viriobenthos assemblages by Randomly Amplified Polymorphic DNA PCR (RAPD-PCR). Appl. Env. Microbiol. 75:2259-2265

37. **Wommack, K.E.***, K. E. Williamson, R. R. Helton, S. R. Bench and D. M. Winget. 2009. Methods for the isolation of viruses from environmental samples. Meth. Molec. Biol. **502**:279-289.
38. **Wommack, K.E.***, S. R. Bench, J. Bhavsar, D. Mead and and T. Hanson. 2009. Isolation independent methods of characterizing phage communities: Characterizing a metagenome. Meth. Molec. Biol. **501**:3-14
39. Schoenfeld, T., M. Patterson, , P.M. Richardson , **K.E. Wommack,** M. Young, and D. Mead, 2008. Use of a novel cloning strategy for comparative metagenomic analysis of viral assemblages from Yellowstone Hot Springs. Appl Environ Microb **74:** 4164–4174.
40. Srinivasiah, S., J. Bhavsar, K. Thapar, M. Liles, T. Shoenfeld, and **K. E. Wommack*.** 2008. Phages across the biosphere: Contrasts of viruses in soil and aquatic environments. Res. Microbiol. **159**: 349-357.
41. Williamson, S. J., S. C. Cary, K. E. Williamson, R. R. Helton, S. R. Bench, Danielle Winget, and **K. E. Wommack***· 2008. Lysogenic Virus-Host Interactions Predominate at Deep-Sea Diffuse-Flow Hydrothermal Vents. Int. Soc. Microb. Ecol. J. 2:1112-1121.
42. Brussaard, C. P., S. W. Wilhelm, F. Thingstad, M. G. Weinbauer, G. Bratbak, M. Heldal, S. A. Kimmance, M. Middelboe, K. Nagasaki, J. H. Paul, D. C. Schroeder, C. A. Suttle, D. Vaque, and **K. E. Wommack**. 2008. Global-scale processes with a nanoscale drive: the role of marine viruses. Int. Soc. Microbial. Ecol. J. **2**:575-578
43. Winget, D. M., and **K. E. Wommack***. 2008. Randomly amplified polymorphic DNA (RAPD)-PCR as a tool for assessment of marine viral richness. Appl Environ Microbiol. **74:**2612-2618.
44. Williamson, K. E., J. B. Schnitker, M. Radosevich, D. W. Smith, and **K. E. Wommack***. 2008. Cultivation-Based Assessment of Lysogeny Among Soil Bacteria. Microb Ecol. **56**:437-447.
45. **Wommack, K. E.***, J. Bhavsar, and J. Ravel. 2008. Metagenomics: read length matters. Appl Environ Microbiol **74**:1453-63.
46. Ghosh, D., K. Roy, K. E. Williamson, D. C. White, **K. E. Wommack**, K. L. Sublette, and M. Radosevich. 2008. Prevalence of lysogeny among soil bacteria and presence of 16S rRNA and trzN genes in viral-community DNA. Appl Environ Microbiol 74:495-502.
47. Bench, S. R., T. E. Hanson, K. E. Williamson, D. Ghosh, M. Radosovich, K. Wang, and **K. E. Wommack***. 2007. Metagenomic characterization of Chesapeake Bay virioplankton. Appl Environ Microbiol 73:7629-41.
48. Williamson, K. E., M. Radosevich, D. W. Smith, and **K. E. Wommack***. 2007. Incidence of lysogeny within temperate and extreme soil environments. Environ Microbiol 9:2563-74.
49. Helton, R. R., L. Liu, and **K.E. Wommack***. 2006. Assessment of factors influencing direct enumeration of viruses within estuarine sediments. Appl. Environ. Microbiol. **72**: 4767-74.
50. Chen, F, K. Wang, J. Kan, M.T. Suzuki, and **K. E. Wommack.** 2006 Diverse and unique picocyanobacteria found in the Chesapeake Bay. Appl. Environ. Microb. **72**(3): 2239-43.
51. Hewson, I., D. M. Winget, K. E. Williamson, J. A Fuhrman, and **K. E. Wommack*.** 2006. Viral and bacterial assemblage covariance in oligotrophic waters of the West Florida Shelf (Gulf of Mexico) J. Mar. Biol. Assoc., UK **86:** 591-603
52. Winget, D.M., K.E. Williamson, R.R. Helton, and **K.E. Wommack*.** 2005. Tangential flow diafiltration: an improved technique for estimation of virioplankton production. Aquat. Microb. Ecol. **41:** 221-232.

53. Helton, R.R., M.T. Cottrell, D.L. Kirchman, and **K.E. Wommack*.** 2005. Evaluation of incubation-based methods for estimating virioplankton production in estuaries. Aquat. Microb. Ecol. **41:**209-219.
54. Radosevich, M., K.E. Williamson, and **K.E. Wommack*.** 2005. Bacteriophage. p. 122-129 *In:* Encyclopedia of Soils in the Environment. D. Hillel, C. Rosenweig, D. Powlson, K. Skow, M. Singer, and DL Sparks eds., Elsiver, LTD.
55. Bettarel, Y., J. Kan, K. Wang, K. Williamson, S. Cooney, S. Ribblett, F. Chen, **K.E. Wommack**, and D.W. Coats. 2005. Isolation and preliminary characterization of a small nuclear inclusion virus infecting the diatom *Chaetoceros C.F. gracilis*. Aquat. Microb. Ecol. **40:**103-114.
56. Williamson, K.E., M. Radosevich and **K.E. Wommack*.** 2005. Abundance and Diversity of Bacteriophages in Six Delaware Soils. Appl. Environ. Microbiol. **71:**3119-3125.
57. **Wommack, K.E.***, S.J. Williamson, A. Sundbergh, R.R. Helton, B.T. Glazer, K. Portune, and S.C. Cary. 2004. An instrument for collecting discrete large-volume water samples suitable for ecological studies of microorganisms. Deep-Sea Res. I. **51:**1781-1792.
58. K.E. Williamson, **K.E. Wommack*,** and M. Radosevich. 2003. Sampling natural viral communities from soil for culture-independent analyses. Appl. Environ. Microbiol. **69:**6628-6633.
59. Yager, P.L. T.L. Connelly, B. Mortazavi, **K.E. Wommack**, N. Bano, J.E. Bauer, S. Opsahl, and J.T. Hollibaugh. 2001. Dynamic microbial response to an Arctic algal bloom at sub-zero temperatures. Limnol. & Oceanogr. **46:**790-801.
60. **Wommack, K.E.**, and R.R. Colwell. 2000. Virioplankton: Viruses in aquatic environments. Microb. Molec. Biol. Rev. **64:**69-114.
61. Lewis D.L., A.W. Garrison, **K.E. Wommack,** A. Whittemore, P. Steudler, J. Melillo. 1999. Influence of environmental changes on degradation of chiral pollutants in soils. Nature (London) **401:**898-901.
62. **Wommack, K.E.**, J. Ravel, R.T. Hill, J. Chun and R.R. Colwell. 1999. Population dynamics of Chesapeake Bay virioplankton: Total community analysis using pulsed field gel electrophoresis. Appl. Environ. Microbiol**. 65:**231-240.
63. **Wommack, K.E.**, J. Ravel, R.T. Hill, and R.R. Colwell. 1999. Hybridization analysis of Chesapeake Bay virioplankton. Appl. Environ. Microbiol**. 65:**241-250.
64. **Wommack, K.E.**, T.A. Muller, R.T. Hill, and R.R. Colwell. 1995. Effects of sunlight on viral infectivity and structure. Appl. Environ. Microbiol. **62:** 1336-1341.
65. **Wommack, K.E.**, R.T. Hill, and R.R. Colwell. 1995. A simple method for the concentration of viruses from natural water samples. J. Microbiol. Meth. **22**: 57-67.
66. **Wommack, K.E.**, R.T. Hill, M. Kessel, E. Russek-Cohen, and R.R. Colwell. 1992. Distribution of viruses in the Chesapeake Bay. Appl. Environ. Microbiol. **58**: 2965-2970.
67. Crockford, T., **K.E. Wommack**, I.A. Johnston, B.J. McAndrew, G. Mutungi, and T.P. Johnston. 1991. Inter- and intra-specific variation in myosin light chain and troponin I composition in fast muscle fibres from two species of fish (genus *Oreochromis*) which have different temperature-dependent contractile properties. J. of Mus. Res. and Cell Motil. **12**:439-446.

Dissertations and Theses

K.E. Wommack. 1998. Ph.D. thesis. University of Maryland, College Park. Aspects of the Ecological Role of Bacteriophages.

K.E. Wommack. 1990. M.Sc. thesis. University of St. Andrews. Contractile Protein Isoforms in Two Tilapiine Fishes (*Oreochromis niloticus and O. andersoni*) and their F1 Hybrid.

