

STEVEN W WILHELM

curriculum vitae – summary

Background

- Ph.D - The University of Western Ontario (1994)
- Postdoctoral training at the University of Texas (1995-1996) and the University of British Columbia (1997-1997)
- NSERC Visiting Scientist in a Canadian Government Laboratory (1997-1998)
- Faculty at the University of Tennessee since 1998, currently the Kenneth & Blaire Mossman Professor of Microbiology

Contributions to training and education

- Twenty-four completed graduate trainees with five currently engaged in training
- Over 100 undergraduate research trainees since 1998
- Courses including Introductory Microbiology, Microbial Ecology, Advance Molecular Biology, Professionalism and Oceanography taught over the past 16 years. Teaching ratings consistently in the top 10% of the College of Arts & Sciences.
- Lead PI of a *National Science Foundation* Research Experiences for Undergraduates training grant since 2012

Contributions to research

- Over \$30M in research support since 1998. Over 400 days “in-kind” support for research expeditions (aka “ship-time”).
- Over 250 peer-review publications since 1994, 50% lead by his students.
- H-index of 71 (Google Scholar estimate, Nov 2023, <http://scholar.google.com/citations?user=XV0DED0AAAAJ>)
- Over 500 presentations (authored and coauthored) at scientific meetings and academic institutions
- Provisional patents for software (bioinformatics analyses) and a treatment to modulate the severity of malaria

Select Awards and Commendations

- Elected Fellow of the *American Association for the Advancement of Science* (AAAS, 2022), *The American Academy for Microbiology* (AAM, 2016), *The Association for the Sciences of Limnology & Oceanography* (ASLO, 2016)
- Awarded John H Martin Award by ASLO, 2021. For a paper that transformed Limnology or Oceanography
- Elected by the membership to the elections committee, ASM (2022-2025)
- UTK Awards for research 2009, 2018, 2019. Teaching Award 2017.
- Named Kenneth & Blaire Mossman Professor 2014 – ongoing; James R Cox Professor 2018-2021

Service and outreach

- Currently a member of multiple scientific societies; editor / board member for 4 journals
- Frequent reviewer service to journals, funding agencies (including multiple panels services in the USA and Canada)
- Service on multiple departmental, college and university wide committees
- Service on advisory panels for federal agencies including EPA, NOAA, DOE and States (MI, NY)
- Appointed *American Society for Microbiology* Distinguished Lecturer (2023-2025)
- Director, NSF-funded REU Site (Microbial Interactions and Functions) (2012 – present)

Steven W Wilhelm

Kenneth & Blaire Mossman Professor, Department of Microbiology

The University of Tennessee, Knoxville, TN 37996

Date of Birth: July 22, 1966. Place of Birth: Shakespeare, Ontario, Canada Citizenship: Canadian (US Permanent Resident)

Educational History

<i>University of Western Ontario</i>	Ph.D. Plant Sciences	1990 - 1994	Ph.D.
<i>University of Western Ontario</i>	B.Sc. Genetics	1985 - 1989	B.Sc. (Honours)

Employment History

Assistant (1998), Associate (2004), Full (2008) Professor, <i>University of Tennessee</i>	August 1, 1998
<i>NSERC Visiting Fellow, Environment Canada, AECB, Burlington, ON</i>	August 1, 1997
Postdoctoral Fellow, Department of Earth and Ocean Sciences, <i>The University of British Columbia</i>	June 1, 1996
Postdoctoral Fellow, Marine Sciences, The University of Texas (Austin) Marine Science Institute	March 1, 1995

Employment History – Courtesy Appointments and Positions

Rank	Institution	Department	Effective Date
Mossman Professorship	Tennessee	Microbiology	Since Oct 2014
Associate Head	Tennessee	Microbiology	2007 - 2020
Graduate Director	Tennessee	Microbiology	2009 – 2020; 2022 - present
Advisory Board	Bigelow Lab for Ocean Sciences	Provasoli-Guillard Collection of Marine Phytoplankton	2009 - 2013
Visiting Faculty	Wisconsin - Milwaukee	Biology	2007 – 2010
Graduate faculty	University of Maine	School of Marine Sciences	2012 – 2017
Adjunct Faculty	University of Kuopio	Biotechnology	2000 – 2001
Adjunct Faculty	University of Windsor	Great Lakes Institute for Environmental Research	Since 2019
Adjunct Faculty	Tennessee	Ecology & Evolutionary Biology	1998-2022
Adjunct Faculty	Tennessee	Genome Science & Technology	Since 1998
Adjunct Faculty	Tennessee	Center for Environmental Biotechnology	Since 1998
Adjunct Faculty	Tennessee	Earth & Planetary Sciences	Since 2013
Associate Faculty	Tennessee	National Institute for Mathematics & Biological Synthesis	Since 2016
Lecturer	Western Ontario	Plant Sciences	Jan – Apr 1994

Service Positions

Associate Editor:	Limnology & Oceanography: Methods	Since 2002
Editorial Board:	Applied & Environmental Microbiology	Since 2007
	Harmful Algae	2011- 2021
	The ISME Journal	Since 2013

Awards and Commendations

2023-2024	Named ASM Distinguished Lecturer	
2021	Elected Fellow , American Association for the Advancement of Science (AAAS)	
2021	John H Martin award Association for the Sciences of Limnology & Oceanography (ASLO) for a paper in aquatic sciences judged to have had a high impact on subsequent research in the last 30 years. For Wilhelm SW and CA Suttle. 1999. <i>Viruses and nutrient cycles in the sea</i> . <i>BioScience</i> 49:781-788.	
2019	University of Tennessee, College of Arts & Sciences <i>Distinguished Research Career Award</i>	
2018	University of Tennessee, Chancellor's Research and Creative Achievement award	
2018	University of Tennessee, <i>James R. Cox Professorship</i> (2018 – 2021)	
2017	University of Tennessee, College of Arts & Sciences Senior Teaching Award	
2016	Elected Fellow , American Academy of Microbiology	
2016	Elected Sustaining Fellow , Association for the Sciences of Limnology and Oceanography.	
2014	Named Kenneth & Blaire Mossman Professor of Biomedicine	
2010	University of Tennessee, <i>Quest Scholar of the Week</i> (August 15 – 22)	
2009	University of Tennessee, Chancellor's Award for Research & Creative Achievement 2000	University
	of Tennessee, Science Alliance Faculty Award for Research	
1999	Oak Ridge Associated Universities Ralph E. Powe Junior Faculty Enhancement Award	
1997	Natural Science & Engineering Research Council (Canada) Visiting Scientist Fellowship	
1994	Dissertation Initiative for the Advancement of Limnology and Oceanography, ASLO	
1993	Graduate Research Fellowship, The University of Western Ontario	
1992	Phycological Society of America, Grant-In Aid of Research	
1991,92,93	Development Bursary, Northeast Algal Society	
1992,93	Special University Scholarship, The University of Western Ontario	
1992	North East Algal Society, Robert T. Wilce Award for best paper	

Students Supervised

PhD Students

Current: Liz Denison, Gwen Stark, Alexander Truchon, Katelyn Houghton,

Brittany Zepernick, 2023	Freshwater diatoms and competition,	SEC PDF Scholar, UTK
Naomi Gilbert, 2022,	Marine virus infection networks,	PDF US DOE- LBNL
Helena Pound, 2021	Microbial community dynamics and <i>Microcystis</i>	US DOE
Eric Gann, 2020	Giant viruses infecting <i>Aureococcus anophagefferens</i>	The Henry Jackson Foundation Bethesda MD
Samantha Rose, 2019	Tool development for giant viruses PDF,	Texas A & M
Lauren Krausfeldt, 2018	Molecular characterization of <i>Microcystis</i> blooms	PDF, Nova Southeastern
Robbie Martin, 2018	Ecological constraints of toxic cyanobacteria	Res Assist Professor, UTK
P. Jackson Gainer, 2018	Microbial interactions in the North Pacific Ocean	Assist Prof, Tenn Wesley
Joshua Stough, 2017	Bioinformatics for complex microbial communities	PDF, Michigan
Md Moniruzzaman, 2016	<i>Aureococcus anophagefferens</i> and its giant virus	Asst Professor, U Miami
Morgan Steffen, 2014	Microcystis community analyses by metagenomics	Assoc Prof, James Madison
Audrey Matteson, 2010	Cyanophage production and ecology	Research Ass, UNC Wilmington

Matthew A Saxton, 2010	Constraints on primary production in Lake Erie	Assoc Prof, Mianm-OH
Janet (Rowe) Goins, 2008	Virus production and diversity in the North Atlantic	Ass Dir UG Res, Wash St Louis
Johanna Rinta-Kanto, 2006	Microcystis proliferation in a Laurentian Great Lake	Res Assoc, U Helsinki
Leo Poorvin, 2005	The role of viruses in the cycling of Fe	ARCH chemicals
Cécile Mioni, 2004	Bioreporters to assess iron bioavailability in oceans	Res Associate, UC Santa Cruz
Melanie Eldridge, 2004	Effects of Fe on plankton in HNLC oceans	Assist Professor, U New Haven,

Master's Students

Shafer Belisle, 2014	Urea as a driver of cyanobacterial blooms	Research Assistant, ORNL
Tiana Pimentel, 2013	Cyanophage distribution in the Northern Pacific	DOCS, NC
Claire Campbell, 2011	Microbial diversity in co-culture	Novozyme, VA
Star Loar, 2009	Novel picoplankton in a Laurentian Great Lake	Algenol, FL
Julie Higgins, 2005	Virus dynamics in HNLC marine waters	AMETEK, TN
Amanda Dean, 2004	The dynamics & activity of viruses in Lake Erie	Genova Diagnostics, NC
Shannon Pedigo, 2004	Effects of iron on the physiology of the Microcystis	NA
Johanna Rinta-Kanto, 2001	Viral enrichments and microbial communities	Res Assoc, U Helsinki

Postdoctoral /Research Associates

Dr. Anthony Ouellette	Feb 2002 – Jul 2003	Associate Professor & Department Co-Chair, Jacksonville University, Jacksonville FL.
Dr. Renhui Li	Dec 2003 – Jun 2005	Professor, Chinese Academy of Sciences, Wuhan China
Dr. Leo Poorvin	Jan 2006 – Jun 2007	Senior Microbiologist, ARCH chemicals (Georgia)
Dr. Gary LeCleir	Jan 2006 – present	Research Assistant Professor, UTK
Dr Sahar Hasim	Nov 2015-Nov 2016	Oak Ridge National Laboratory
Dr Lauren Krausfeldt	Jun 2018-July 2019	Nova Southeastern University
Dr Eric Gann	Mar 2020 – Mar 2021	The Henry Jackson Foundation
Dr Kristen Yoshimura	Aug 2020 – July 2022	Assistant Professor, James Madison
Dr Robbie Martin	Aug 2018 – July 2023	Research Assistant Professor, UTK

Dr Emily Chase	Feb 2022 - present
Dr Brittany Zepernick	June 2022 - present

Visiting Scientists

	Home Institution
Dr Peter Pascucci	Denver Community College,
Dr George Bullerjahn	Bowling Green State University
Dr R Michael McKay	Bowling Green State University
Dr Andrew Lang	(cohosted with A Buchan) Memorial University
Dr Xiangming Tang	NIGLAS, CAS
Dr Guijun Yang	University of Wuxi (China)

Visiting graduate students (includes UT students who completed significant amounts of work in my lab)

Andy Kenst, Jan 2004 – Oct 2005, UTK Earth and Planetary Science (E Perfect, advisor)
 Cynthia May, May 2007, University of Vermont (M. Watzin, advisor)
 Alicia Hanson, Mar 2008, University of Wisconsin–Milwaukee (E Young, advisor)
 Marie-François Fabre, Jun – Sept 2008, École National Agronomique, Rennes France
 Emily Rogers, 2006 – 2010, UTK FWS (T Henry, Advisor)
 Jacque Young, 2009-2010, UTK GST (B Hettich, advisor)
 Marie-Agnes Perdu, Aug 2011 – Jan 2012, AgroParis Tech, Paris France
 Mallory Morrow, May – Dec 2011, UTK Graduate Education program
 Alise Ponsero, Jan – Jun 2012, Université de Rennes 1, France
 Lang Ho Lee, Sept 2012 –Sept 2013, ORNL GST (N VerBerkmoes (NEB), advisor)
 Chloe Ridings /Kristin Irwin, April – May 2014 UTK EPS (Mike McKinney, Advisor)
 Guotao (Sunny) Peng, September 2015 – 2016, Fudan University (Shanghai), China
 Sebastien Guilmoit, Jan 2016 – July 2016, University of Pau (UPPA), France
 Taylor Tuttle, Feb 2016, Bowling Green State U (G Bullerjahn, Advisor)
 Emily Davenport, Feb 2016, Bowling Green State U (G Bullerjahn, Advisor)
 Justyna Hampel, May 2017, Wright State (S Newell, Advisor)
 Dominique Derminio, Sept 2019, SUNY ESF (G Boyer, Advisor)
 Chris Cook, 2018 – 2020, UTK (A Steen, Advisor)