K.E. Wommack. 1987. B.S. honors thesis. Emory University. A Scanning Electron Microscope Study of White Band Disease in *Montastrea annularis* (Ellis and Solander).

Meeting Organizer or Session Chair

May, 2009. Session chair, From direct counts to metagenomics: Two decades of discovery in aquatic viral ecology. 109th General Meeting of the American Society for Microbiology, Philadelphia, PA.

May, 2009. Meeting organizer, Two Decades of Discovery, What's Next? 3rd Annual meeting of the SCOR Working Group on the Role of Viruses in Marine Ecosystems, University of Delaware, Newark, DE (http://scor-viral-ecology.dbi.udel.edu/).

August, 2007. Meeting organizer, Soil Viral Metagenomics Annotation Workshop, Delaware Biotechnology Institute, Newark, Delaware

May, 2007. Session chair and speaker, Session on Bacterial Mortality – Who's killing who? 107th General Meeting of the American Society for Microbiology, Toronto, Canada

June, 2006. Session chair and speaker, Session TS-B19 Do Viruses Control Microbial Ecosystems? ASLO Summer Meeting, Victoria, British Columbia, Canada

May, 2006. Session chair and speaker, Session 083/N Friend or Foe: Viral Infection as a Fundamental Force in the Ecology of Microorganisms. 106th General Meeting of the American Society for Microbiology, Orlando, FL

Fall 2002, Steering Committee, American Society for Limnology and Oceanography, 2003 Aquatic Sciences Meeting, Salt Lake City, UT

Invited Seminars - National

1. Nov., 2014. Uncovering the biology of unknown viruses through metagenomics and nucleotide metabolism genes. Rutgers, The State University of New Jersey.
2. March, 2014. Key biological features of unknown viruses revealed through metagenomics. Inst. of Genomic Biology, Univ. of Illinois, Urbana-Champaign.
3. Nov. 2013. Metagenomics as a window on viral impacts in microbial ecosystems. Center for Bioinformatics and Computational Biology, Univ. of Delaware
4. Jan., 2013. Workshop presentation on VIROME: The Viral Informatics Resource fOr Metagenome Exploration. Environmental Virology Workshop, University of Arizona, Tucson.
5. *Nov., 2012.* The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. Massachusetts Institute of Technology, Dept. of Civil & Environmental Engineering.
6. Sept., 2012. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. University of Pennsylvania.
7. May, 2012. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. University of California, Irvine.
8. April, 2012. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. Baylor University.

9. March, 2012. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. Drexel Microbiome Workshop, Philadelphia, PA.
10. March, 2012. VIROME: The Viral Informatics Resource fOr Metagenome Exploration. CAMERA -AAAS review meeting, Univ. of California, San Diego, CA.
11. February, 2012. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. Biology Department, Georgia Institute of Technology, Atlanta, GA
12. March, 2011. Something Really viral. Keystone Conference on Microbial Communities as Drivers of Ecosystem Complexity, Breckenridge, CO
13. May, 2010. The hot unknown geneosphere: Metagenomics of viral assemblages in geothermal environments. US-China Workshop on Collaborative Research on Geomicrobiological Processes in Extreme Environments, Penn State University
14. September, 2009. Observations of the most abundant and active genes in the biosphere—the ecology of viral genes. Cambridge Healthtech Institute's Fourth Annual EXPLORING NEXT-GENERATION SEQUENCING Second-Generation Applications to Third-Generation Progress. Providence, RI.
15. June, 2009. Metagenomic exploration of natural viral populations: A field guide to the genetic wilderness. Conference on Next Generation Sequencing in Non Model Organisms. Univ. of Connecticut, Storrs, CT
16. April, 2009. Making sense of the chaff: What will metagenomic approaches tell us about viral ecology. Thermal Biology Institute, University of Montana. March, 2009. Department of Biology, Lincoln University, PA.
17. December, 2008. Making sense of the chaff: What will metagenomic approaches tell us about viral ecology. Biological Sciences Department, St. Joeseph's University, Philadelphia, PA
18. October, 2008. The unknown genosphere: Genomics and metagenomics of dsDNA viruses. Los Alamos National Lab, Genome Explorer Seminar Series
19. February, 2008. Incorporation of viruses into the ecological paradigms of soil microbial communities. USDA, CSREES, NRI Soil and Soil Biology Project Director's meeting, Menlo Park, CA.
20. February, 2008. Phage all around us: Viruses in water, soil, and sediment. University of Nebraska, Lincoln, Dept. of Plant Pathology.
21. September, 2007. dsDNA viruses: The genetic twilight zone. Delaware Biotechnology Institute Retreat. Lewes, DE
22. March, 2007. Endemism rules: Unique microbial communities of the Chesapeake Bay. NSF Microbial Observatories Principal Investigators Meeting, Washington, DC
23. January, 2007. The viriosphere outside my window: Seasonal dynamics of Chesapeake Bay virioplankton. Department of Biology, University of Southern California
24. September, 2006. The viriosphere outside my window: Seasonal dynamics of Chesapeake Bay virioplankton. Horn Point Environmental Labs, University of Maryland.
25. March, 2006. The viriosphere outside my window: Seasonal dynamics of Chesapeake Bay virioplankton. Department of Biology, Auburn Univ., Auburn, Alabama
26. March, 2006. Phage all around us: Viruses in water, soil, and sediment. Department of Microbiology, Univ. of Tennessee, Knoxville
27. November, 2005. Invited speaker. Viruses throughout the year: Seasonal dynamics of Chesapeake Bay Virioplankton. Lincoln University

28. October, 2005. Incorporation of viruses into the ecological paradigms of soil microbial communities. USDA, CSREES, NRI Soil and Soil Biology Project Director's meeting, Newark, DE.
29. October, 2005. Virioplankton: Seven years at the tip of the iceberg. Annual Graduate Student Colloquium, Marine Estuarine Environmental Sciences program, Univ. of Maryland System, Baltimore, MD.
30. January, 2005. Phage all around us: Viruses in water, soil, and sediment. Department of Microbiology and Molecular Genetics, Michigan State University.
31. September, 2004. Virioplankton: a key component of the annual biological cycle of the Chesapeake Bay, National Science Foundation, Microbial Observatories Principal Investigator's meeting, Big Sky, Montana
32. August, 2004. Annual biological cycle of virioplankton diversity in the Chesapeake Bay. American Society for Microbiology: New Phage Biology Meeting, Key Biscayne, FL
33. March, 2004. Phages under our pheet: Diversity, abundance and composition of soil viral communities. Dept. of Plant & Soil Sciences, University of Delaware, Newark, Delaware
34. October, 2003. Virioplankton: Newest players in the annual biological cycle of the Chesapeake. Chesapeake Biological Laboratory, University of Maryland Center for Environmental Science
35. June, 2003. Viral Ecology: The influence and effect of viruses within microbial communities. Defense Advanced Research Projects Agency Prognostic Epidemiology Workshop. Arlington, VA.
36. March, 2002. Tools for Examination of Virioplankton Ecology. Smithsonian Environmental Research Center. Edgewater, Maryland.
37. Nov., 2001. Ecological role of viruses in microbial communities. Chemistry-Biology Interface program, University of Delaware, Newark, Delaware
38. May, 2001. Molecular tools: a window into microbial ecology. Delaware Biotechnology Institute; University of Delaware, Newark, Delaware
39. March, 2001. The Biogeochemistry of Viral Infection. Dept. of Plant & Soil Sciences, University of Delaware, Newark, Delaware
40. March, 2001. Impacts and consequences of viral infection in marine microbial communities. Virginia Institute of Marine Science, Gloucester Point, VA
41. Oct., 2000. Department of Oceanography, Florida State University, Tallahassee, FL
42. Sept., 2000. College of Marine Studies, University of Delaware, Lewes, DE
43. Oct., 1999. Annual Meeting of the Southeastern Branch of the American Society for Microbiology, Jekyll Island, GA.
44. Apr., 1999. Georgia Institute of Technology, Atlanta, GA.
45. Mar., 1999. Skidaway Institute of Oceanography, Savannah, GA.
46. Oct., 1996. The beneficial and detrimental effects of indigenous viruses on the marine ecosystem: "The little engine that could." 31st Annual Tri-Branch Meeting, American Society for Microbiology, Boxborough, MA.
47. Mar., 1996. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina, Columbia, SC.
48. Jan., 1997. Smithsonian Environmental Research Center, Edgewater, MD.

49. Nov., 1995. The ecological role of viroplankton: A molecular approach. DuPont Central Research and Development Experimental Station, Wilmington, DE.

Invited Seminars - International

1. August, 2014. Nucleotide metabolism genes and phenome to genome connections in virioplankton. 15th meeting of the International Society for Microbial Ecology, Seoul, South Korea.
2. May, 2012. What can shotgun metagenomics tell us about the ecology of virioplankton. Oceanological Observatory of Banyuls s/mer, France.
3. January, 2011. Uncovering the secrets of viruses in extreme environments. Deep Crustal Biosphere Workshop, University of the Free State, Bloemfontein, South Africa
4. June, 2011. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. 1st Earth Microbiome Workshop, Bejing Genomics Inst. Shenzhen, China
5. November, 2011. The viriosphere: ecological, biological, and genetic contrasts of viruses across the biosphere. International Soil Omics Conference. Chinese Agricultural Univ., Nanjing China.
6. August, 2009. Making sense of the chaff: What will metagenomic approaches tell us about viral ecology. Kalmar University, Sweden.
7. September, 2008. Making sense of the chaff: What will metagenomic approaches tell us about viral ecology. 16th Annual International meeting on Microbial Genomics. Lake Arrowhead, CA.
8. July, 2008. Making sense of the chaff: What will metagenomic approaches tell us about viral ecology. Fifth Aquatic Viral Workshop, Vancouver, BC, Canada.
9. April, 2007. Viral ecology across the biosphere: Placing viruses within ecosystems. Fondation des Treilles conference on : The evolution, diversity and ecology of the dark matter of the biosphere: Bacteriophages. Les Treilles, Tourtour – France.
10. July, 2006. Metagenomics and the marine virus community. Practical Workshop on Virus Ecology Methods, Marine Biological Association of the UK, Plymouth, UK.
11. June, 2006. Metagenomics and the marine virus community. Scientific Committee for Ocean Research, University of British Columbia, Canada
12. June, 2005. Second SCOPE meeting on Microbial Environmental Genomics, Shanghi, China, Declined
13. April, 2005. How well do cultivated algal viruses reflect virioplankton genotypic diversity? 4th Algal Virus Workshop, Amsterdam, Netherlands
14. August, 2004. Viruses in Soils: The first terrestrial viral metagenome. 10th Symposium of the International Society for Microbial Ecology, Cancun, Mexico
15. April, 2004. Virioplankton: a key component of the annual biological cycle of the Chesapeake Bay. Laboratoire d'Océanographie de Villefranche-sur-mer. Villefranche-sur-mer, France
16. April, 2004. Virioplankton: a key component of the annual biological cycle of the Chesapeake Bay. Royal Netherlands Institute for Sea Research. Texel, Netherlands.
17. March, 2003. Virioplankton and the biological paradigms of the sea. Commission Internationale pour l'Exploration Scientifique de la mer Méditerranée Workshop on the Ecology of Marine Viruses. Oceanological Observatory of Banyuls s/mer, France.

Short talks at scientific meetings

1. **K. Eric Wommack***, Dan Nasko, Jaysheel Bhavsar, and Shawn W. Polson. 2013. The marine virus sequencing initiative: making the most of your metagenome. 7th Aquatic Viral Workshop, Univ. of South Florida, St. Petersburg, FL
2. **K. Eric Wommack**, Shawn Polson, Yu-Chih Tsai, and Jonas Korlach. 2013. Applications of PacBio Long-Read Sequencing to Research Problems in Environmental Microbiology. PacBio User Group Meeting, Baltimore MD
3. **K. Eric Wommack***, Dan Nasko, Jaysheel Bhavsar, and Shawn W. Polson. 2013. VIROME: The Viral Informatics Resource for Metagenome Exploration. 15th Meeting of the Genomics Standard Consortium. Bethesda, MD
4. Shawn W. Polson, Eric Sakowski, Mara Hyatt, Helen Schmidt, Jeffrey Wray, and **K. Eric Wommack**. 2011. Metagenome Gazing: Exploring the deeper phylogenetic potential of viral shotgun metagenome data. 6th Aquatic Viral Workshop, Royal Netherlands Institute for Sea Research, Texel, the Netherlands.
5. **Wommack K. E**., E. Sakowski, S. W. Polson, M. Hyatt, W. Kress, H. Schmidt, J. Wray, R. Marine, Shannon J. Williamson. 2011. Viral metagenomics as an educational platform: Studying virioplankton diversity through genes encoding chaperonins and nucleotide metabolism proteins. 2011 Aquatic Sciences Meeting, Amer. Soc. Limnol. Oceanog. Meeting San Juan Puerto Rico.
6. **Wommack K. E.***, S. J. Williamson, D. Fadrosh, and S. Polson. 2010. Observations of the most abundant and active genes in the biosphere—the ecology of viral genes. 2010 ASLO-AGU Ocean Sciences Meeting. Portland, OR.
7. **Wommack K.E.*,** S.R. Bench, and T.E. Hanson. 2005. How well do cultivated algal viruses reflect virioplankton genotypic diversity? 4th Algal Virus Workshop, Amsterdam, NL
8. **Wommack, K.E.**, K.E. Williamson, D.M. Winget, R. White, R.R. Helton, and D.L. Kirchman. 2003. An improved method for estimation of virioplankton production. Aquatic Sciences Meeting, Salt Lake City, UT. Abstract CS-21.

Poster Presentations

1. Widmayer, S., Eric G. Sakowski, **K. Eric Wommack**, Shawn W. Polson. 2014. Biogeographical Analysis of Eastern oyster (*Crassostrea virginica*) Commensal Microbes in the Choptank River. 114th General Meeting of the American Society for Microbiology, Boston, MA.
2. Chopyk, J., Z. F. DiSpirito, R. M. Moore, David Renter, Natalia Cernicchiaro, Rodney Moxley, **K. E. Wommack**. 2014. The correlation between microbial community diversity and STEC serotypes in beef processing samples. Governor's Converence/STEC CAP Annual Converence, Lincoln, NE.
3. Chopyk, J., E. Sakowski, H. Schmidt, D. Nasko, L. Z. Allen, B. Hedlund, D. Mead, T. Schoenfeld, **K. E. Wommack**, and S. W. Polson. 2013. It's Getting Hot in Here: Phylogeny of Replicase Genes in Hydrothermal Viral and Microbial Assemblages, 113th General Meeting of the American Society for Microbiology, Denver, CO.
4. Nasko, D.J., Polson, S.W., Bhavsar, J.D., Ravel, J., Ma, B., **Wommack, K.E.** Assessing patterns of CRISPR spacer composition using the CASC discovery and validation tool. Poster session presented at: The 15th Genomic Standards Consortium meeting; 2013 Apr 22-24; Bethesda, MD
5. Daniel J. Nasko, Shawn Polson, Bing Ma, Jacques Ravel, **K. Eric Wommack.** 2013. Assessing CRISPR Spacer Composition in the Vaginal Microbiome. Human Microbiome Science, Bethesda, MD.

6. Daniel J. Nasko, Shawn Polson, Bing Ma, Jacques Ravel, **K. Eric Wommack.** 2013. CASC-poster. 15th Meeting of the Genomics Standard Consortium
7. **Wommack, K. E**., D. Nasko, S. Polson, M. Radosevich, J. DeBrun, Y.-C. Tsai, B. Bowman, R. Tapella, and J. Korlach. 2013. A comparison of two library construction procedures for obtaining long read sequences for use in environmental microbial genomicsPresented at the 113th General Meeting of the American Society for Microbiology, Denver, CO.
8. **K. Eric Wommack**, Shawn W. Polson, Shannon J. Williamson, Eric Sakowski, Helen Schmidt, Mara Hyatt, Jeff Wray, and Rachel Marine. 2012 Metagenomic insights on virioplankton biology through nucleic acid and protein synthesis genes. 14th Meeting of the International Society for Microbial Ecology. Copenhagen, Denmark.
9. Nasko, D.J., Polson, S.W., Bhavsar, J.D., **Wommack, K.E.** 2012. Using metagenomes to assess whether or not certain viral genes are more likely to become CRISPR spacers. 14th Meeting of the International Society for Microbial Ecology. Copenhagen, Denmark.
10. H. F. Schmidt, E. G. Sakowski, S. J. Williamson, S. W. Polson, and **K. E. Wommack.** 2012. DNA polymerase phylogeny recapitulates virioplankton biology. General Meeting American Society for Microbiology, San Francisco, CA.
11. Shawn W. Polson, Jaysheel D. Bhavsar, Daniel Nasko, Sari Khaleel, and **K. Eric Wommack**. 2012. VIROME: A Shotgun Metagenome Analysis and Exploration Tool. . General Meeting American Society for Microbiology, San Francisco, CA.
12. Eric G. Sakowski, Mara Hyatt, William Kress, Daniel Nasko, Shawn W. Polson, and **K. Eric Wommack**. 2012. Living the lytic life: Ribonucleotide reductase sequences in aquatic viral metagenomes. Viruses of Microbes, EMBO conference, Brussels, Belgium
13. **K. Eric Wommack**, Shawn W. Polson, Shannon J. Williamson, Eric Sakowski, Helen Schmidt, Mara Hyatt, Jeff Wray, and Rachel Marine. 2012. Needles in the haystack: leveraging metagenomic data to understand phage biology. Viruses of Microbes, EMBO conference, Brussels, Belgium
14. Nasko, D.J., Polson, S.W., J. Bhavsar, **Wommack, K.E**. 2011. Are some viral genes more likely to become CRISPR spacers? 6th Aquatic Viral Workshop, Royal Netherlands Institute for Sea Research, Texel, the Netherlands.
15. Rachel Marine, Shawn W. Polson, Jacques Ravel, Graham Hatfull, Daniel Russell, Matthew Sullivan, Fraz Syed, Nick Caruccio, Michael Dumas, and **K. Eric Wommack**. 2011 . Less is More: Evaluation of a Low Input, Transposase-Mediated Protocol for Rapid Generation of High-Throughput Sequence Libraries. General Meeting, American Society for Microbiology. New Orleans, LA.
16. **K. E. Wommack**, Eric Sakowski, Shawn W. Polson, Mara Hyatt, William Kress, and Helen Schmidt. 2011. Digging deeper: Phylogenetic and biogeographic characterization of abundant proteins within viral metagenomes. Keystone Symposium Microbial Communities as Drivers of Ecosystem Complexity, Breckenridge CO
17. Polson S.W., **K. E.Wommack**, L. A. Zeigler, D. W. Fadrosh, S. J. Williamson. 2010. The "Other" DNA Viruses: Metagenomic assessment of ssDNA virioplankton assemblages. 2010 ASLO-AGU Ocean Sciences Meeting. Portland, OR.
18. Dumas, M. D., K. E. Fletcher, R. R. Helton, K. M. Ritalahti, F. E. Löffler, **K. E. Wommack**. 2009. Dehalophage Dynamics in Dehalococcoides Sp. Strain BAV1 Cultures. 109th General Meeting of the American Society for Microbiology, Philadelphia, PA.
19. Helton, R. R., S. W. Polson, D. M. Winget, L. Zeigler, D. W. Fadrosh, S. C. Cary, S. J. Williamson, **K. E. Wommack**. 2009. Exploration and induction of temperate phage from hydrothermal