UTK Undergraduate Research Assistants

Johanna Rinta-Kanto (1999), Arianne Balsom (2000), Amanda Howard (2000), Kari Voellinger (2000 - 01), Alison Rozmus (2001), Acacia Baker (RT McNair Fellow - 2001), Courtney Mack (2001) Sara Handy (2002), Lynn Neal (2003 – 04), Janet Rowe (2003 – 04), Justine Leigh-Bell (2002 – 04), Casey Rentz (2002 – 04), Matthew Carberry (2002 -05), Matthew Smith (2002 – 05), Matthew Steadmon (2004 – 05), Ashley Frazier (2005 – 2006), Kim Dunagan (2005 – 2006), Ainslie Fennell (2006 – 2006), Rhett Ketschke (2005 – 2006), Jeremy Chandler (2006), Dinielle Truitt (2006 – 2008), Sallye Hartman (2007), Lindsay Kuhnhein (2007-2008), Randon Davis (2007-2008), Rob Arnold (2007 – 2009), Ann Wells (2008 – 2009), Tanaysha Mapp (2008 – 2010), Kellina Morris (2008 –2010), Tommie-Jo Kinney (2009 – 2011), Juhee Shah (2009), Sarah Farnsley (2009 – 2011), Cara Turski (2009-2012), Liz Morrow (2010), Loren Lowry (2010), Helena Pound (2010 – 2014), Mallory Morrow (2011), Jenna Zalewski (2011 - 2012), B. Schafer Belisle (2011 – 2012), Chad Effler (2011 – 2013), Brooke Watson (2012), Kacey Russell (2012), Austen Webber (2012 – 2014), Jasmine Vazin (2012 – 2013), A. Kaitlyn Victor (2013 - 2014), Kristen Larsen (2013 - 2015), Alex Daniel (2014), Mark MacDonald (2014 – 2016), Alyssa Scott (2015 – 2017), Miranda French (2016 – 2017), Steven Ho (2017), Ashley Humphrey (2016 – 2019), Tommiejean Christesen (2017-2018), Shelby Whitehead (2017-2021), Abigail Jarrat (2018), Vinila Baljepally (2018), Brennan Hughes (2018-2020), Jenny Patel (2020), Kelly Fox (2020-2021), Justin Dracup (2020-2021), David Niknejad (2020-2022), Danielle Johnson (2022), Brooke Creasey (2022-2023), William Schepens (2023 – present), Ellen Barnes (2023 – present).

Visiting Undergraduate Assistants

Whitney Black (Maryville College, 1999 – 00), Starla Stephens (NIH-RISE fellow; New Mexico State University, 2000), Sarah Wied (University of Minnesota, 2002), Rachel Service (Maryville College 2003 – 04), Margaret Henke (University of Wisconsin-LaCrosse, 2005), Brittany Morcom , (University of Delaware, 2006), Sarah Kortebein (Tufts University, 2008; DePauw University, 2011), Mariya Campbell (Georgia State, 2013), Eric Gann (U Mass Amherst, 2014 - 2015), Emlyn Hammer (St Mary's College of Maryland, 2015), Olivia Sayer (Colorado Mesa, 2015), Markus Pryor (Rochester Inst Tech, 2017), Ryan Johnson (Augustana College, 2018), Barbara Klein (U West Florida 2019), Kyle Rauba (Columbia College, 2020), Ashton Start (James Madison, 2022), Rebecca Cutforth (Amherst, 2022); Jacob Smith (South Virginia Uni, 2023); Isabella Maggard (UVA Wise, 2023)

Pre-collegiate scholars (High School students)

Brandon Falls (Farragut, 2007), Cara Turski (Farragut, 2008 and 2009), Christina Kihm (Farragut, 2009), Phillip Hensley (Gibbs, 2011), Rebecca Weir (Farragut, 2011), Margaux Armfield (West Secondary, 2014- 2016).

Science-journalism interns

Joel Smithson (2008), Sarah Farnsley (2009), Miriam Kramer (2009 – 2011), Katie Freeman (2010), Eric Gedenk (2012), Lewis Walker (2013 – 2014), Jesse Weber (2013 – 2014), Shelby Whitehead (2017-2021), Taylor Mattioli (2021).

Teaching Experience- *The University of Tennessee* (with evaluations as available)

1999 Microbial Ecology (Micro 470) (4.20 / 5.00), General Seminar (Micro 595, 2 semesters)

2000 Microbial Ecology (Micro 470) (4.51 / 5.00), Microbial Physiology (Micro 601 – *Archaea*), Intro to Oceanography (EEB 446) (4.03 / 5.00), General Seminar (Micro 595, 2 semesters)

2001 Microbial Ecology (Micro 470) (3.85 / 5.00), Ocean Biogeochemistry Readings and Discussion (EEB 554), General Seminar (Micro 595, 2 semesters), Microbial Physiology (Micro 601 – *The physiology of photosynthetic microbes*), Advanced Microbial Physiology (Micro 610 – *Classic concepts in microbial physiological ecology*)

2002 Intro to Oceanography (EEB 446) (4.38 / 5.00), Microbial Ecology (Micro 470) (4.55 / 5.00), Senior Semina (Micro 495), General Seminar (Micro 595), Microbial Physiology (Micro 601 – *The physiology & genetics o microbial toxin production*)

2003 Microbial Ecology (Micro 470) (4.57 / 5.00), Senior Seminar (Micro 495), General Seminar (Micro 595),

2004 Microbial Ecology (Micro 470) (3.5/5.0), Senior Seminar (Micro 495)

2005 Microbial Ecology (Micro 470) (3.6/5.0), Senior Seminar (Micro 495), General Seminar (Micro 595), Advanced topics in Microbial Genetics & Molecular Biology (Micro 650 – *Molecular tools & complex communities*) (3.6/5.0)

2007 Senior Seminar (Micro 495), General Seminar (Micro 595), Advanced topics in Microbial Genetics and Molecular Biology (Micro 650 – *Molecular tools and complex communities*) (4.25/5.00)

2008 Foundations in Microbiology (Micro 680). Guest lecture to the school of journalism – *Scientists and society, two peoples separate by a not so common language*. Guest lecture to Microbial Ecology (Micro 470).

2009 Senior seminar (Micro 495, 22 students) (4.3/5.0). Guest lecture to Microbial Ecology (Micro 470).

2010 Microbiology 650 (10 students), Micro 595 (34 students), Microbiology 495 (22 students (4.43/5.0)). Micro 596 (6), Guest lectures to Microbiology 470 (Microbial Ecology), Journalism and Electronic Media 451 (Environmental Journalism), Micro 596 (6 students)

2011 Microbiology 495 (16 students, 4.3/5.0), Geol 459/559 (26 students), Micro 596 (11 students)

2012 Micro 310 (184 students, team taught 3.8/5.0), Micro 596 (5 students, spring 2012; 8 students, fall 2012), Micro 650 (9 students), Micro 495 (8 students, 4.4 / 5.0); Micro 595 (38 students). Guest lectures to Microbiology 470 (Microbial Ecology), Journalism & Electronic Media 451 (Environmental Journalism)

2013 Micro 596 (2 students), Micro 495 (5 students), Micro459/EPS459 (28 students 4.2 / 5.0), Micro 559/EPS559 (9 students, 4.1 / 5.0), Micro 596 (10 students), Guest lecture JEM 451 (Environmental Journalism)

2014 Micro 595 (36 students), Guest lecture JEM 451 (Environmental Journalism), Micro 596 (7 students),

2015 Micro 596 (1 student spring, 9 students fall), Micro459/EPS459 (35 students), EPS 559 (5 students), Micro 650 (12 students)

2016 Micro 604 (Virology JC, 17 students), Micro 594 (Grant Writing, 15 students), Micro 596 (8 students). Guest lectures to JEM 451 (Environmental Journalism, 15 students) and Microbiology 321 (45 students)

2017 Micro 321 (Advance Microbiology, 37 students), Micro 604 (Graduate journal club in genomics, 27 students). EPS/Micro 459, 559 (Introduction to Oceanography, 38 students), Micro 595 (General Seminar, 49 students), Micro 596 (graduate rotations, 10 students)

2018 Micro 615 (Colloquium, 41 students), Micro 596 (10 students), Micro 321 (47 students), Guest lectures to JEM 451 (Environmental Journalism, 15 students)

2019 Micro 594 (Grant Writing, 11 students), EPS/Micro 459, 559 (Introduction to Oceanography, 36 students), Micro 596 - graduate rotations (10 students). Guest lectures to JEM 451 (Environmental Journalism, 15 students),

2020 Micro 506 (2 students), Micro 401 (1 student), Micro 600 (4 students), Micro 495 (14 students, 4.8 / 5.0). Guest lectures to JEM 451 (Environmental Journalism, 15 students),

2021 Micro 401 (2 students), Micro 600 (5 students), Micro 495 (16 students, 4.9/5.0), EPS/Micro 459, 559 (Introduction to Oceanography, 35 students (4.5/5 and 4/5), Micro 596 (Grant Writing, 19 students, 3.88/5), Micro 610 (Journal club – the art of the review – 8 students). Guest lectures to JEM 451 (Environmental Journalism, 12 students).

2022 Micro 495 (12 students); Micro 594 (18 students)
2023 Micro 495 (18 students); Micro 594 (18 students); Micro459/559 (27 students, team taught)

Teaching Experience- Other Institutions

University of Amsterdam Understanding *Microcystis* - A Masterclass, March 2021.

Universidad de la República de Uruguay, Programa Curso-Taller Interdisciplinario de Posgrado: “Cianotoxinas en sistemas acuáticos. Metodologías de monitoreo y análisis. Montevideo, UY (Dec 2017)

Marine Biological Association of the UK, Plymouth, UK. Instructor – Practical workshop on virus ecology (July 2006)

Environmental Protection Agency / Clarkson Center for the Environment. Instructor - Lake Ontario Limnology Practicum (September 2003) (Clarkson Univ BY501). Field training course on the RV Lake Guardian.

Earth and Ocean Sciences, The University of British Columbia. Spring 1997. Guest Lecturer as replacement instructor delivered to Oceanography 412 (Marine Microbiology) and Oceanography 415 (Algal Ecology).

Faculty of Science, The University of Western Ontario. 1993-1994. Instructor - Biology 213b, Productivity and Pollution in Aquatic Ecosystems - Limnology. (Teaching Rating: 4.6 / 5.0)

RESEARCH GRANTS AND SUPPORT

*Nationally Competitive Grants and Awards from Federal Sources (*active, †student training grant)*