vent diffuse flow water. 109th General Meeting of the American Society for Microbiology, Philadelphia, PA.

20. Bhavsar J, S. W. Polson, S. Dhankar, **K. E. Wommack**. 2009. VIROME: A resource for analysis of viral metagenomes. 109th General Meeting of the American Society for Microbiology, Philadelphia, PA.
21. K. E. Sides, K. Roy, V. Srinivasan, D. Ghosh, S. Pfiffner, **K. E. Wommack**. 2009. Prevalence of lysogeny in forested and agricultural soil bacteria as a function of host colony formation rate. 109th General Meeting of the American Society for Microbiology, Philadelphia, PA.
22. D. M. Winget, D. W. Fadrosh, **K. E. Wommack**, S. J. Williamson. 2008. Widening the Camera Lens: Metagenomic and Biogeochemical Characterization of Marine Virioplankton. 108th General Meeting of the American Society for Microbiology. Boston, MA.
23. S. Srinivasiah, T. I. Mills, D. Adhikari, J. Lovett, J. J. Fuhrmann, **K. E. Wommack**. 2008. Combinatorial Influences of pH and Carbon Availability on Coexisting Viral and Bacterial Assemblages in Soil. 108th General Meeting of the American Society for Microbiology. Boston, MA.
24. S. Jamindar, L. A. Waidner, D. M. Winget, and **K. E. Wommack.** 2008. Genetic analysis of Chesapeake Bay virioplankton assemblages based on major capsid gene (gp23) and randomly amplified polymorphic DNA. 108th General Meeting of the American Society for Microbiology. Boston, MA.
25. M. D. Dumas, K. E. Fletcher, R. R. Helton, K. M. Ritalahti, F. E. Löffler, **K. E. Wommack.** 2008. Growth of Dehalococcoides Strain BAV1 in Conjunction with a Highly Infective Phage. 108th General Meeting of the American Society for Microbiology. Boston, MA.
26. R. R. Helton, R. D. Wagner, M. D. Dumas, **K. E. Wommack**, F. E. Löffler and K. M. Ritalahti. 2008. Detection of Putative Prophage Genes in Purified Viral Extracts from Dechlorinating *Dehalococcoides* Cultures. 108th General Meeting of the American Society for Microbiology. Boston, MA.
27. K. Ritalahti, R. Helton, **K. E. Wommack**, F. Löffler, K. Fletcher. 2007. Preliminary Evidence for Phage-Mediated Horizontal Gene Transfer in *Dehalococcoides*. 107th General Meeting of the American Society for Microbiology. Toronto, Canada.
28. D. Ghosh, M. Radosevich, **K. E. Wommack**, K. Roy, S. Srinivasiah. 2007. Coordinate Effects of Carbon Fluxes on Viral and Bacterial Populations in Soil: A Microcosm Approach. 107th General Meeting of the American Society for Microbiology. Toronto, Canada.
29. M. Patterson, V. Dhodda, D. Mead, **K. E Wommack,** R. DiFrancesco, M. Young, P. Richardson, T. Schoenfeld. 2007. Viral Community Genomics of Thermal Aquifers and Improved DNA Polymerases for DNA Amplification and Sequencing. 107th General Meeting of the American Society for Microbiology. Toronto, Canada.
30. **K. E. Wommack**, R. Goodman, M. Radosevich, M. Liles, J. Bhavsar, E. Carroll. 2007. Comparative Analysis of Soil Viral Metagenomic Libraries. 107th General Meeting of the American Society for Microbiology. Toronto, Canada.
31. D. M. Winget, and **K. E. Wommack.** 2007. Daily and Diurnal Cycles in Marine Virioplankton Production. 107th General Meeting of the American Society for Microbiology. Toronto, Canada.
32. S. Srinivasiah, J. Bhavsar, **K.E. Wommack.** 2007. Assessment of Metagenomically-Derived PCR Primers for Fingerprinting of Soil and Marine Viral Assemblages. 107th General Meeting of the American Society for Microbiology. Toronto, Canada.

33. **K. E. Wommac**k, J. Bhavsar, and J. Ravel. 2006. Are short read sequences appropriate for microbial metagenomics? Genomes, Medicine, and the Environment Conference, Hilton Head, SC
34. R.R. Helton, K.M. Ritalahti, T. E. Hanson, F.E. Loeffler, **K.E. Wommack**. 2006. Detection and analysis of prophage integrases in dechlorinating bacterial populations. 11th International Symposium on Microbial Ecology, Vienna Austria.
35. D. Ghosh, K. Roy, E.C. Martin, D.C. White, K.E. Williamson, **K.E. Wommack**, M. Radosevich. 2006. Direct evidence for horizontal transfer of 16S rRNA gene via transduction. 11th International Symposium on Microbial Ecology, Vienna Austria.
36. K. Roy, D. Ghosh, E. Martin, D.C. White, **K.E. Wommack**, K.E. Williamson, M. Radosevich, 2006. Soil bacterial communities sampled with BioSep beads exhibit a high frequency of lysogeny. 11th International Symposium on Microbial Ecology, Vienna Austria.
37. K.E. Williamson, D.W. Smith, M. Radosevich, **K.E. Wommack**. 2006. Assessing lysogenic interactions in soils: A cultivation-based approach. 11th International Symposium on Microbial Ecology, Vienna Austria.
38. D. M. Winget and **K. E. Wommack**. 2006. Inter-annual trends of viral production in the Chesapeake Bay. Summer Meeting American Society of Limnology and Oceanography, Victoria, British Columbia, Canada.
39. R. R. Helton and **K. E. Wommack.** 2006. Molecular examination of estuarine sediment viruses of the Chesapeake Bay. 2006 Summer Meeting American Society of Limnology and Oceanography, Victoria, British Columbia, Canada.
40. D. Ghosh, K, Roy, E. Martin, K.E. Williamson, **K.E. Wommack**, and M. Radosevich. 2006. Lysogeny and the Horizontal Transfer of Bacterial Genes in Soil Viral Communities. 106th General Meeting of the American Society for Microbiology. Orlando, FL
41. D.M. Winget, D.A. Bronk, C. Heil and **K.E. Wommack.** 2005. Viral diversity and production during *Trichodesmium* blooms in the Gulf of Mexico. 4th Algal Virus Workshop, Amsterdam, NL
42. J. Kan, Hanson, T, Campbell, B, Cary, C, **Wommack, KE**, Hill, R, Chen, F. 2005. Meta-proteomics, a new way to explore microbial function in natural environments. Molec. Cellular Proteomics. 4:S286. HUPO 4th Annual World Congress, Munich, Germany
43. Bench S. R., S. J. Williamson, **K. E. Wommack.** 2005. Patterns of Virioplankton Diversity in a Temperate Estuary. American Society for Microbiology, 105th General Meeting, Atlanta, GA. Abstract N-019.
44. Winget D. M., C. Brussaard, **K. E. Wommack**. 2005. Genotypic Diversity of Phycoviruses and Estuarine Virioplankton: a RAPD-PCR Survey. American Society for Microbiology, 105th General Meeting, Atlanta, GA. Abstract N-020.
45. Helton R. R., K. Wang, J. Kan, D. M. Winget, **K. E. Wommack.** 2005. What Lies Beneath: Chesapeake Bay Viriobenthos Diversity and Abundance. American Society for Microbiology, 105th General Meeting, Atlanta, GA. Abstract N-021.
46. Williamson S. J., S. Cary, S. R. Bench, **K. E. Wommack**. 2005. Metagenomic Characterization of Viral Communities within Deep-Sea Hydrothermal Vent Ecosystems. American Society for Microbiology, 105th General Meeting, Atlanta, GA. Abstract N-198.
47. Simon M., K. E. Williamson, **K. E. Wommack**. 2005.Detection and Identification of RNA Viruses in the Environment using Randomly-Primed RT-PCR. American Society for Microbiology, 105th General Meeting, Atlanta, GA. Abstract N-177.

48. Williamson K. E., **K. E. Wommack**, M. Radosevich 2005.Incidence of Lysogeny among Soil Bacteria. American Society for Microbiology, 105th General Meeting, Atlanta, GA. Abstract N-222.
49. Martin, E.C., M. Radosevich, A. Peacock, D.C. White, K.E. Williamson, and **K.E. Wommack.** 2005. Abundance of Virus-Like-Particles in Soils and Aquifer Sediments. BioMicro World 2005, First International Conference on Environmental, Industrial and Applied Microbiology, Badajoz, Spain
50. Williamson, K. W., **K. E. Wommack**, and M. Radosevich. 2004. Comparison of Viral Communities in Six Delaware Soils. 10th International Symposium on Microbial Ecology. Cancun, Mexico.
51. Bench, S.R., **K.E. Wommack,** K.E. Williamson, M. Radosevich. 2004 Comparative Metagenomics: Comparing viral community sequences from diverse environments. 10th International Meeting of the International Society of Microbial Ecologist, Cancun, Mexico.
52. Williamson, S. J., K. E. Williamson, R. R. Helton, and **K. E. Wommack**. 2004. "Lysogenic virus-host interactions predominate in deep-sea diffuse-flow hydrothermal vent environments." 10th International Meeting of the International Society of Microbial Ecologist, Cancun, Mexico.
53. Helton, R.R., **K.E. Wommack.** 2004. Bacteriophages of the Chesapeake Bay sediments: abundance and morphologies of the most copious form of microbial life. International Symposium for Microbial Ecology, Cancun, Mexico.
54. Helton, R.R., J.E. Maier, and **K.E. Wommack.** 2004. Extraction of virus-like particles (VLPs) from sediments from oligohaline, mesohaline and polyhaline zones within the Chesapeake Bay. American Society for Microbiology 104th General Meeting,, New Orleans, LA. #N-214.
55. Winget, D.M., K.E. Williamson, and **K.E. Wommack.** 2004. Seasonal and spatial variations in viral production in the Chesapeake Bay. 10th International Meeting of the International Society of Microbial Ecologist, Cancun, Mexico.
56. Bench, S.R., K.E. Williamson, and **K. E. Wommack.** 2004. Virioplankton of the Chesapeake Bay: Exploring community diversity through metagenome analysis. Ocean Sciences Meeting, Honolulu, HI
57. K. E. Williamson, **K. E. Wommack,** M. Radosevich, 2003. Extracting Viruses from Soil for Culture Independent Analyses. American Society for Microbiology 103rd General Meeting, Washington, DC
58. Helton, R.R., M.T. Cottrell, D.L Kirchman, and **K.E. Wommack**. 2003. A comparison of three incubation-based methods for estimation of bacteriophage production in the Chesapeake and Delaware bays. American Society for Microbiology, 103rd General Meeting, Washington, D.C. Abstract N-149.
59. Winget, D. & **K. E. Wommack**. 2003. Metagenomic survey of bacteriophage diversity based on RAPD-PCR. American Society for Microbiology, 103rd General Meeting, Washington, D.C. Abstract N-325
60. **K. E. Wommack,** R. R. Helton, M. T. Cottrell, and D. L. Kirchman. 2002. Viral and protistian control of bacterioplankton production over an oxic to anoxic gradient in Chesapeake bay water column. Eos. Trans. AGU, 83(4), Ocean Sciences Meet. Suppl., Abstract OS11i-11
61. K. Williamson, **K. E. Wommack,** M. Radosevich, 2001. Comparison of Methods for Extracting Bacteriophage from Soils. Soil Science Society of America 2001 International Annual Meeting, Charlotte, NC

62. **K. E. Wommack**, R.E. Hodson, and D.L. Lewis. 2001. Bacterial degradation of a chiral herbicide: Minimal media studies. *In* Abstr. Intl. Soc. Microb. Ecol.-9, Amsterdam, NL

63. **K. E. Wommack,** B. A. Shira, J. K. Avants, A. W. Garrison. 2001. Bacterially-mediated degradation of a chiral disinfection byproduct. In Abstr., 101st General Meeting of the Amer. Soc. for Microbiology. Orlando, FL

64. **Wommack, K. E.**, F. Chen and R.E. Hodson. 2000.Development of molecular genetic detection methods for marine diazotrophs. *In* Abstr., 2000 Aquatic Sciences Meeting. Copenhagen, Denmark.

65. Yager, PL., T.L. Connelly, B. Mortazavi, **K. E. Wommack**, N. Bano, J. E. Bauer, and J. T. Hollibaugh. 2000. Dynamic microbial response of springtime algal bloom at sub-zero temperatures. *In* Abstr., 2000 Ocean Sciences Meeting. San Antonio, Texas.

66. **Wommack, K. E.**, A. Whittamore, R.E. Hodson, and D.L. Lewis. 1999. Phenotypic and taxonomic characterization of soil bacteria which degrade a chiral pesticide. *In* Abstr. 99th General Meeting American Society for Microbiology. Chicago, Illinois.

67. **Wommack, K. E.**, F. Chen and R.E. Hodson. 1999. Nitrogenase reductase from marine vibrios. *In* Abstr. Amer. Soc. Limnology and Oceanography 1999 Aquatic Sciences meeting.

68. **Wommack, K. E.**, J. Ravel, R. T. Hill, and R. R. Colwell. 1998. Virioplankton community structure: Population and autecological analysis. *In* Abstr. 8th Intl. Symposium on Microbial Ecology (ISME-8).

69. **Wommack, K. E.**, J. Ravel, R. T. Hill, and R. R. Colwell. 1997. Population dynamics of Chesapeake Bay viroplankton. *In* Abstr. 97th Annu. Meet. Am. Soc. Microbiol., Miami, Florida.

70. Schlekat, C.E., **K. E.Wommack**, A.W. Decho, and G.T. Chandler. 1997. Phylogenetic characterization of an estuarine bacterial isolate and compositional analysis of its metal binding EPS. *In* Abstr. 97th Annu. Meet. Am. Soc. Microbiol., Miami, Florida.

71. **Wommack, K. E.**, J. Ravel, R. T. Hill, and R. R. Colwell. 1997. Analysis of viroplankton population dynamics using molecular genetic techniques. Gordon Research Conference on Applied and Environmental Microbiology

72. **Wommack, K.E.**, R.T. Hill, J. Ravel and R.R. Colwell. 1996. Analysis of bacteriophage distribution patterns in Chesapeake Bay utilizing classical and molecular approaches. *In* Abstr. 96th Annu. Meet. Am. Soc. Microbiol., New Orleans, Louisiana.

73. **Wommack, K.E.**, W.L. Straube, R.T. Hill, and R.R. Colwell. 1995. Identification of bacteriophage isolates employing banding patterns generated from randomly amplified polymorphic DNA-polymerase chain reaction (RAPD-PCR). *In* Abstr. 95th Annu. Meet. Am. Soc. Microbiol., Washington, D.C.

74. **Wommack, K.E.**, T.A. Muller, R.T. Hill, and R.R. Colwell. 1995. Decline of bacteriophage viability (infective and replicable virus particles) in estuarine microcosms. *In* Abstr. 95th Annu. Meet. Am. Soc. Microbiol., Washington, D.C.

75. **Wommack, K.E.**, R.T. Hill, and R.R. Colwell. 1993. Ecological studies on natural and cultured estuarine bacteriophages. *In* Abstr. 92nd Annu. Meet. Am. Soc. Microbiol., Atlanta, Georgia.

76. Hill, R.T., and **K.E. Wommack**. 1992. Bacterium-bacteriophage interactions in the Chesapeake Bay. *In* Abstr. 92nd Annu. Meet. Am. Soc. Microbiol. New Orleans, Louisiana.

77. **Wommack, K.E.**, R.T. Hill, and R.R. Colwell. 1991. Seasonal variations in abundance of viruses in Chesapeake Bay. *In* Abstr. Internatl. Marine Biotech. Conf. '91, Baltimore, Maryland.
78. McAndrew B.J., **K.E. Wommack**, and I.A. Johnston. 1989. A genetic analysis of the thermal dependence of contractile function in fish muscle. Natural Environment Research Council Workshop on Marine Genetics., Plymouth, England, United Kingdom.