- *2021-2025** NSF DBI- NSF REU Site Award. (\$402,340 to UTK). PI –SW Wilhelm. coPI GR LeClerc. *Microbial community interactions and functions*.
- *2019- 2024** DOE OBER. (\$3,169,336 total; \$715,854 to SWW). PI JP Gibert (Duke). coPIs J Shaw (Duke), D Pelletier and D Weston (ORNL) and SW Wilhelm. *From viruses to protists: temperature response of the neglected components of microbial controls on peatland nutrient cycling*.
- *2019- 2024** NSF EDGE. (\$1,009,308 to UTK; \$812,116 to SWW) PI SW Wilhelm. coPIs TB Reynolds and TE Sparer. *EDGE CT: Genetic tools to study giant viruses*.
- *2018- 2024** NIH / NSF. Oceans and Human Health Center Award. (\$5.2M to BGSU, \$501,682 to UTK) PI – GS Bullerjahn (BGSU). coPIs SW Wilhelm and 12 others. Lake Erie Center for Great Lakes and Human Health
- 2018- 2023 NSF (OCE). Collaborative Research: inferring cellular lysis and regeneration of organic matter by marine viruses. (\$1,773,520 total, \$598,368 to UTK. Proposal includes 14 days ship time with Wilhelm as lead, ~\$ 600,000 in-kind). PI JS Weitz (G Tech). CoPIs SW Wilhelm and MB Sullivan (Ohio State).
- 2018- 2023 NOAA (NCCOS – ECOHAB). (\$654,968 total, \$359,443 to UTK). PI – Ameet Pinto (Northeastern). coPIs SW Wilhelm (UTK) and F. Hellweger (TUB). *Towards a predictive understanding of our ecosystems: Microcystis blooms and toxin production*
- 2021- 2023 NSF (OCE). Collaborative Research: inferring cellular lysis and regeneration of organic matter by marine viruses. (\$59,450 plus 3 days ship time to UTK). PI – SW Wilhelm. Supplemental funds to continue research on virus activity in the Sargasso Sea.
- †2017- 2020** NSF DBI- NSF REU Site Award. (\$340,410 to UTK). PI –SW Wilhelm. coPI GR LeClerc. *Microbial community interactions and functions*. With \$1,698 supplement added May 2017.
- †2016** NSF DBI- NSF REU Site Award. (\$17,989 to UTK). PI –SW Wilhelm. coPI ER Zinser. *Microbial community interactions and functions*.
- 2015- 2020** NSF (IOS) (\$1,049,718 total, \$467,638 to SWW, IOS-1451528) PI SW Wilhelm with 4 coPIs. Collaborative Research: an integrated approach to understanding the function of the potent hepatotoxin microcystin in the growth & ecology of Microcystis.
- 2015-2018 NSF (MRI) (\$412,443 for equipment acquisition). *MRI: Acquisition of a Liquid Chromatograph-Tandem Quadrupole-Orbitrap Fourier Transform Mass Spectrometer for High-Throughput Biological Analyses*
- 2014-2017 NIH (Pathogenic eukaryotes panel) – R21AI113386-01. (\$403,000 total; \$275,000 direct). N Schmidt, PI. SW Wilhelm and SR Campagna, co-PIs. *Effect of the gut microbiome on malaria*.
- 2012– 2017** NSF Dimensions in BioDiversity program. (~\$2,000,000 total- \$575,644 to SWW. DEB 1240870). PI –HW Paerl. coPIs SW Wilhelm, W Gardner and F Hellweger. *Collaborative Research: Anthropogenic nutrient input drives genetic, functional and taxonomic biodiversity in hypereutrophic Lake Taihu, China*
- 2012-2016 NSF Cross divisional (CBET / DEB). PI HW Paerl. coPIs SW Wilhelm, JM DeBruyn. *INSPIR: An ecologically driven strategy for ensuring sustainability of anthropogenically and climatically impacted lakes*. (\$475,000 total, \$179,999 to UTK)
- †2012 – 2016** NSF DBI- NSF REU Site Award. (\$315,000 to UTK). PI –SW Wilhelm. coPI ER Zinser. *Microbial community interactions and functions*.
- 2011- 2016 NOAA (ECOHAB-PCM, NA11NOS4780021) (\$703,779 total to UTK, \$351,890 to SWW). PI SW Wilhelm, coPI GL Boyer. *“Biological degradation of microcystins: a first step towards biofilters for high efficiency toxin removal”*
- 2011- 2015 NSF OCE–1061352 (\$874,605 total to UTK- \$295,000 to SWW). PI A Buchan, coPIs SR Campagna and SW Wilhelm. *“Biogeochemical implications of marine phage: roseophage as a relevant model”*.
- 2010-2015 NSF OCE-1030518 (\$1,400,043 total (\$799,179 total to UTK- \$372,424 to SWW). PI ER Zinser, coPIs Z

Johnson and SW Wilhelm. Collaborative Research: Seasonal and decadal changes in temperature drive *Prochlorococcus* ecotype distribution patterns. This proposal is complemented by 64 days of major ship time (ca \$1,6000,000 of in-kind support).

2009- 2013 NSF EF – 0949120 (\$613,954 total) (\$275,004 to UTK plus \$6,700 REU supplement in May 2011). PI WH Wilson, coPIs SW Wilhelm and R Stepanauskas. *Decoding virus leviathans*.

2009- 2014 NSF IOS – 0841918 (\$458,704 to UTK, ^{*}plus \$5,700 REU supplement in June 2010). PI SW Wilhelm, NC Verberkmoes. What makes *Microcystis* bloom? Dissecting the physiological ecology of a toxic cyanobacterium with community level proteomics

2009- 2013 NSF OCE- 0851113 (\$499,703 total, \$299,800 to UTK) PI SW Wilhelm. Co-PIs NC Verberkmoes, JT Lennon. Collaborative research: characterizing the constraints on virus infection of cyanobacteria

2008- 2012 NSF CBET – 0826838 (\$300,000 total- \$101,582 (\$80,630 direct) to UT, ^{*}\$9,950 REU supplement added in 2009) PI H Paerl. coPI SW Wilhelm *Collaborative research: evaluating nutrient reductions to control cyanobacteria and ensure large lake sustainability: Lake Taihu (china) as a model for North American systems*.

2008- 2011 NSF OCE – 0825405 (\$610,163 total- \$174,257 to UTK). PIs DA Hutchins, SW Wilhelm and BS Twining. *FeCycle II: Variability in plankton Fe quotas during an unamended Lagrangian experiment*.

2006- 2010 NOAA (ECOHAB) (\$436,967 to UTK). PIs SW Wilhelm, T Henry, GL Boyer, R Strange, M Twiner. *Chronic toxicity and bioaccumulation of microcystins in freshwater fish*.

2005- 2010 DOE (JGI). “*Determination of the genomic sequence of Aureococcus anophagefferens*.” PIs CJ Gobler, D Berry and SW Wilhelm. Sequencing and automated assembly of the *A. anophagefferens* genome.

2005- 2009 NSF OCE- 0526159. (\$466,095 to UTK). “Development of bioluminescent bacterial bioreporters to quantify the bioavailability of Fe in seawater”

2005- 2009 OHHI (NOAA) – (\$748, 921 total (\$349,993 total- \$294,142 direct to SWW). PIs GS Boyers and SW Wilhelm. “*OHH 2005: Identification, characterization and inventory of novel freshwater biotoxins*”.

2005- 2009 NSF OCE – 0452409 (\$357, 369- \$246,361 direct). PI SW Wilhelm. “Viral abundance, production and diversity during the North Atlantic Spring Bloom (NASB 2005)”

2002- 2008 MERHAB (NOAA). (\$3,328,055 total, (\$488,127 to UTK). PI- Greg Boyer, co-PIs S.W. Wilhelm, J. Makarewicz, M.C. Watzin, C.R. O’Neill, T.B. Mihuc, and P. Hopkins. Tier-based monitoring for toxic cyanobacteria in the lower Great Lakes

2002- 2006 NSF DEB – 0129118. \$300,147 total; \$207,000 direct. *Viral influence on freshwater cyanobacteria and toxin dynamics*

2002- 2003 NSF OPP – 0228895. \$22,714 total; \$18,000 + \$6,000 in direct supplies and \$5,000 indirect travel costs *Viral dynamics and the Southern Ocean Fe-cycle*

2002- 2003 NSF – Direct funds for participation in NBP Haz Mat. Cruise (ca. \$10,000 in direct supplies and travel costs, \$15,000 in shiptime), PI – Wade Jeffrey, Univ. West Florida. *Solar stimulation of bacterial production in the southern hemisphere*

2000-2002 NSF OPP – 0003241. \$72,115 to UTK. PI- J. Grebmeier, co-PI’s S. Wilhelm and L. Cooper. *SGER: Voyage of the RCMP St. Roch II: A Journey of Scientific Re-Discovery*

2000-2001 NSF OCE – 0002968. \$48,220 to UTK PI – S.W. Wilhelm, co – PI’s B. Applegate, G. Sayler. *SGER: Development of a bioreporter regulated by the bioavailability of Fe in seawater*

2000-2001 NSF DEB – 0003069. \$34,937 to UTK. SGER: Viral impacts on fluvial and limnetic biogeochemistry

2000 NSF – Direct funds for participation in NBP Haz Mat. Cruise (ca. \$10,000 direct in supplies and travel costs, \$20,000 in shiptime), PI – Wade Jeffrey, Univ. West Florida. Microbial DNA damage across a latitudinal gradient in the southern hemisphere

1999-2003 NSF OCE – 9977040, \$243,063 to UTK direct plus 21 days shiptime, (ca. \$144,000). *Bioavailability of carbon and iron from viral lysis products* Includes \$5,400 REU supplement in 2000.

1999- 2006 NSF CHE- 9974734. \$ 2,036,093 total budget. John Turner, PI. Wilhelm listed as senior collaborator.

Integrating teaching and research for chemical and environmental analysis in Appalachia and the southeast 1997-1998
NSERC – Visiting Scientists Research Fellowship – Environment Canada (\$35,000)

Nationally /Internationally Competitive Grants and Awards from other Sources

***2022-2024**, DOE-JG Lead PI on “Direct resolution of virus-host interactions using bulk single-celled labeling and application to deep community metatranscriptomics”. (est \$200,000 in sequencing and support).

***2020 – 2024**, Simons Foundation. The continuum of virus-host interactions: environmental drivers of horizontal gene transfer and virus effects. \$1,147,793 to SWW.

2020-2021, NSERC (Canada). Evaluating the persistence of SARS-CoV-2 (COVID-19) in the urban water cycle. PI RML McKay (U Windsor). SWW listed as “contributor/partner” per NSERC rules on international scientists. (\$50,000 – all funds staying in Canada to support research).

***2019-2023**, DOE-JGI. Collaborator on “Interactions through multi-omics high-resolution time series’. Sequencing of genomes and metatranscriptomes” (est \$400,000 in sequencing and support).

***2018-2022**, DOE-JGI. coPI on “Elucidating *Sphagnum* microbiome genetic interactions for improved growth at elevated temperature”. Sequencing of genomes and metatranscriptomes (est \$400,000 in sequencing and support)

***2018-2022**, DOE-JGI. Lead PI on “Algal, bacterial and viral interactions as the backdrop to marine carbon and trace metal cycling”. Sequencing of 135 metatranscriptomes (est \$150,000 in sequencing and support)

***2018-2022**, DOE-JGI. Lead PI on “Microbial interactions that drive carbon and nutrient cycling via the fate of an under-ice freshwater diatom bloom”. Sequencing of 90 metatranscriptomes (est \$100,000 in sequencing and support)

2016-2017, Oak Ridge National Laboratory. Support for viral research in northern peat fields (\$25,330)

2016-2017, The Gordon & Betty Moore Foundation (\$43,000). Service and advisory to *Protocols.IO*. SW Wilhelm PI.

2015 – 2018, The Gordon & Betty Moore Foundation (\$329,000). Development of a tractable genetic system for *Aureococcus anophagefferens*. SW Wilhelm PI. coPIs ER Zinser, WH Wilson, T Sparer and T Reynolds.

2014 – 2020, Natural Sciences and Engineering Research Council (Canada). (\$1,650,000 funds for training to Western University) "NSERC CREATE for freshwater Harmful Algal Blooms (fHABs): Algal Bloom Assessment through Science, Technology and Education (ABATE)". PIs I Creed, CG Trick. SW Wilhelm listed as international contributor.

2011 – 2014, National Institute for Mathematical and Biological Synthesis – funding to support working group to model virus activities (est. \$100,000). PI J. Weitz (Georgia Tech), coPI SW Wilhelm.

2009 – 2010, The Gordon & Betty More Foundation – *Sequencing of 4 phage genomes (ca \$20,000)*. PI A Buchan, coPIs SW Wilhelm and WH Wilson

2009 – 2011, New York SeaGrant (\$108,615 - \$11,000 to UT). Winter assessment of microbial biomass and metabolism: testing the importance of winter productivity to summer hypoxia in Lake Erie. PIs MR Twiss, SW Wilhelm.

2007 – 2009, Ohio SeaGrant (\$116,607 - \$30,000 to UT) Phylogenetic analysis and physiological characterization of photosynthetic picoplankton in Lake Erie. PIs GS Bullerjahn, RML McKay, SW Wilhelm.

2005- 2009, Scientific Committee on Oceanographic Research – (\$45,000 direct funds). Funds to support a marine virus ecology working group. Chairs, M Weinbauer (Villefranche-sur-mer, France), SW Wilhelm.

2005-2008, Ohio SeaGrant (\$93,244 - \$8,568 to UT). Redfield revisited: addressing current perspectives on the phosphorus quotas of freshwater plankton. PIs RML McKay, B Sterner, SW Wilhelm.

2002 –2005, American Water Work Association. \$139,814 total; \$96,423 direct. PI – S.W. Wilhelm *Development of molecular reporters for Microcystis toxicity and activity*

1999-2000 , ORAU Faculty Enhancement Award (\$5,000 direct funds + \$9,300 UTK match). *Molecular diagnostics for the ferric uptake regulatory gene in marine prokaryotes*

1998 – 2013, Ship time on the CCGS *Limnos* (with estimated value of in-kind support): 1998 - 5 days (\$26,000) ; 1999 - 11 days (\$57, 200); 2000 -11 days (\$57,200); 2001 - 11 days (\$62,000); 2002- 11days (\$69,000), 2003 - 12 days (\$84,000), 2004-15 days (\$108,000); 2005 - 10 days (\$75,000); 2006 – 10 days (\$130,000); 2007 – 5 days

(\$65,000); 2008 – 6 days (\$78,000); 2009 – 5 days (\$65,000); 2010 – 5 days (\$65,000); 2011 – 5 days (\$65,000); 2012 – 5 days (\$65,000); 2013 – 15 days (\$225,000); 2015 – 5 days (\$100,000). Time on CCGS *Griffon* 2007 – 3 days (\$75,000); \$2008 – 6 days (\$150,000); 2009 – 10 days (\$250,000); 2010-3 days (\$75,000); 2011- 5 days (\$125,000); 2012-5 days (\$125,000); 2013-5 days(\$125,000); 2015-5 days(\$125,000)

Competitive Grants and Awards from The University of Tennessee (all direct funds)

2024-2025, UTK ORI-START Program - Microbial cascades from animal decomposition hotspots in *Sphagnum* bogs (~ \$100,825. PI JM DeBruyn. coPIs SW Wilhelm and DJ Weston (ORNL))

2022, SARIF Equipment Award (Cytoflex Flow Cytometer) (~\$93,000 – PI SW Wilhelm)

2019-2020, Joint Direct Research and Development Program: Science Alliance (\$48,583 – PI SW Wilhelm). Microeukaryotes and their viruses: uncovering their hidden role in one of the largest terrestrial carbon sinks II.

2018-2019, Office of Research Interdisciplinary Research Seed Program (\$66,010 – PI A Steen, coPI SW Wilhelm). Novel pathways for microcystin degradation in aquatic environments.

2018-2019, Joint Direct Research and Development Program: Science Alliance (\$49,531 – PI SW Wilhelm). Microeukaryotes and their viruses: uncovering their hidden role in one of the largest terrestrial carbon sinks.

2017, Haines- Morris Award – University of Tennessee (\$3,872 - PIs: J Mikucki, SW Wilhelm) Grant to support distinguished lecturer series “*The Earth’s Microbiome*”.

2015, Center for Wildlife Health (UTIA) – (\$10,000 – PI R. Trout-Fryxell, coPIs JM DeBruyn and SW Wilhelm). *Discovering the effects of life history on Lone star ticks microbiomes*.

2015, Haines- Morris Award – University of Tennessee (\$3,000 - PIs: K Lloyd, SW Wilhelm) Grant to support distinguished lecturer series *It’s a Microbial World After all*.

2012, SARIF – University of Tennessee (\$93,110 from SARIF, College and cost shares). *Modernization of equipment in Microbiology*.

2012, Haines- Morris Award – University of Tennessee (\$4,000 - PIs: K Lloyd, J Mikucki, SW Wilhelm) Grant to support distinguished lecturer series *Microorganisms, Guardians of the Earth’s Biogeochemical Cycles*.

2012, UTK/ORNL JDRD (\$43,500 - PI SW Wilhelm, coPI LJ Hauser). High-throughput transcriptomics to secure ecosystem health in freshwater systems.

2011-2012, Microbiology across Campuses Educational and Research Venture (\$9,960 - PI JM DeBruyn, coPIs A Buchan, ER Zinser. MA Radosevich and SW Wilhelm. *Establishment of a baseline research program concerning the microbiology of the Tennessee River system*.

2010-2011, Microbiology across Campuses Educational and Research Venture (\$20,000-PI A Buchan, coPI S Campagna). “Biogeochemical Influences of Bacteriophage: Characterization of the Composition and Bioavailability of Nutrients Released by Phage-Mediated-Lysis of Roseobacters in Model Systems”

2010 – 2011, Haines- Morris Award – University of Tennessee (\$5,931 - PI: B O’Meara, multiple coPIs including SW Wilhelm). Grant to support distinguished lecturer series *Merging Phylogenies with Ecology*

2009-10, Haines- Morris Award – University of Tennessee (\$6,000 - co-PIs S. Campagna). Funds to host seminar series - *The evolution of –omics and the interface of biology and chemistry*.3

2009-10, Microbiology across Campuses Educational and Research Venture (\$24,995 - co-PIs M Radosevich and A Buchan). *Seasonal variation in lysogeny and its response to climate change*.

2009-10, Microbiology across Campuses Educational and Research Venture (\$24,020 - PI M Radosevich, coPIs N Labbe, SW Wilhelm and A Buchan). *Revealing the lifestyles of novel soil bacteria through whole genome sequencing: Planococcus sp. and Gemmatimonadetes*

2008, Professional Development Award – University of Tennessee (\$3,500). The sequence of a giant virus: a proof of concept for a large-scale genome sequencing program.

2007, Haines- Morris Award – University of Tennessee (\$6,000 - co-PIs A. Buchan and E. Zinser). Funds to host seminar series - *The complexity of microbial ecology from proteins to planets*.

2006, Professional Development Award – University of Tennessee (\$4,467 – split with Dr A Buchan). A shifting paradigm in the isolation and cultivation of microbes.

2004, SARIF Small grants fund - University of Tennessee (\$5,000 each from Microbiology, Arts and Sciences and Office of Research) Impacts of ocean fertilization on viral infection

2002, Professional Development Award - University of Tennessee (\$4,950) Research in Viral Proteomics

2000-2001, UT Environment and Natural Resources Council (\$40,000 - co-PI G. Stacey). Environmental genomic approaches to Microcystis ecology, toxicology and biogeochemistry

2001, SARIF Equipment Grant - University of Tennessee (\$ 8,000)

2001, Professional Development Award - University of Tennessee (\$3,200) Viral distributions in the Arctic

2000, Professional Development Award - University of Tennessee (\$4,500) *Lake Erie Viral Ecology*

2000, SARIF/Small Grant Funds – University of Tennessee (\$10,000) *Iron limitation in the Peruvian Upwelling*

1999, SARIF Equipment Grant - University of Tennessee (with B Applegate, D Nivens, G Sayler) (\$20,000)

Research and Teaching Expeditions

InVirT Cruise II, Sargasso, Mar 25 – Apr 1, 2022, RV Atlantic Explorer
 InVirT Cruise, Sargasso, Oct 12 - 17 2019 RV Atlantic Explorer
 The Taihu Project, Aug 14 – 19, 2018, Wuxi/Nanjing, China
 The Taihu Project, Jun 20-27, 2016, Wuxi/Nanjing, China
 Lake Erie survey, Aug 17-21, 2015. CCGS *Limnos*.
 The Taihu Project, Oct 6-12, 2014, Wuxi/Nanjing, China
 The Taihu Project, Aug 5-14, 2013, Wuxi/Nanjing, China
 MELEE XVI, July 21-26, 2013, CCGS *Limnos*
 POWOW 2, Jan 10 – Feb 7, 2013, RV Kilo Moana
 MELEE XV, Aug 13-17, 2012, CCGS *Limnos*
 The Taihu Project, Jun 21 - 28, 2011, Wuxi, China
 MELEE XIV, Aug 3-7, 2010, CCGS *Limnos*
 The Taihu Project, May 24 – 31, 2010, Wuxi, China
 WamBam IV, Feb 16-19, 2010, CCGS *Griffon*
 MELEE XIII, Aug 17-22, 2009, CCGS *Limnos*
 The Taihu Project, May 22 – Jun 2, 2009, Wuxi, China
 WAMBAM IIIb, Feb 16 – 20 2009, CCGS *Griffon*
 WAMBAM IIIa, Jan 12-16 2009, CCGS *Griffon*
 FeCycle II, September 14 – Oct 7 2008, R/V *Tangorua*
 WAMBAM II, Feb 12 – 17 2008, CCGS *Griffon*
 MELEE XII (Lake Erie), Aug 20 - 24 2007 CCGS *Limnos*
 WAMBAM, Feb 20 -22, 2007, CCGS *Griffon*
 Hawaiian transects trial, Nov 6-8 2006, R/V *Kilo Moana*
 MELEE XI (Lake Erie), Aug 8 - 18 2006 CCGS *Limnos*
 MELEE X (Lake Erie), Aug 22 - 26 2005 CCGS *Limnos*
 MELEE IX (Lake Erie), July 11 - 15 2005 CCGS *Limnos*
 NASB 2005- Leg 1 (Florida-Azores), May 22 – June 27 RV *Seward Johnson*
 Lake Erie Moorings Survey, Aug 9 – 13, 2004 CCGS *Limnos*
 MELEE VIII (Lake Erie), July 12 - 16 2004 CCGS *Limnos*
 Limnology Practicum. Sept 19–26, 2003 R/V *Lake Guardian*
 Lake Erie Moorings Survey, Aug 11 – 15, 2003 CCGS *Limnos*
 MELEE VII (Lake Erie), July 21 - 25 2003 CCGS *Limnos*
 Lake Erie Moorings Survey, Jun 17 – 20, 2003, CCGS *Limnos*
 FeCycle (Southern Ocean), Jan 26- Feb 15 2003, R/V *Tangorua*
 MELEE VI (Lake Erie), July 15-26, 2002, CCGS *Limnos*
 MELEE V (Lake Erie), November 5-9, 2001, CCGS *Limnos*
 MELEE IV (Lake Erie), July 9-20, 2001, CCGS *Limnos*
 Peru-Galapagos Upwelling, Aug-Sept 2000 R/V *Melville*
 MELEE III (Lake Erie), July 3-14 2000, CCGS *Limnos*
 Delaware - Sargasso Sea, May 21- June 16 2000, R/V *Cape Henlopen*
 MELEE II (Lake Erie), July 5-16, 1999, CCGS *Limnos*
 California Iron Upwelling Survey, June 3-14 1999, R/V *Pt Sur*
 Delaware – Sargasso Sea, Sept 28 – Oct 4, 1998, R/V *Cape Henlopen*
 MELEE I (Lake Erie), July 6-10 1998, CCGS *Limnos*
 Strait of Georgia Survey III, July 16-21, 1998, CCGS *Vector*
 Delaware - Sargasso Sea, May 3- 25 1998, R/V *Cape Henlopen*
 Lake Erie Survey, September 2-6, 1997, CCGS *Limnos*
 Strait of Georgia Survey II, June 23-28 1997, CCGS *Vector*
 Strait of Georgia Survey, August 19-24 1996, CCGS *Vector*
 VIRDEX III, Gulf of Mexico July 22-31 1996, R/V *Longhorn*
 VIRDEX II, Gulf of Mexico November 7-8 1995, R/V *Longhorn*
 VIRDEX, Gulf of Mexico June 20-29 1995, R/V *Longhorn*
 LongSecs, April 22 1995, R/V *Longhorn*

Chief Scientist, Dr Steven Wilhelm
 Chief Scientist, Dr Steven Wilhelm
 Lead Scientist, Dr. Steven Wilhelm
 Lead Scientist, Dr. Steven Wilhelm
 Lead Scientist, Dr Caren Binding
 Lead Scientist, Dr. Steven Wilhelm
 Lead Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Rick Bourbonniere
 Chief Scientist, Dr Zack Johnson
 Chief Scientist, Dr. Rick Bourbonniere
 Lead Scientist, Dr. Steven Wilhelm
 Chief Scientists, Bourbonniere/Wilhelm
 Lead Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Rick Bourbonniere
 Lead Scientist, Dr. Hans Paerl
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Phil Boyd
 Chief Scientist, Dr. Steven Wilhelm
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 Chief Scientist, Dr Zack Johnson
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. David Hutchins
 Chief Scientist, Murray Charlton
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Michael Twiss
 Chief Scientist, Murray Charlton
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 Chief Scientist, Murray Charlton
 Chief Scientist, Dr. Phil Boyd
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 Chief Scientist, Dr. Michael Twiss
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Ken Bruland
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. David Hutchins
 Chief Scientist, Dr. David Hutchins
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Curtis Suttle
 Chief Scientist, Dr. David Hutchins
 Chief Scientist, Dr. Robert Hecky
 Chief Scientist, Dr. Curtis Suttle
 Chief Scientist, Dr. Curtis Suttle
 Chief Scientist, Dr. Curtis Suttle
 Chief Scientist, Dr. Steven Wilhelm
 Chief Scientist, Dr. Curtis Suttle
 Chief Scientist: Anthony F. Amos

Peer Reviewed Journal Publications (*graduate student, **undergraduate, # postdoc/tech in my group)

Up to date details available at orcid.org/0000-0001-6283-8077; scholar.google.com/citations?user=XV0DED0AAAAJ