Professional Meetings Attended (since 2001)

1. August, 2014, ISME 15, the 15th meeting of the International Society for Microbial Ecology, Seoul, South Korea.
2. May, 2014, 114th General Meeting of the American Society for Microbiology, Boston, MA.
3. May 2013, 113th General Meeting Amer. Soc. for Microbiol, Denver, CO
4. July 2013, Human Microbiome Science, Bethesda, MD
5. April 2013, 15th Meeting of the Genomics Standard Consortium
6. June 2013, Natl., Inst. for Mathematical & Biological Synthesis, Working group on ocean viruses, Knoxville, TN
7. Jun 2013, PacBio User Group Meeting, Baltimore MD
8. Aug. 2013, NSF EarthCube Ocean Omics Workshop, Catalina Is., California
9. Nov. 2013, 7th Aquatic Viral Workshop, Univ. of South Florida, St. Petersburg, FL July 2012, Viruses of Microbes, EMBO conference, Brussels, Belgium
10. June 2012, General Meeting American Soc. for Microbiology, San Francisco
11. Feb. 2012, ASLO/AGU Ocean Sciences Meeting, Salt Lake City, UT
12. March, 2011. Keystone Symposium Microbial Communities as Drivers of Ecosystem Complexity, Breckenridge CO
13. June, 2011. 1st Earth Microbiome Workshop, Bejing Genomics Inst. Shenzhen, China
14. Jan., 2011. Deep Crustal Biosphere workshop, Univ. of Free State, Bloemfontain, South Africa
15. Nov., 2011. International Soil Omics Conference. Chinese Agricultural Univ., Nanjing China.
16. May, 2011. Amer. Soc. for Microbiology, New Orleans, LA
17. February, 2011. ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico
18. August, 2010. 13th International Society for Microbial Ecology Meeting, Seattle, WA
19. February, 2010. ASLO-AGU Ocean Sciences Meeting. Portland, OR.
20. *September, 2009.* Cambridge Healthtech Institute's Fourth Annual EXPLORING NEXT-GENERATION SEQUENCING Second-Generation Applications to Third-Generation Progress. Providence, RI.
21. June, 2009. Conference on Next Generation Sequencing in Non Model Organisms. Univ. of Connecticut, Storrs, CT
22. May, 2009. 109th General Meeting of the American Society for Microbiology, Philadelphia PA
23. May, 2009. Two Decades of Discovery, What's Next? 3rd Annual meeting of the SCOR Working Group on the Role of Viruses in Marine Ecosystems, University of Delaware, Newark, DE
24. January, 2009. Plant and Animal Genome Meeting. San Diego, CA.
25. September, 2008. 16th Annual International meeting on Microbial Genomics. Lake Arrowhead, CA.
26. July, 2008. Fifth Aquatic Viral Workshop, Vancouver, BC, Canada.
27. May,2008. 108th General Meeting of the American Society for Microbiology. Boston, MA.
28. March, 2008. NIH Human Microbiome Project Community Outreach Workshop. Bethesda, MD.
29. February, 2008. USDA, CSREES, NRI Soil and Soil Biology Project Director's meeting, Menlo Park, CA.

30. January, 2008. Plant and Animal Genome Meeting. San Diego, CA.
31. September, 2007. Delaware Biotechnology Institute Retreat. Lewes, DE
32. August, 2007. Soil Viral Metagenomics Annotation Workshop, Delaware Biotechnology Institute, Newark, Delaware
33. April, 2007. Fondation des Treilles conference on : The evolution, diversity and ecology of the dark matter of the biosphere: Bacteriophages. Les Treilles, Tourtour – France.
34. May, 2007. 107th General Meeting of the American Society for Microbiology, Toronto, Canada
35. March, 2007. NSF Microbial Observatories Principal Investigators Meeting, Washington, DC.
36. October, 2006. Genomes, Medicine, and the Environment Conference, Hilton Head, SC**.**
37. July, 2006. Practical Workshop on Virus Ecology Methods, Marine Biological Association of the UK, Plymouth, UK
38. June, 2006. Scientific Committee for Ocean Research, University of British Columbia, Canada
39. June, 2006. ASLO Summer Meeting, Victoria, British Columbia, Canada
40. May, 2006. 106th General Meeting of the American Society for Microbiology, Orlando, FL
41. October, 2005. USDA, CSREES, NRI Soil and Soil Biology Project Director's meeting, Newark, DE.
42. October, 2005. Annual Graduate Student Colloquium, Marine Estuarine Environmental Sciences program, Univ. of Maryland System, Baltimore, MD.
43. May, 2005. 105th General Meeting American Society for Microbiology, Atlanta, GA.
44. April, 2005. 4th Algal Virus Workshop, Amsterdam, Netherlands.
45. May, 2004. 104th General Meeting American Society for Microbiology. New Orleans, LA.
46. September, 2004. Microbial Observatories Principal Investigator's meeting, Big Sky, Montana
47. August, 2004. 10th Symposium of the International Society for Microbial Ecology, Cancun, Mexico
48. August, 2004. American Society for Microbiology: New Phage Biology Meeting, Key Biscayne, FL
49. February, 2004. Ocean Sciences Meeting, Honolulu, HI
50. May, 2003. 103rd General Meeting American Society for Microbiology, Washington, DC
51. June, 2003. Defense Advanced Research Projects Agency Prognostic Epidemiology Workshop. Arlington, VA.
52. March, 2003.Commission Internationale pour l'Exploration Scientifique de la mer Méditerranée Workshop on the Ecology of Marine Viruses. Oceanological Observatory of Banyuls s/mer, France.
53. February, 2003. Aquatic Sciences Meeting, Salt Lake City, UT.
54. February, 2002. Ocean Sciences Meeting, Honolulu, HI.
55. August, 2001. 9th Symposium International Society Microbial Ecology Amsterdam, NL
56. May, 2001. 101st General Meeting American Society for Microbiology. Orlando, FL

Grants and contracts awarded

Competitive grants: Principal Investigator

National Science Foundation DBI-1356374: Collaborative Research: ABI Development: VIROME, bioinformatics cyberinfrastructure for the next wave of scientific advancements in microbiome research. (2014-2017) $900,000.

National Institutes for Health: R21-Bacteriophage-host dynamics as a factor in the etiology of bacterial vaginosis. (2013-2015) $250,000.

National Science Foundation OCE-1148118: Collaborative Research: Exploratory application of single--molecule real time (SMRT) DNA sequencing in microbial ecology research; (2011-2014) $ 200,000

Gordon & Betty Moore Foundation CAMERA integration of VIROME: a bioinformatics pipeline and web-application interface for analysis of viral metagenome data 2010-2012; $533,639.

National Science Foundation MCB 0731916: Microbial Genome Sequencing Program; Metagenomic exploration of virus-host interactions in deep-sea hydrothermal vent environments 2007-2010; $ 1,208,880

United States Department of Agriculture Soil and Soil Biology program: Incorporation of viruses into the ecological paradigms of soil microbial communities 2004-2008; $ 450,000

National Science Foundation MCB-0132070: Intra-annual diversity and dynamics of Chesapeake Bay virioplankton 2002-2007; $989,663

National Research Council Postdoctoral Fellow, Ecosystems Research Division, U.S. Environmental Protection Agency, Athens, GA. 1998-2001.

Competitive grants: Co-Principal Investigator

National Science Foundation DBI 1039979: NSF MRI: Acquisition of Long Read DNA Sequencing Instrument 2010-2013; $ 744,538

United States Department of Agriculture, Shigella-toxigenic *E. Coli* Coordinated Agricultural Project 2012-2017; $500,000

United States Department of Agriculture Microbial Observatories; Collaborative research: Microbial Observatory: Influence of land management practices on virus-host interactions in soil 2007-2011; $490,674

Scientific Committee for Ocean Research, Working Group on the Role of Viruses in Marine Ecosystems, 2005-2008; $45,000.

National Science Foundation EF-0626826: Environmental Genome Shotgun Sequencing of Marine Viroplankton. 2007-2009; $167,832

United States Department of Energy; Microbial Genome Sequencing program: Genomic analysis of viruses infecting globally distributed microalgae 2005-2006; ~$200,000 in sequencing costs for ten algal viral genomes.

National Science Foundation EAR-BE-0221825: Quantification and modeling of DOC and DON release in marine systems: a study of increasing trophic complexity. 2002-2007; $314,774

Internal university competitive grant: Principal Investigator*:*

Delaware Sea Grant Project Development: Microbiome of the Eastern Oyster, *Crassostrea virginica.* 2010; $10,000.

National Aeronautics and Space Administration Delaware EPSCoR program: Evolutionary signatures in viral DNA. 2008-2009; $29,500.

National Science Foundation Delaware EPSCoR program: Viral-host interactions across a gradient of geothermal environments Viral-host interactions across a gradient of geothermal environments. 2006-2007; $48,500

University of Delaware Research Foundation: Exploratory investigations of virioplankton in hydrothermal, deep sea environments 2002-2003; $29,978

Student fellowships

University Dissertation Fellowship, Dept. Biological Sciences, Univ. of Delaware, Rachel Marine; 2014-2015; 25,000

University Graduate Fellowship, Dept. Biological Sciences, Univ. of Delaware, Eric Sakowski; 2014-2015; 25,000

Townsend Fellowship, PhD. Graduate Fellowship, University of Delaware, Eric Sakowski; 2013-2014; 25,000

University Graduate Fellowship, Dept. Biological Sciences, Univ. of Delaware, Rachel Marine; 2012-2013; 25,000

Townsend Fellowship, PhD. Graduate Fellowship, University of Delaware, Danielle M. Winget; 2007-2008; 20,000

Delaware Water Resources Center, PhD Graduate fellowship, University of Delaware, Eric Sakowski; 2010-2013.

Institute of Soil and Environmental Quality, PhD Graduate fellowship, University of Delaware; Rachel Marine; 2009-2012.

United States Department of Agriculture, National Needs Pre-doctoral fellowship: Shellie Bench 2004-2006; $66,000

National Science Foundation Pre-doctoral fellowship: Danielle Winget 2003-2006; $105,000

Environmental Protection Agency Science to Achieve Results program: Pre-doctoral fellowship: Kurt Williamson 2003-2006; $105,000

Competitive equipment grants: Co-Principal Investigator

National Science Foundation; DBI - Major Research Instrumentation: NSF MRI: Transforming life sciences research through acquisition of a long-read, DNA sequencing instrument at the University of Delaware. 2010-2013; $861,433

National Science Foundation; DBI - MRI-R2: Acquisition of Data Intensive Academic Grid (DIAG). 2010-2013; $2,706,252

National Science Foundation; DBI - Biological Field Stations & Marine Labs; Acquisition of a Flow Cytometer for Interdisciplinary Research in Marine Biology and Biogeochemistry. 2003-2005; $97,500

UNIDEL: Equipment support for the Institute for Soil and Environmental Quality at the University of Delaware; 2004; $421,000

Non-competitve grants: Principal Investigator

Gordon and Betty Moore Foundation, Funds to support the Third annual meeting of the Scientific Committee for Ocean Research Working Group on the Role of Viruses in Marine Ecosystems, $5,000.

University of Delaware Center for Critical Zone Research and the Delaware EPSCoR program, Funds to support the Third annual meeting of the Scientific Committee for Ocean Research Working Group on the Role of Viruses in Marine Ecosystems, $3,000.

Field work

Beatrix Gold Mine, Bloemefontain, South Africa. Deep sub-surface research. January, 2011.

R/V Hugh R. Sharp. Delaware and Chesapeake Bays. 4 days 2011.Viral ecology research.

R/V *Atlantis.* 9°N East Pacific Rise and Sea or Cortez. 21 days 2008. Deep sea hydrothermal vent research utilizing deep submergence vehicle *Alvin*.

R/V *Hugh R. Sharp.* Delaware and Chesapeake Bays. 10 days 2007; 18 days 2006. Viral ecology research.

R/V *Cape Henlopen.* Delaware and Chesapeake Bays. 25 days 2005, 25 days 2004; 25 days 2003; 15 days 2002; 10 days 2001; 14 days, 1996; 9 days, 1995; 6 days, 1992 and 1991. Vial ecology research.

R/V *Atlantis.* 9°N East Pacific Rise. 17 days 2001. Deep sea hydrothermal vent research utilizing deep submergence vehicle *Alvin*.

R/V *Walton Smith*. Gulf of Mexico. 10 days 2002. Nutrient dynamics within cyanobacterial and microalgal blooms.

R/V *Columbus Islin.* Bahamas. 8 days, 1993. 12 days, 1990. Microbial studies in Bahamian waters.

R/V *Cape Hatteras*. Bahamas. 10 days, 1991. Microbial studies in Bahamian waters.

R/V *Ridgely Warfield.* Chesapeake Bay. 4 days, 1990.

The Inter-University Institute of Eilat; H. Steinitz Marine Biological Laboratory. Eilat, Israel. 7 days, 1995. Isolation of commensal bacteria of corals.

Caribbean Marine Research Center. Lee Stocking Island, Bahamas. 7 days, 1993. Participant, National Underwater Research Program, Workshop on Pathogens and Parasites of Reef corals.

Heron Island Research Station. Great Barrier Reef, Australia. 14 days, 1991. Isolation of bacteria associated with sessile marine invertebrates.

College Center of the Finger Lakes research station. San Salvador Island, Bahamas. 14 days, 1986. 8 days, 1987. Coral reef ecology studies.

Teaching and Advising

I. Postdoctoral Mentor

	Dates	Current position
Shawn Polson	1/2008-12/2010	Coordinator, Bioinformatics Core Facility, Univ. of Delaware
Rebekah R. Helton	7/2007-6/2009	Bioimaging Core Facility, University of Delaware
Shannon J. Williamson	8/2003-3/2005	Director, Environmental Virology J. Craig Venter Institute, San Diego, CA

II. Full-time Research Associates Supervised

	Dates	Current position
Matthew Simon	9/2005-5/2006	Dentistry school pursuing DDS

III. Graduate Student Major Advisor-Ph.D.

	Dates	Academic Department	Current position
Ryan M. Moore	7/2012 - present	Plant & Soil Sciences	
Dan Nasko	11/2009-present	Plant & Soil Sciences	
Eric Sakowski	9/2009-present	Biological Sciences	
Rachel Marine	7/2009-present	Biological Sciences	
Sharath Srinivasiah	7/2005-5/2011	Dept. Plant and Soil Sciences	
Seema Bhatlekar	9/2008-11/2008	Biological Sciences (rotation)	
Danielle M. Winget	9/2002-5/2008	College of Marine Studies, Oceanography	Post-doc, University of British Columbia, Vancouver, CA
Rebekah R. Helton	7/2001-2/2007	Dept. Plant and Soil Sciences	University of Delaware
Kurt E. Williamson	7/2001-11/2006	Dept. Plant and Soil Sciences	Assoc. Professor, College of William & Mary

IV. Graduate Student Major Advisor-M.S.

	Dates	Academic Department	Current position
Jessica Chopyk	9/2013 - present	Plant and Soil Sciences	
Michael Dumas	9/2007-6/2010	Biological Sciences	
Sandeep Kumar	9/2008-5/2010	Computer and Information Sciences	
Sanchita Jamindar	6/2007-12/2009	Plant and Soil Sciences	Technician Univ. Delaware
Deephan Mohan	9/2007-8/2008	Computer and Information Sciences	
Kanika Thapar	9/2006-5/2008	Computer and Information Sciences	Cisco Systems, San Jose, CA

Jaysheel Bhavsar	9/2006-present	Operations Research; Computer and Information Sciences	
Sowmya Vijayaraghavan	9/2004-5/2006	Computer and Information Sciences	Double-click and Google
Shellie R. Bench	8/2003-3/2006	College of Marine Studies, Marine Biosciences	PhD. student, Univ. of California, Santa Cruz

V. Undergraduate Research Mentor

		Dates	*Academic Department*	*Support (summer)*
1	Nicole Place	6/2014-present	Biological Sciences	Delaware NSF EPSCoR
2	Amelia Harrison	6/2014-present	Ecology	Delaware Water Resources Center
3	Zachary DiSpirito	6/2013-present	Animal Sciences	USDA
4	Andrew Boddicker	3/2013-present	Biological Sciences	Delaware NSF EPSCoR
5	Alessandra Ceretto	6/2013-present	Biological Sciences	Delaware Water Resources Center
6	Julia Hagemeyer	6/2012-present	Marine Biology	Delaware Water Resources Center
7	Van Vorrasane	6/2012-present	Delaware Technical and Community College, Biotechnology program	Delaware NSF EPSCoR
8	Steven Szymd	6/2012-present	Civil & Environmental Engineering	Delaware NSF EPSCoR
9	Coleen McCarren	6/2012-present	Washington College, Biology	Delaware NSF EPSCoR
10	Sam Widameyer	6/2011-present	Ecology	Delaware NSF EPSCoR
11	Jessica Chopyk	2/2011-present	Biological Sciences	Delaware NSF EPSCoR
12	Helen Schmidt	6/2010-present	Chem. Biochem	Delaware NSF EPSCoR
13	Jeff Wray	2/2010-5/2012	Biological Sciences	Delaware NSF EPSCoR