- *Truchon AR, #EE Chase, M Moniruzzaman, **BA Creasey, FO Aylward, C Xiao, CJ Gobler, and SW Wilhelm. GF, RM Martin, LE Smith, B. Wei, FL Hellweger, GS Bullerjahn, RML McKay, GL Boyer and SW Wilhelm, 2023. *Kratosvirus quantuckense*: the history and novelty of an algal bloom disrupting virus and a model for giant virus research. **Frontiers in Microbiology** doi: 10.3389/fmicb.2023.1284617
- *Stark GF, #RM Martin, #LE Smith, B. Wei, FL Hellweger, GS Bullerjahn, RML McKay, GL Boyer and SW Wilhelm, 2023. Microcystin aids in cold temperature acclimation: differences between a toxic *Microcystis* wildtype and non-toxic mutant. **Harmful Algae** 129:102351 doi: 0.1016/j.hal.2023.102531
- *Stark GF, *AR Truchon, M Dittmann and SW Wilhelm. 2023. Closed circular genome sequence of a *Microcystis aeruginosa* PCC7806 $\Delta mcyB$ (UTK) nontoxic mutant. **Microbiology Resource Announcements**. doi:10.1128/MRA.00700-23.
- Liang X, M Radosevich, JM DeBruyn, SW Wilhelm, R McDearis and J. Zhuang. 2023. Incorporating viruses into soil ecology: A new dimension to understand biogeochemical cycling. **Critical Reviews in Environmental Science and Technology**. doi: 10.1080/10643389.2023.2223123
- Wieczynski DJ, #KM Yoshimura, *ER Denison, S Geisen, JM DeBruyn, AJ Shaw, DJ Weston, DA Pelletier, SW Wilhelm, and JP Gibert. 2023. Viral infections mediate microbial controls on ecosystem responses to global warming. **FEMS Microbiology Ecology** 99: fiad016 doi: 10.1093/femsec/fiad016.
- *Gilbert NG, #GR LeCleir, *HL Pound, RF Strzepek, MJ Ellwood, BS Twining, S Roux, PW Boyd, and SW Wilhelm. 2023. Giant virus infection signatures are modulated by euphotic zone depth strata and iron regimes of the subantarctic Southern Ocean. **mSystems** doi: 10.1128/msystems.01260-22.
- #Martin RM, *MK Denney, *HL Pound, JD Chaffin, GS Bullerjahn, RML McKay, A Zastepa, KA Jones, HF Castro, SR Campagna, and SW Wilhelm. 2023. Sulfolipid substitution ratios of *Microcystis aeruginosa* and planktonic communities as an indicator of phosphorus limitation in Lake Erie. **Limnology & Oceanography** doi: 10.1002/lno.12333.
- *Zepernick BN, SW Wilhelm, GS Bullerjahn and HW Paerl. 2023. Climate change and the aquatic continuum: a cyanobacterial comeback story. **Environmental Microbiology Reports** 15:3-12 doi:10.1111/17582229.13122
- *Zepernick BN, **DJ Niknejad, *GF Stark, *AR Truchon, #RM Martin, KL Rossignol, HW Paerl, and SW Wilhelm (2022) Morphological, physiological, and transcriptional responses of the freshwater diatom *Fragilaria crotonensis* to elevated pH conditions. **Frontiers in Microbiology** 13:1044464 doi:10.3389/fmicb.2022.1044464.
- Hellweger FL, C Schampera, #RM Martin, F Eigemann, DJ Smith, GJ Dick and SW Wilhelm. Response to comment on "Models predict planned phosphorus load reduction will make Lake Erie more toxic". **SCIENCE** 378:eade2277. Doi: 10.1126/science.ade2277
- Wilhelm SW, FL Hellweger, #RM Martin, C Schampera, F Eigemann, DR Smith and CJ Dick. Response to "Model assumptions limit implications for nitrogen and phosphorus management": the need to move beyond the phosphorus = biomass – toxin doctrine. **Journal of Great Lakes Research** 48: 1738-1739 doi: 10.1016/j.jglr.2022.10.001.
- Uri Neri U, Wolf YI, Roux S, Camargo A, Lee B, Kazlauskas D, Chen IM, Ivanova N, Zeigler-Allen L, Paez-Espino D, Bryant, DA, Bhaya D, and the **RNA Virus Discovery Consortium (**50 authors, including SWW, GRL and NEG). Expansion of the global RNA virome reveals diverse clades of bacteriophages. **Cell** 185: 4023- 4037.e18
- *Zepernick BN, #ER Gann, *AR Truchon, GL Boyer and SW Wilhelm. 2022. Draft genome sequence of the freshwater diatom *Fragilaria crotonensis* SAG 28.96. **Microbiology Resource Announcements**. doi:10.1128/mra.00289-22
- #Martin RM, *AR Truchon, #ER Gann and SW Wilhelm. 2022. Metagenome-Assembled Genome of a *Pseudanabaena* sp. from a Crimson Cyanobacterial Bloom in Lake Salubria, New York, USA. **Microbiology Resource Announcements**. doi: 10.1128/mra.00494-22
- *Gilbert NE, #GR LeCleir, RF Strzepek, MJ Ellwood, BS Twining, S Roux, C Pennacchio, PW Boyd and SW Wilhelm. 2022. Bioavailable iron titrations reveal oceanic *Synechococcus* ecotypes optimized for different iron availabilities. **ISME Communications** 2: 1-12. doi:10.1038/s43705-022-00132-5
- Hellweger FL, #RM Martin, F Eigemann, DJ Smith, GJ Dick, and SW Wilhelm. 2022. Models predict planned phosphorus load reduction will make Lake Erie more toxic. **SCIENCE** doi: 10.1126/science.abm6791.

- *Truchon AR, #ER Gann and SW Wilhelm. 2022. A closed, circular genome of *Aureococcus anophagefferens* Virus, the lytic virus of brown tide forming algae. **Microbiology Resource Announcements**. doi: 10.1128/mra.00282-22
- *Zepernick BN [†], *ER Denison [†], JD Chaffin, GS Bullerjahn, CP Pennacchio, T Frenken, DH Peck, JT Anderson, D Niles, A Zastepa, RML McKay and SW Wilhelm. 2022. Metatranscriptomic sequencing of winter and spring planktonic communities from Lake Erie- a Laurentian Great Lake. **Microbiology Resource Announcements** doi:10.1128/mra.00351-22 ([†] co-lead).
- Sofen LE, OA Antipova, MJ Ellwood, *NE Gilert, MC Lohan, C Mahaffey, EL Mann, DC Onemus, #GR LeClerc, SW Wilhelm, and BS Twining. 2022. Trace metal contents of autotrophic flagellates from contrasting openocean ecosystems. **Limnology & Oceanography Letters**. doi:10.1002/lol2.10258
- *Pound HL, #RM Martin, *BN Zepernick, CJ Christopher, SM Howard, HF Castro, SR Campagna, GL Boyer, GS Bullerjahn, JD Chaffin and SW Wilhelm. 2022. Changes in microbiome activity and sporadic viral infections help explain observed variability in microcosm studies. **Frontiers in Microbiology** 13:809989 doi:10.3389/fmicb.2022.809989.
- #Gann ER, *AR Truchon, SE Papoulis, ST Dyhrman, CJ Gobler and SW Wilhelm. 2022. *Aureococcus anophagefferens* (Pelagophyceae) genomes improve evaluation of nutrient acquisition strategies involved in brown tide dynamics. **Journal of Phycology** 58:146-160 doi:10.1111/jpy.13221
- *Pound HL, #ER Gann and SW Wilhelm. 2021. A comparative study of metatranscriptomic assessment methods to characterize *Microcystis* blooms. **Limnology & Oceanography: Methods** doi: 10.1002/lom3.10465
- Corchis-Scott R, Q Geng, R Seth, R Ray, M Beg, N Biswas, L Charron, K Drouillard, R D'Souza, D Heath, C Houser, F Lawal, J McGinlay, S Menard, L Porter, D Rawlings, M Scholl, K Siu, Y Tong, C Weisener, SW Wilhelm, and RM McKay. 2021. Averting an outbreak of Severe Acute Respiratory Syndrome Coronavirus 2 (SARSCoV-2) in a university residence hall through wastewater surveillance. **Microbiology Spectrum** 9: e0079221 doi: 10.1128/Spectrum.00792-21.
- Hoke AK, G Reynoso, MR Smith, MI Gardner, DJ Lockwood, *NE Gilbert, SW Wilhelm, IR Becker, GJ Brennan, LK Utz, KE Crider, SR Farnon, V Mendoza, ZP Zimmerman, AC Poole, LL Wurch and MM Steffen. 2021. Genomic signatures of Lake Erie bacteria suggest interaction in the *Microcystis* phycosphere. **PLoS ONE** 16(9): e0257017 doi:10.1371/journal.pone.0257017
- *Pound HL, #RM Martin, CS Sheik, MM Steffen, SE Newell, GJ Dick, RML McKay, GS Bullerjahn and SW Wilhelm. 2021. Environmental studies of cyanobacterial harmful algal blooms should include interactions with the dynamic microbiome. **Environmental Science & Technology** 10.1021/acs.est.1c04207
- Papoulis S, SW Wilhelm, D Talmy and ER Zinser. 2021. Nutrient loading and viral memory drive accumulation of restriction modification systems in bloom-forming cyanobacteria. **mBio**. doi: 10.1128/mBio.00873-21
- #Gann ER, Y. Kang, ST Dyhrman, CJ Gobler and SW Wilhelm. 2021. Metatranscriptome library preparation influences analyses of viral community activity during a brown tide bloom. **Frontiers in Microbiology** doi: 10.3389/fmicb.2021.664189
- Kang Y, MJ Harke, DL Berry, JL Collier, SW Wilhelm, ST Dyhrman, CJ Gobler. 2021. Transcriptomic responses of four pelagophytes to nutrient and light limitation. **Frontiers in Marine Science** doi: 10.3389/fmars.2021.636699 (in press)
- *Zepernick BN, #ER Gann, *HL Pound, #RM Martin, # LE Krausfeldt, JD Chaffin and SW Wilhelm. Elevated pH conditions associated with *Microcystis* spp. blooms decrease viability of the cultured diatom *Fragilaria crotonensis* and natural diatoms in Lake Erie. **Frontiers in Microbiology** 12: 598736 doi: 10.3389/fmicb.2021.598736
- Barnard MA, JD Chaffin, HE Plaas, GL Boyer, B Wei, SW Wilhelm, KL Rossignol, JS Braddy, GS Bullerjahn, TB Bridgeman, TW Davis, J Wei, M Bu and HW Paerl. 2021. Roles of nutrient limitation on Western Lake Erie CyanoHAB toxin production. **Toxins** 13: 47 doi: 10.3390/toxins13010047
- #Martin RM, M Kausch, K Yap, J Wehr, GL Boyer and SW Wilhelm. 2021. Metagenome-assembled genome sequences of *Raphidiopsis raciborskii* and *Planktothrix agardhii* from a cyanobacterial bloom in Kissena Lake, New York, USA **Microbiology Resource Announcements** 10:e10380-20 doi:10.1128/MRA.01380-20.
- *Pound HL and SW Wilhelm. 2020. Tracing the active genetic diversity of *Microcystis* and *Microcystis* phage through a temporal survey of *Taihu*. **PLoS ONE** 15: e0244482 doi:10.1371/journal.pone.0244482
- #Martin RM, M Moniruzzaman, *GF Stark, #ER Gann, DS Derminio, Bofan Wei, FL Hellweger, A Pinto, GL Boyer, and SW Wilhelm. 2020. Episodic decrease in temperature increases *mcy* gene transcription and cellular microcystin in continuous cultures of *Microcystis aeruginosa* PCC 7806. **Frontiers in Microbiology** 11:601864 doi:10.3389/fmicb.2020.601864
- Yang G, X Tang, SW Wilhelm, W Pan, Z Rui, L Xu, C Zhong and X Hu. 2020. Intermittent disturbance benefits colony size, growth and dominance of *Microcystis* in Lake Taihu under field simulation conditions. **Harmful Algae** 99:101909. doi:10.1016/j.hal.2020.101909

- *Gann ER, Y Xian, P Abraham, R Hettich, TB Reynolds, C Xiao and SW Wilhelm. 2020. Structural and proteomic studies of the *Aureococcus anophagefferens* Virus demonstrate a global distribution of virus-encoded carbohydrate processing. **Frontiers in Microbiology** doi: 10.3389/fmicb.2020.02047
- Wilhelm SW, GS Bullerjahn and RML McKay. The complicated and confusing ecology of *Microcystis* blooms. 2020. **mBio** 1(3) e00529-20 doi: 10.1128/mBio.00529-20.
- Jenny J-P, O Anneville, F Arnaud, Y Baulaz, D Bouffard, I Domaizon, SA Bocaniov, N Chèvre, M Dittrich, J-M Dorioz, ES Dunlap, G Dur, J Guillard, T Guinaldo, S Jacquet, A Jamoneau, Z Jawed, E Jeppesen, G Krantzberg, J Lenters, B Leoni, M Meybeck, V Nava, T Nöges, P Nöges, M Patelli, V Pebbles, M-E Perga,
- S Rasconi, CR Ruetz III, L Rudstam, N Salmaso, S Sapna, D Straile, O Tammeorg, MT Twiss, DG Uzarski, A-M Ventela, WF Vincent, SW Wilhelm, S-A Wänberg. GA Weyhenmeyer. 2020. Scientists warning to humanity: rapid degradation of the world's large lakes. **Journal of Great Lakes Research** (in press).
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A tale of two blooms: the complicated ecology of diatoms, cyanobacteria and their viruses in Lake Erie. University of Wisconsin – Madison, Madison WI, November 2023.

Viruses and cyanobacteria in fresh waters: a molecular biologist's tales. Inaugural *Robert E. Benoit Distinguished Lecture*, Virginia Tech College of Sciences, Blacksburg, VA. April 2023.