14	Bill Kress	6/2009-8/2010	Civil & Environmental Engineering	Delaware NSF EPSCoR
15	Mara Hyatt	6/2009-8/2011	Delaware Technical and Community College, Biotechnology program	Delaware NSF EPSCoR
16	Jennifer Clarke	6/2009-8/2010	Lincoln University, Biological Sciences	NSF Research Experiences for Undergraduates
17	Megan Furman	9/2008-5/2010	Entomology and Wildlife Ecology	Delaware Water Resources Center
18	Jackie Lovett	6/2007-10/2011	Biological Sciences	Delaware NSF EPSCoR
19	Tim Mills	6/2007-5/2009	Delaware Technical and Community College, Biotechnology program	NIH-INBRE and Delaware NSF EPSCoR
20	Jen Schnitker	6/2006-11/2006	Chemistry-Biochemistry	Lab Funds
21	Remi Osinubi	6/2006-8/2006	Delaware Technical and Community College, Med Tech program	Delaware NSF EPSCoR
22	Candice Johnson	6/2005-8/2005	Lincoln University, Biological Sciences	NIH-HHMI
23	Matthew Simon	6/2003-5/2005	Biological Sciences	Inst. Soil and Environmental Quality
24	Laura Fontana	6/2003-9/2004	Animal and Food Sciences	Lab funds
25	James Maier	6/2003-8/2003	Plant and Soil Sciences	Lab funds
26	Robin White	6/2002-8/2002	Wesley College, Biological Sciences	NIH-BRIN

VI. Courses Taught

Course	*Term*	*Enrollment*
PLSC 802 Professional Development	S12, S10,S08, S06, W05, S04, S02,	16 (S12), 9 (S10), 17 (S08), 13 (S06), 10 (W05), 13 (S04), 10 (S02)
PLSC 667 Environmental Virology	F05, F07, F03,	4(F07), 3(F05), 6 (F03),
PLSC 868 Graduate Research	all	1 to 3
MAST 868 Graduate Research	F02-S08	1 to 2

MAST 616/617 Methods in Molecular Microbial Ecology with lab section	S03	8
PLSC 466 Independent Study	S06	1
PLSC 809 Soil Science Seminar	F01	7

VI. Guest Lectures in University of Delaware Courses

Course	*Term*
BISC 654 Biochemical Genetics	S07
PLSC 270 Biotechnology: Science and Socioeconomic Issues	S03, S05

VII. Other teaching (prior to 2001)

Spring, 1995. Adjunct Professor, Catonsville Community College, Catonsville, MD. Environmental Science Lecture and Laboratory 102.
Summer 1992-95. Sailing instructor, Getaway Sailing School, Baltimore, MD
Summer 1981-88. Sailing instructor, Florida National High Adventure Sea Base, Boy Scouts of America.
Resident Assistant 1986-87. Turman Residence Hall, Emory University, Atlanta, GA.

Service

I. Departmental Service

Promotion and Tenure Committee (2010-11)
Chair, Pedologist Search Committee (2010)
Chair, Promotion and Tenure Committee (2007)
Promotion and Tenure Committee (2001; 2002; 2003)
Graduate Studies Committee (2002-04)
Pedologist faculty search committee, Dept. of Plant and Soil Science (2005) - resulted in hire of Kyungsoo Yoo

II. College Service

College of Agriculture and Natural Resources Promotion and Tenure Committee (2008-09)
Chair, Delaware Biotechnology Institute Seminar Committee (2009-present)
Search Committee, Marine Microbial Ecologist, College of Marine Studies (2008) - resulted in hire of Jennifer Biddle
Search Committee, Phytoplankton Ecologist, College of Marine Studies (2007) - resulted in hire of Matt Oliver
Delaware Biotechnology Institute Seminar Committee (2002)
Delaware Biotechnology Institute Scientific Leadership Committee (2002-2004)
Life Sciences Student Outreach faculty advisor (2002-2003)
Ship's advisory committee, College of Marine Studies (2003)
Food virologist faculty search committee, Dept. of Animal and Food Science (2003) - resulted in hire of Kalmia E. Kniel

Delaware Biotechnology Institute, search committee, Campus Information Technology Associate II (2005)
Acquisition of capillary DNA sequencer for the University of Delaware DNA Sequencing and Genotyping Center (2005)

III. University Service

Delaware Biotechnology Institute Seminar Coordinator (2009-2010)
Search committee, Director position Delaware Biotechnology Institute (2008)
Radiation Safety Committee (2007-present)

IV. Graduate Student Committees

Student	*Dates*	*Affiliation*
Sari Kahil	Member (2010-present)	Bioinformatics and Systems Biology
Eric Sakowski	Chair (2010-present)	Biological Sciences
Rachel Marine	Chair (2010-present	Biological Sciences
Sharath Srinivasiah	Chair (2005-2011)	Plant and Soil Sciences
David Keller	Member (2006-present)	Univ. of Maryland, Marine Estuarine Environmental Sciences
Karin Holmfeldt	Member Examination Committee (2009)	Kalmar University, Sweden
Danielle M. Winget	Chair (2002-08)	College of Marine Studies, Oceanography program
Jessica Clasen	Member, Examination Committee (2008)	Dept. Earth and Ocean Sciences, University of British Columbia
Rebekah R. Helton	Chair (2001-07)	Plant and Soil Sciences
Kurt E. Williamson	Chair (2001-06)	Plant and Soil Sciences
Elizabeth McClement	Member (2003-08)	College of Marine Studies, Marine Biosciences
Christian Winter	Member, Examination Committee (2007)	Univ. of Groningen, Netherlands
Kui Wang	Member (2002-07)	Univ. of Maryland, Marine Estuarine Environmental Sciences
Elif Demir	Member (2004-05)	College of Marine Studies, Oceanography
Lisa Waidner	Member (2003-06)	College of Marine Studies, Marine Biosciences
M.S. committees	*Dates*	*Affiliation*
Michael Dumas	Chair (2007-present)	Biological Sciences
Sanchita Jamindar	Chair (2007-present)	Plant and Soil Sciences
Shellie Bench	Chair (2003-2006)	College of Marine Studies, Marine Biosciences\
Jaysheel Bhavsar	Chair (2007-present)	Computer and Information Sciences

V. Professional Service

Co-Editor-in-Chief

Microbiome	2012-present

Editor

Applied and Environmental Microbiology	2012-present
International Soc. Microb. Ecology Journal	2011-2014

Journal Editorial Boards

Microbial Ecology	2006-2013
Environmental Microbiology	2006-present
International Soc. Microb. Ecology Journal	2010-present
Applied and Environmental Microbiology	2006-present

Scientific Advisory Boards

Genome Canada project: Applied Metagenomics of the Watershed Microbiome	*2011-2015*

Peer-review of manuscripts

	Reviews 2001-2012
Applied and Environmental Microbiology	29
Aquatic Microbial Ecology	19
Environmental Microbiology	31
Microbial Ecology	18
Limnology & Oceanography	6
Proceedings National Academy of Sciences	4
Environmental Microbiology Reports	3
Nature Reviews Microbiology	3
Deep-Sea Research	2
PLoS One	1
Science	4
Virus Genes	1
J. Marine Biological Association UK	1
Nature Protocols	1
BMC Genomics	2
International Society for Microbial Ecology Journal	9
Limnology and Oceanography Methods	1
Molecular Ecology	1
Water Research	1
Antarctic Science	1
Marine Biotechnology	1
Archiv für Hydrobiologie	1
Acta Oecologia	1
Estuaries	1
Genes	1
Journal of Plankton Research	1

J. General Virology	1
BMC Bioinformatics	1
J. of Virology	1
Nature	2

Ad hoc Grant reviews	*Reviews since 2001*
Virginia Sea Grant	2
California Sea Grant	4
Natural Environment Research Council	2
Department of Energy	1
National Science Foundation	
Biological Oceanography	14
Division of Environmental Biology	8
Environmental Genomics	2
Genes and Genome Systems	2
Office of Polar Programs	2
Ocean Technology	1
Emerging Frontiers	1
Integrated Organismal Systems	3
Major Research Instrumentation	1
USDA Soil Processes	3
Israel Science Foundation	2
Canada Foundation for Innovation	1
City University of New York	1
Institut Français de la Biodiversité Programme Biodiversité	1
Institut Français de la Biodiversité Programme de Recherche en Genomique et Biotechnologies Vegetales	1

Grant Review Panel Service		*Reviews*
2014	National Institutes of Health: International Cooperative Biodiversity Groups	15
2013	National Science Foundation: Biological Oceanography	30
2009	Gordon and Betty Moore Foundation Viral Genome and Metagenome sequencing requests	
2008	USDA Epidemiology and Food Safety	17
2007	Environmental Protection Agency: Science to Achieve Results Graduate Fellowships	16
2005	National Science Foundation: Biological Oceanography	18
2005	Environmental Protection Agency: Science to Achieve Results Graduate Fellowships	21
2002	Department of Energy: Natural Attenuated Bioremediation	9
2001	Department of Energy: Natural Attenuated Bioremediation	13