The complicated ecology of *Microcystis*. MEB seminar series, the University of Southern California, Los Angeles, CA, Nov 2021 (Virtual seminar)

The complicated ecology of *Microcystis*. Institute for biodiversity and ecosystem dynamics, University of Amsterdam, March 2021. (Virtual seminar)

Standing on the shoulders of giants: the unusually large viruses of the world. New England BioLabs Corporate, Feb 18, 2021. (Virtual seminar)

What makes *Microcystis* bloom? Institute for biodiversity and ecosystem dynamics, University of Amsterdam. April 2020 (cancelled due to COVID19)

Using molecular tools to study viruses in the environment. University of Texas – El Paso, El Paso TX, April 2019

Resolving virus activity with molecular tools. Rice University, Houston TX, Nov 2018

Using molecular tools to study ecosystem health in the Laurentian Great Lakes. McMaster University, Hamilton, ON, Dec 2016.

Moving towards a quantitative understanding of marine viruses. University of Georgia (Microbiology), Athens, GA. Nov 2016.

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Toxic *Microcystis* blooms: molecular resolution of why blooms occur. Johns Hopkins University, Baltimore MD. April 2016

Measuring moments in cyanobacterial ecology – using big data to deal with big blooms. Grand Valley State University – Annis Water Center. Allendale MI, Jan 2016.

Shakespeare said it best – all the world's a phage. University of North Carolina Marine Sciences, Morehead City, NC, October 2015.

What constrains marine viruses? Royal Netherlands Institute for Sea Research, Texel NL, September 2015.

Molecular approaches to understand the ecology of harmful algal blooms, Bowling Green State University, April 2014.

Ecogenomic approaches to understanding virus ecology across the world's oceans. University of Nebraska, Jan 2014.

Protecting our waters: a microbiologist's perspective. University of Tennessee Pre-football game showcase presentation, Nov 2012.

Nearly two decades of *Microcystis* blooms in the Laurentian Great Lakes – what have we learned? Department of Biological Sciences, University of Toronto, Mississauga, Oct 2012.

The molecular ecology of freshwater harmful algal blooms. Environmental Sciences, College of William and Mary, Williamsburg VA, February 2012.

Wilhelm SW. Our water resources and the microbiologist. ORICL Society, Roane State College, Oak Ridge TN, Feb 2012.

Can 'omics tell us why harmful algal blooms occur? Biological Sciences, Kent State University, Kent OH, September 2010.

Molecular tools: complex communities. The Chinese Academy of Science, Nanjing Institute of Geography and Limnology. Nanjing, China, June 2009.

Understanding Toxic Cyanobacteria in a Laurentian Great Lake. The University of Western Ontario, London, ON. Mar 2009.

Viruses, biogeochemistry and global carbon cycles, Bucknell University (inaugural *Phi Sigma* departmental lecture), Lewisburg PA, Nov 2008.

Climate change and our most valuable natural resource – our freshwater systems. The University of Tennessee Science Forum, Knoxville TN, Nov 2008

Quantitative molecular tools and toxic cyanobacteria in a Great Lake. University of Maryland, Baltimore, MD Mar 2008.

Viruses, cyanobacteria and a dead zone: using molecular biology in a Laurentian Great Lake. College of Natural Resources and the Environment, The University of Michigan, Ann Arbor, MI, Nov 2007.

Great Lakes microbial ecology: Viruses in the Great Lakes ecosystem. The University of Wisconsin-Milwaukee, Apr 2007.

The application of molecular tools to uncover the ecology and diversity of toxic cyanobacteria. Great Lakes Water Institute, The University of Wisconsin-Milwaukee, Apr 2007.

Virus driven geochemistry and virus ecology in freshwater environments, Kellogg Biological Station, Michigan State University, Mar 2007.

Quantitative tools and cyanobacterial communities in the Great Lakes. The University of North Carolina Marine Sciences, Morehead City, Oct 2006.

Quantitative molecular tools for toxic cyanobacterial blooms: insights on ecology. University of Delaware, Lewes DE, Jun 2006.

Viruses, toxic algae and a dead zone: my vacations on Lake Erie. Department of Biology, University of Quebec at Montreal, Mar 2006.

Viruses and toxic algae in Lake Erie. Department of Biology, SUNY Oswego, Oswego NY, Nov 2005.

Nutrient recycling in marine microbial communities: moving forward with our understanding of bioavailability. Department of Biology, The University of Denver, Denver, CO. Feb 2005.

Fe cycling in marine microbial communities: moving forward with our understanding of bioavailability. College of Marine Studies, the University of Delaware, Lewes DE. Sept 2004.

The Microbial Ecology of the Lake Erie Ecosystem: Insights on viral and cyanobacterial populations. Department of Biological Sciences, Wright State University, Dayton, OH, May 2004.

Virus in the sea: evidence for their critical role in the marine iron cycle. Department of Marine Sciences, Grice Marine Laboratory / College of Charleston, Charleston SC. Apr 2004.

The impact of viruses on marine geochemistry. Southampton College, Long Island University, Southampton NY Nov 2003.

How do microbes and viruses influence global carbon cycles? Department of Biology, Maryville College, Maryville, TN Apr 2003.

The effect of viruses on biogeochemical cycles in aquatic systems. Department of Biology, Kent State University, Akron, OH, Sept 2001.

Viruses and nutrient cycles in the sea. Department of Biology, New Mexico State University, Las Cruces, NM, Apr 2000.

The influence of viruses and cyanobacteria on marine Fe cycles. Department of Marine Sciences, University of Georgia, Athens, GA, May 1999.

The role of viruses and prokaryotes iron in marine systems. Skidaway Institute of Oceanography, Savannah, GA. Apr 1999.

Factors influencing the bioavailability of iron in marine systems. Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN Mar 1999.

Viruses and iron as regulators of marine productivity. Netherlands Institute of Oceanography (NIOZ), Texel, NL. Oct 1998

The impact of sunlight and host repair mechanisms on marine viral communities. College of Marine Studies, The University of Delaware, Lewes DE, Nov 1997.

Viruses in aquatic environments: understanding ultraviolet radiation and “The Paradox of The Viruses”. Canada Centre for Inland Waters, Burlington, ON, Nov 1997.

The role of sunlight in the maintenance of viruses in the sea. Department of Plant Sciences, The University of Western Ontario, London, Ontario, Apr 1997.

The physiological ecology of iron-limited cyanobacteria. Department of Microbiology, The University of British Columbia. Vancouver, British Columbia, Jan 1997.

The dynamics of viruses in marine systems. Department of Plant Sciences, The University of Western Ontario, London, Ontario, Oct 1996.

The ecology of cyanobacteria in iron-limited systems. Marine Science Institute, University of Texas at Austin, Port Aransas, Texas, June 1995.

Nutrient limitation in aquatic systems. Sir Wilfred Grenfell College, Memorial University. Cornerbrook, Newfoundland, May 1995.

Iron transport in cyanobacteria: a new concept for affinity. Biology Department, Brock University. St. Catherines, Ontario, May 1994.

Presentations at Scientific Meetings – Invited

Wilhelm SW. The Global Problem of Harmful Cyanobacterial Blooms. Florida ASM Regional meeting, St Augustine FL, October 14, 2023 (**Opening Plenary – ASM Distinguished Lecture**)

Wilhelm SW. How viruses shape marine biogeochemistry. Gordon Research Conference – Marine Microbes – Les Diablerets, Switzerland, May 29, 2022 (**Opening Keynote**).

Wilhelm SW. Profiling virus infections in mixed communities. Gordon Research Conference – Marine Microbes – Les Diablerets, Switzerland, May 24, 2020 (Cancelled due to COVID-19) (**Opening Keynote**).

Wilhelm SW. The proteome and structure of the AaV particle: a virus with a sweet tooth. 4th International Symposium on Giant Virus Biology, Ringberg Castle, Tegernsee, Germany Nov 2019

Wilhelm SW. Metatranscriptomic insight into the effects of viruses on *Microcystis* blooms. ICTC11, Krakow, Poland May 3-10, 2019 (**Keynote Speaker**)

Wilhelm SW. Recent advances on the role of biological interactions, food web structure and biodiversity on lake function. ELLS- IAGLR 2018 Evian, France, Sept 23-28 (**Keynote Speaker**)

Wilhelm SW, LE Krausfeldt, X Tang, MM Steffen, M Denney, RM Martin, JMA Stough, AT Farmer, HF CastroGonzalez and SR Campagna. Using big data to save large lakes – understanding what the microbial community is trying to do provides a path forward. International Society of Limnology, Nanjing, China, August 2018.

Wilhelm SW. Resolving virus-host relationships from environmental metatranscriptomes. *Aquatic Virus Workshop 9, Lincoln, NE. June 2018 (Opening Plenary)*

Wilhelm SW, SR Coy, ER Gann, M Moniruzzaman, JMA Stough, and SM Short. Ecological interactions of giant viruses revealed by metatranscriptomics. 3rd International Symposium on Giant Virus Biology, Ringberg Castle, Tegernsee, Germany Nov 2017.

Wilhelm SW. Resolving hidden virus-host relationships in environmental metatranscriptomes. Gordon Research Conference - Marine Molecular Ecology. Hong Kong, July 2017.

Wilhelm SW. Making lakes great again: using molecular tools to study harmful algal blooms in lakes from China to the USA. International Nexus of Food, Energy, Water, and Soil. Yixing, China, October 2016 (**Keynote symposium presentation**)

Wilhelm SW. Of shunts and pumps – virus driven nutrient dynamics. Aquatic virus workshop 8, Plymouth, UK. July 2016 (**Plenary**).

Wilhelm, SW. A preliminary gauge for the diversity of giant viruses in marine coastal waters – tracking AaV. 2nd International Symposium on Giant Virus Biology, Ringberg Castle, Tegernsee, Germany Nov 2015.

Wilhelm SW. Developing a quantitative understanding of virus community activity in marine systems. American Society of Virology, July 2015 (**Keynote symposium presentation**)

Wilhelm SW and MM Steffen. Using metatranscriptomes to link cyanobacterial bloom communities with environmental drivers. American Society for Microbiology, New Orleans, June 2015.

Paerl HW, WS Gardner, MJ McCarthy, TG Otten, BL Peierls, KL Rossignol and SW Wilhelm. Mitigating global proliferation of toxic cyanobacterial blooms: the case for dual nutrient (N & P) input reduction strategies. International Association of Great Lakes Researchers, Burlington Vermont, June 2015.

Wilhelm SW. The biology of HAB species. NSF workshop to collect global expertise to address the problem of harmful algal blooms, Bowling Green, OH, April 2015. (**Opening Keynote**)

Wilhelm SW, MM Steffen, BS Belisle, SP Dearth, MM Campbell, GL Boyer, SB Watson, RA Bourbonniere, JM DeBruyn and SR Campagna. Changing tides for Lake Erie: the biogeochemical evolution of a Laurentian Great Lake and implications for biological communities of the future. American Geophysical Union, San Francisco CA, Dec 2013

Wilhelm SW. The genome of BtV – the large virus infecting *Aureococcus anophagefferens*. International Symposium on Giant Virus Biology, Ringberg Castle, Tegernsee, Germany Nov 2013.

Wilhelm SW, DL Sonderegger, CA Stock, JS Weitz, CA Suttle, L Bourouiba, A Buchan, M Middelboe, ML Coleman, MJ Follows, JA Fuhrman, JT Lennon, TF Thingstad, WH Wilson, KE Wommack. Mapping global distributions and activity of marine viruses. Aquatic Virus Workshop 7, St Petersburg, FL, Nov 2013. (**Opening Plenary**)

Weitz JS, CA Stock, Wilhelm SW, L Bourouiba, A Buchan, ML Coleman, MJ Follows, JA Fuhrman, JT Lennon, M Middelboe, DL Sonderegger, CA Suttle, TF Thingstad, WH Wilson, KE Wommack. A multi-trophic model to quantify what viruses do (in theory) to microbial ecosystems in the ocean euphotic zone. Aquatic Virus Workshop 7, St Petersburg, FL, Nov 2013. (**Plenary**)

Steffen MM and SW Wilhelm. Can nutrient availability drive genome plasticity in *Microcystis*? International Association for Cyanophytes Research Symposium, Cleveland, OH, Aug 2013.

Maas EW, JM DeBruyn, SW Wilhelm and PW Boyd. Iron and bacteria. University of Otago Symposium on the Role of the Ocean in Climate Change, Dunedin, NZ, Nov 2012.

Wilhelm SW. Viruses in the ocean: do they manage the best recycling program on the planet? University of Otago Symposium on the Role of the Ocean in Climate Change, Dunedin, NZ, Nov 2012.

Sander SG, PW Boyd, GR LeClerc, KA Hunter, E Ilbisanmi, EW Maas, I Velasquez and SW Wilhelm. Organic ligands – a key control on trace metal biogeochemistry in the ocean. University of Otago Symposium on the Role of the Ocean in Climate Change, Dunedin, NZ, Nov 2012.

DeBruyn JM, GR LeClerc, EW Maas, SW Wilhelm, PW Boyd. Bacterial production and diversity during a southern Pacific Ocean spring phytoplankton bloom. New Zealand Society for Microbiology, Dunedin NZ, Nov 2012.

Wilhelm SW, AR Matteson, SN Loar, S Pickmere, JM DeBruyn, MJ Ellwood, DA Hutchins and PW Boyd. The ecological implications of viruses in a Pacific spring bloom community. New Zealand Society for Microbiology, Dunedin NZ, Nov 2012.

Wilhelm SW. Developing an understanding of the synergies between human activity & climate for toxic cyanobacterial blooms. New Zealand Society for Microbiology, Dunedin NZ, Nov 2012 (**Plenary**).

Wilhelm SW, AR Matteson, SN Loar, S Pickmere, JM DeBruyn, MJ Ellwood, DA Hutchins and PW Boyd. The ecological implications of viruses in a Pacific spring bloom community. New Zealand Society for Microbiology, Dunedin NZ, Nov 2012

Wilhelm SW, AR Matteson, AJ Ponsoero and TM Pimentel. Cyanophage – ubiquitous members of freshwater and marine systems. Phycological Society of America, Charleston, SW. June 2012 (**Plenary**).

Wilhelm SW. Global scale processes and constraints on viruses: implications for biogeochemistry. Aquatic Virus Workshop, Texel, Netherlands, October 2011. (**Keynote**)

Wilhelm SW. Advances in our understanding of *Microcystis* bloom events: implications from metagenomic and metaproteomic observations. Sino-US symposium on harmful cyanobacteria. Chinese Academy of Science Institute of Hydrology, Wuhan, China, June 2011. (**Keynote**)

Carrick HJ, RA Bourbonniere, B Beall, GS Bullerjahn, RML McKay, REH Smith, MR. Twiss, and SW Wilhelm. Abundance, distribution and taxonomic composition of winter plankton in ice covered Lake Erie. Regional Science Consortium, Erie, PA, Nov 2010.

Wilhelm SW. Viruses and global-scale processes. International Society for Microbial Ecology, Seattle, August 2010.

Wilhelm SW. Can `omics tell us why we get harmful algal blooms? Canadian Institute for Advance Research Integrated Microbial Biodiversity Program. Seattle, August 2010.

Wilhelm SW, RML McKay, MR Twiss, GS Bullerjahn, RA Bourbonniere, CH Marvin, HJ Carrick, REH Smith, N D'Souza, BF Beall, MA Saxton, DE Smith, and J Harrison. Biology on ice: life in a very cold Lake Erie. The Lake Erie at the Millennium Conference, Windsor, ON April 2010.

Wilhelm SW. Viruses and the marine carbon cycle: moving beyond models. SCOR working group on Microbial Carbon, Xiamen, China, October 2009.

Wilhelm SW. The implications of viruses on ecosystem level geochemical cycles. American Society of Microbiology, Philadelphia, PA May 2009.

Wilhelm SW. Around the world in eighty stations – a global perspective of aquatic viruses. ASLO, Nice, France, January 2009.

Wilhelm SW. "Cyanobacteria – their toxins and phage". Keynote address – Allegheny Branch - American Society for Microbiology, Lewisberg PA, Nov 2008

Wilhelm SW. The ecological role of viruses in marine and freshwater ecosystems. Ecological Society of American, Milwaukee, WI, August 2008.

Wilhelm SW. Imminent challenges in aquatic virus ecology. Aquatic Virus Workshop, Vancouver, BC July 2008.

Cattolico RA, J Chang, C Gobler, H Ong, E Sims, G Rocap, SW Wilhelm, Y Zhou and M Jacobs. The stramenopile chloroplast genome: new evolutionary and functional insights. Seventh International Chrysophyte Symposium, New London, CT June 2008.

Twiss MR, RA Bourbonniere, GS Bullerjahn, HJ Carrick, N D'Souza, PC Furey, RML McKay, NE Ostrom, M Saxton, REH Smith, and SW Wilhelm. Winter Assessment of Microbial Biomass and Metabolism: February 2007 & 2008. The Fifth Biennial Conference of the Lake Erie Millennium Network, University of Windsor, Windsor, ON April 2008

Wilhelm SW and GL Boyer. Toxic cyanobacteria in the Laurentian Great Lakes – an overview of the past and a looking glass to the future. US EPA Toxicology and risk assessment conference, Cincinnati OH April 2008.

Wilhelm SW. Climate change and food webs in the Great Lakes: implications for the changing seasons. Michigan State University conference on Climate Change in the Great Lakes Region, East Lansing, MI April 2008.

Wilhelm SW. Viruses in large lakes – the Lake Erie experience. IAGLR, State College, PA, May 2007.

Wilhelm SW. Viruses and biogeochemical cycles. EuroOceans Conference on Marine Viruses, Bergen, Norway. May 2007.

(Keynote)

Wilhelm SW. The synergies between viruses, nutrient cycles and system geochemistry. SCOR WG126 – Marine Virus Ecology Meetings, Vancouver, BC. June 2006.

Wilhelm SW, GL Boyer, JM Rinta-Kanto, AJA Ouellette, R Li, and RA Bourbonniere. An overview of cyanobacterial blooms in Lake Erie, 2000 – 2005. ASLO, Victoria, BC. June 2006.

Rinta-Kanto JM, R Li, and SW Wilhelm. The use of conserved genes from the microcystin synthetase pathway to forecast toxin production potential of a cyanobacterial community in Lake Erie. ASLO, Victoria, BC. June 2006. Wilhelm SW and JM Rinta-Kanto. Field methods in the study of toxic cyanobacterial blooms: results and insights from the Lake Erie experience. EPA – ISOCHAB, September 2005, Raleigh NC

Rinta-Kanto JM, R Li, GL Boyer, and SW Wilhelm. Analysis of toxic cyanobacterial community during 2003 and 2004 blooms on Lake Erie. IAGLR, May 2005, Ann Arbor, MI.

Carberry MJ, JM Rinta-Kanto and SW Wilhelm. Pervasive cyanophage in a Laurentian Great Lake: applications of molecular techniques to gain insight on their distribution and ecology. Eighth Cyanobacterial Molecular Biology Workshop, St Adele, PQ. August 2004.

Mioni CE, MR Twiss, WH Jeffrey, RD Frew, PW Boyd, and SW Wilhelm. Deployment of a heterotrophic bioluminescent bioreporter to estimate the bioavailability of iron in seawater. ASLO / TOS Ocean Sciences Meeting, Honolulu HI, Feb 2004.

Wilhelm SW. Molecular and ecological effects of ultraviolet radiation on marine virioplankton. American Society of Photobiology. Baltimore, MD, July 2003.

Wilhelm SW, CE Mioni, MR Twiss, RML McKay and CG Trick. Resolving iron availability in Lake Erie. IAGLR, Chicago, IL, June 2003

Trick CG, L Pickell and SW Wilhelm. Fundamental differences in the iron acquisition systems in phytoplankton. Iron Fertilization Experiment Panel. PICES Annual Meeting, October 2000, Tsukuba, Japan

Suttle CA and SW Wilhelm. Ten years after: revisiting the significance of viruses to mortality and carbon flow in aquatic ecosystems. ASLO, June 2000, Copenhagen, DN

Wilhelm SW. Physiological alterations that influence iron acquisition in marine cyanobacteria. Scientific Community on Oceanographic Research-WG109, Biogeochemistry of Iron in Seawater, Amsterdam, NL November 1998.

Wilhelm SW and CA Suttle. Viruses as regulators of nutrient cycles in aquatic environments. Eighth International Symposium of Microbial Ecology, Halifax, NS, August 1998

Wilhelm SW and CA Suttle. The role of viruses in organic carbon cycles in the sea. Ocean Sciences Meeting, American Geophysical Union, San Diego CA, February 1998.

Contributed conference presentations

Houghton K, S Roux, NE Gilbert, EE Chase, D Muratore, GR LeClerc, JS Weitz and SW Wilhelm. Linking virus and microbial host during active infections *in situ*, Ocean Sciences Meeting, New Orleans, Feb 2024.

Truchon AR, EE Chase, BA Creasey, AR Stark and SW Wilhelm. Interruption of diel cycling of *Aureococcus anophagefferens* by a giant virus. Aquatic Virus Workshop, Quebec City, QC, May 2023.

Chase EE, AR Truchon, BA Creasey, SW Wilhelm. The role of photosynthesis in a model microalgae - virus system: *Aureococcus anophagefferens* and *Florevirus quantuckensis*. Aquatic Virus Workshop, Quebec City, QC, May 2023.

Denison ER, BN Zepernick, GS Bullerjahn, RM McKay, and SW Wilhelm. Viral infection of winter phytoplankton communities in a North American Great Lake revealed through metatranscriptomics. Aquatic Virus Workshop, Quebec City, QC, May 2023.

Hambrick KM, LE Smith, RM Martin, ER Zinser, D Talmy, and SW Wilhelm. Temperature changes that drive increased cyanotoxin production also lead to “phage resistant” mutants in *Microcystis aeruginosa* NIES 298. Aquatic Virus Workshop, Quebec City, QC, May 2023.

Martin RM, HL Pound, JD Chaffin and SW Wilhelm. Transcriptomics suggests mitomycin C is not useful for lysogeny research in freshwater cyanobacterial communities. Aquatic Virus Workshop, Quebec City, QC, May 2023.

Smith, LE, Martin, RM, Wilhelm, SW. Passive and active selection generates viral resistance in *Microcystis aeruginosa*. Aquatic Virus Workshop, Quebec City, QC, May 2023.

Zepernick BN, ER Denison, NE Gilbert, AR Truchon, EE Chase, JD Chaffin, GS Bullerjahn, RML McKay and SW Wilhelm. Elucidating the secrets of Lake Erie’s “glass” black box: examining winter diatom bloom ecophysiology under the ice. NSF-NIEHS Oceans and Human Health All Centers Meeting. Fort Myers FL. May 2023.

Stark GF, RM Martin, LE Smith, B Wei, GL Boyer, SW Wilhelm. Evidence from chemostat studies that microcystin alters cold temperature adaptation. NSF-NIEHS Oceans and Human Health All Centers Meeting. Fort Myers FL. May 2023.

Martin RM, LE Smith, GF Stark, B Wei, GL Boyer, KA Jones, SR Campagna, FL Hellweger, SW Wilhelm. Reducing P concentration under N replete conditions increases microcystin quota in continuous cultures of *Microcystis aeruginosa* NIES-88. NSF-NIEHS Oceans and Human Health All Centers Meeting. Fort Myers FL. May 2023.

McKay RM, ER Denison, BN Zepernick, T Frenken, GS Bullerjahn and SW Wilhelm. Metatranscriptomic analysis of winter planktonic communities from Lake Erie spanning climatic gradients. IAGLR, Toronto, May 2023.

Gilbert, NE D Muratore, GR LeClerc, JS Weitz, MB Sullivan, S Roux, MJ Ellwood, BS Twining, PW Boyd, and SW Wilhelm. Patterns and drivers of “giant virus” transcriptional activity in two oligotrophic ocean regions.

Gordon Research Conference – Marine Microbes – Les Diablerets, Switzerland, May 29, 2022

McKay RML, GS Bullerjahn, HJ Carrick, MR Twiss and SW Wilhelm. The past, present and future of Lake Erie’s winter ecosystem. Joint Aquatic Science Meeting, Grand Rapids, MI. May 2022.

Stark GF, RM Martin, LE Smith, B Wei, GL Boyer, and SW Wilhelm. Microcystin aids in photo-acclimation during prolonged cold stress treatment in *Microcystis aeruginosa* strain PCC7806. ICTC Toledo OH, May 2022

Sheik C, K Natwara, RM Martin, SW Wilhelm, TR Miller, K Svoboda. Hiding in plain sight: characterizing a novel cyanobacterium that packs a potential punch. ICTC Toledo OH, May 2022

- Martin RM, MK Denney, HL Pound, JD Chaffin, GS Bullerjahn, RM McKay, K Jones, HF Castro, SR Campagna and SW Wilhelm. Sulfolipid profiles of *Microcystis aeruginosa* and cyanobacterial blooms as an indicator of P availability. ICTC Toledo OH, May 2022
- Barnard MA, HE Plaas, KL Rossignol, JS Braddy, AN Bartenfelder, JD Chaffin, RM Martin, DJ Niknejad, SW Wilhelm, HW Paerl. Evaluating FluoroProbe as a tool for rapid chlorophyll a and phytoplankton group differentiation during Western Lake Erie CyanoHAB bloom conditions. ICTC 12, Toledo OH, May 2022.
- Sofen LE, O Antipova, MJ Ellwood, NE Gilbert, MC Lohan, C Mahaffey, EL Mann, DC Ohnemus, SW Wilhelm, and BS Twining. Metal contents of autotrophic flagellates from contrasting open-ocean ecosystems. OSM-ASLO, Honolulu HI, Feb 2022.
- Papoulis S, SW Wilhelm, D Talmy and ER Zinser. Nutrient loading and viral memory drive accumulation of restriction modification systems in bloom-forming cyanobacteria. OSM-ASLO, Honolulu HI, Feb 2022.
- Martin RM, MK Denney, HL Pound, JD Chaffin, GS Bullerjahn, RM McKay, K Jones, HF Castro, SR Campagna and SW Wilhelm. Sulfolipid profiles of *Microcystis aeruginosa* and cyanobacterial blooms are an indicator of P availability. Oceans and Human Health Annual Meeting, Bowling Green OH, Oct 2021.
- Zeppernick BN, ER Gann, RM Martin, HL Pound, LE Krausfeldt, JD Chaffin and SW Wilhelm. Elevated pH conditions associated with *Microcystis spp.* blooms decrease viability of the cultured diatom *Fragilara crotonensis* and natural diatoms in Lake Erie. Oceans and Human Health Annual Meeting, Bowling Green OH, Oct 2021.
- Barnard MA, HE Plaas, K Rossignol, J Braddy, A Bartenfelder, JD Chaffin, RM Martin, DJ Niknejad, SW Wilhelm and HW Paerl. Evaluating FluoroProbes as tools for rapid chlorophyll a and phytoplankton group differentiation during bloom conditions. Oceans and Human Health Annual Meeting, Bowling Green OH, Oct 2021.
- Pound HL, RM Martin, BN Zeppernick, CJ Chrostopher, SM Howard, H Castro, SR Campagna, GL Boyer, GS Bullerjahn, JD Chaffin and SW Wilhelm. The influence of nutrients on *Microcystis* physiology and proliferation: are viruses' part of your "bottle effects?" Oceans and Human Health Annual Meeting, Bowling Green OH, Oct 2021.
- Barnard MA, JD Chaffin, HE Plaas, GL Boyer, Bofan Wei, SW Wilhelm, KL Rossignol, JS Braddy, GS Bullerjahn, TB Bridgeman, TW Davis, J Wei, B Minsheng and HW Paerl. Nutrient limitation dynamics of Western Lake Erie CyanoHAB biomass, microcystin, and anatoxin production. IAGLR (virtual) May 2021.
- Barnard MA, JD Chaffin, HE Plaas, GL Boyer, Bofan Wei, SW Wilhelm, KL Rossignol, JS Braddy, GS Bullerjahn, TB Bridgeman, TW Davis, J Wei, B Minsheng and HW Paerl. Nutrient limitation dynamics of the Western Lake Erie CyanoHAB biomass and toxin production. ACS Virtual Meeting, April 2021.
- Barnard MA, HE Plaas, JD Chaffin, GL Boyer, Bofan Wei, SW Wilhelm, KL Rossignol, JS Braddy, GS Bullerjahn, TB Bridgeman, TW Davis, J Wei, B Minsheng and HW Paerl. Understanding the roles of nutrient limitation on the Western Lake Erie Cyanobacterial Harmful Algal Blooms. North Carolina State University ePoster session. Sept 2020.
- Wilhelm SW, RM Martin, LE Krausfeldt, HL Pound, BN Zeppernick, B Klein, GR LeCleir, SE Papoulis, X Tang, HF Castro, D Talmy, FL Hellweger, AJ Pinto, ER Zinser, SR Campagna and GL Boyer. The complicated, no good, multifaceted and confusing reasons for *Microcystis* blooms. Ocean Sciences / ASLO meeting. San Diego, Feb 2020.
- Calfee BC, D Talmy, SW Wilhelm and ER Zinser. Determining the contributions of microorganisms to H₂O₂ degradation and its implications for the success of *Prochlorococcus* in the oligotrophic ocean. Ocean Sciences / ASLO meeting. San Diego, Feb 2020.
- Gann ER, B Hughes, PJ Gainer, TB Reynolds and SW Wilhelm. Influence of light and nitrogen concentration on the infection of *Aureococcus anophagefferens* CCMP 1984 by a giant virus. 4th International Symposium on Giant Virus Biology, Ringberg Castle, Tegernsee, Germany Nov 2019.
- Barnard MA, HE Plaas, J Wei, JD Chaffin, GL Boyer, B Wei, SW Wilhelm and HW Paerl. Use of ¹⁵N compound specific analysis to trace N assimilation into microcystins in toxic cyanobacterial harmful algal blooms (cyanoHABs). American Chemical Society Eastern North Carolina Regional Meeting, Nov 2019.
- Zeppernick BN, ER Gann, HL Pound, RM Martin, LE Krausfeldt, JD Chaffin and SW Wilhelm. *M. aeruginosa* bloominduced pH effects on freshwater diatoms. 10th Symposium on Harmful Algae in the US, Orange Beach AL, Nov 2019.
- Pound HL, D Talmy and SW Wilhelm. The "neglected viruses" of *Taihu*: abundant transcripts for viruses infecting eukaryotes and their potential role in phytoplankton succession. 10th Symposium on Harmful Algae in the US, Orange Beach AL, Nov 2019.
- Martin RM, B Klein, DS Dermino, B Wei, FL Hellweger, AJ Pinto, GL Boyer and SW Wilhelm. Reduced light intensity counteracts the cool-temperature-induced increase in microcystin quota of *Microcystis aeruginosa*. 10th Symposium on Harmful Algae in the US, Orange Beach AL, Nov 2019.

Krausfeldt LE, AT Farmer, C Christopher, GL Boyer, HF Castro, BN Zepernick, SR Campagna and SW Wilhelm. Different physiological responses and toxicity related to N-speciation are revealed by tracing labeled N through the metabolome of *Microcystis aeruginosa*. 10th Symposium on Harmful Algae in the US, Orange Beach AL, Nov 2019.

Hellweger F, SW Wilhelm, RM Martin and A Pinto. Systems BioEcology modeling of *Microcystis* growth and toxin production. Microbial Ecology and Water Engineering Conferences (IWA), Hiroshima, JP. Nov 2019.

Hellweger F, SW Wilhelm, RM Martin and A Pinto. Dynamic, Molecular-level modeling of the intracellular functioning Microcystin in *Microcystis*. Society for Aquatic Microbial Ecology, Potsdam, DE, Sept 2019.

Papoulis S, SW Wilhelm, D Talmy and ER Zinser. Nutrients explain the distribution of restriction modification systems in prokaryotic genomes. Trait-based approaches to ocean life. Buckinghamshire, UK Aug 2019.

Xian Y, ER Gann, J Rodriguez, MC Chacon, SW Wilhelm and C Xiao. Structural studies of A. anophagefferens Virus (AaV) by Cryo-EM. Three-Dimensional Electron Microscopy Gordon Conference, Hong Kong June 2019.

Smith ZJ, RM Martin, B Wei, SW Wilhelm and GL Boyer. Spatial and temporal variation in Paralytic Shellfish Toxin production by benthic *Microseira (Lyngbya) wollei* in a freshwater New York Lake. International conference on toxic cyanobacteria, Krakow, Poland. May 2019.

Tang X, LE Krausfeldt, HW Paerl, G Gao, B Qin and SW Wilhelm. Seasonal gene expression and the ecophysiological implications of toxic *Microcystis aeruginosa* blooms in a large shallow eutrophic lake (Lake Taihu, China). The 18th International Conference on Harmful Algae, Nantes, France, October 2018.

Pound HL, X Tang, JMA Stough, LE Krausfeldt, G Gao and SW Wilhelm. Community level virus diversity during a massive *Microcystis* bloom in Lake Taihu. International Society of Limnology, Nanjing, China, August 2018.

Paerl HW, H Xu, G Zhu, JT Scott, MJ McCarthy, SE Newell, SW Wilhelm, WS Gardner, N Hall, B Peierls, K Rossignol, Y Li, M Zhu, B Qin. Combating large lake eutrophication and harmful algal blooms in the anthropocene: why dual nutrient (N &P) reductions are needed. International Society of Limnology, Nanjing, China, August 2018.

Black JN, JMA Stough, SW Wilhelm, CV Ton and SM Short. A complex community of viruses and virophage infects the alga *C. parva*. Canadian Society for Microbiology, Winnipeg, MN, June 2018.

Moniruzzaman M, ER Gann and SW Wilhelm. Giant virus infection induces widespread physiological reprogramming in *Aureococcus anophagefferens* CCMP 1984 – a harmful bloom algae. Aquatic Virus Workshop 9, Lincoln, NE. June 2018

Xiao C, J Rodrigues, Y Xian, ER Gann, MG Fischer and SW Wilhelm. Giant marine virus sample preparation and data collection for Cryo-EM. Aquatic Virus Workshop 9, Lincoln, NE. June 2018

Xian Y, ER Gann, J Rodriguez, MC Chacon, SW Wilhelm and C Xiao. Structural studies of *Aureococcus anophagefferens* Virus (AaV) by Cryo-EM. American Society of Virology, College Park, MD. July 2018.

Coy SR, ER Gann, ME Holder, NJ Ajami, JF Petrosino, JL Van Etten and SW Wilhelm. Epigenomics of the *Chlorella* virus PBCV-1. Aquatic Virus Workshop 9, Lincoln, NE. June 2018

Pound HL, X Tang, JMA Stough, LE Krausfeldt, G Gao and SW Wilhelm. Community level virus diversity during a massive *Microcystis* bloom in Lake Taihu. Aquatic Virus Workshop 9, Lincoln, NE. June 2018

Martin RM, M Moniruzzaman, LM Steenhauer, AJ Koster, A Willis, JN Woodhouse, CPD Brussaard and SW Wilhelm. *Cylindrospermopsis raceiborskii* virus and host: a new genomically characterized virus/host system for a bloom-forming cyanobacterium. Aquatic Virus Workshop 9, Lincoln, NE. June 2018

Gann ER and SW Wilhelm. Towards understand environmentally relevant constraints of the *Aureococcus anophagefferens* virus infection cycle. Aquatic Virus Workshop 9, Lincoln, NE. June 2018

Gann ER, BC Calfee, T Chen, ER Zinser, TE Sparer, TB Reynolds and SW Wilhelm. Towards developing a genetic system for the brown tide bloom forming pelagophyte *Aureococcus anophagefferens*. American Society of Microbiology, Atlanta, GA. June 2018

Stough JMA, M Kolton, JE Kostka, DJ Weston, DA Pelletier and SW Wilhelm. Novel viral diversity within microbiome of *Sphagnum* peat identified by high-throughput transcript sequencing data. ASM TN-KY Regional Branch Meeting, Nov 2017

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- Ong HC, SW Wilhelm, CJ Gobler, G Bullerjahn, G Roca, MA Jacobs, RA Cattolico. The complete chloroplast genome sequences of two brown tide agents: *Aureococcus anophagefferens* CCMP1984 and *Aureocoumbra lagunensis* CCMP1507. Plant Society of Plant Biologists, Honolulu, HI. July 2009
- Dibbell A, AC Mosier, SW Wilhelm and CA Francis. Diversity and abundance of ammonia-oxidizing archaea in freshwater lakes. American Society of Microbiology, Philadelphia, PA May 2009.
- Rowe JM, M-F Fabre, D Gobena, WH Wilson, and SW Wilhelm Application of the major capsid protein gene as a marker of phylogenetic diversity of *Emiliana huxleyi* Phycodnaviruses in the North Atlantic. WG 126 Meeting, Newark, DE, May 2009.
- Budinoff CR, ME Jones, SW Wilhelm, and A Buchan. Isolation and characterization of roseobacters and roseophage from two distinct coastal environments. SCOR WG 126 Meeting, Newark, DE, May 2009.
- Huang S., SW Wilhelm, N Jiao, F Chen. Exploring population structure of cyanobacterial podoviruses in different oceanic regions based on virus-encoded DNA polymerase gene. SCOR WG 126 Meeting, Newark, DE, May 2009
- D'Souza N, SW Wilhelm, MR Twiss, HJ Carrick, RA Bourbonniere, GS Bullerjahn, and RML McKay. Primary production in ice-covered Lake Erie. IAGLR, Toledo, OH. May 2009.
- Cusick KD, SW Wilhelm and GS Saylor. Transcriptional profile comparison of *S. cerevisiae* to copper and the algal toxin saxitoxin. ISME, Cairns, Australia, August 2008
- Rowe JM, JM DeBruyn, MA Saxton, L Poorvin, DA Hutchins, ER Zinser, ZI Johnson and SW Wilhelm. Marine viruses across oceanic regimes: analyses of virus-host parameters from the Sargasso Sea, North Atlantic, and Western Pacific. ASLO St John's NL, June 2008
- Wilhelm SW, RA Bourbonniere, GS Bullerjahn, HJ Carrick, NE Ostrom, CJ Marvin, RML McKay, MR Twiss and REH Smith. Winter assessment of microbial biomass and metabolism (WAMBAM): the implications for climate change on winter biological activity in a Laurentian great lake. ASLO St John's NL, June 2008
- Wilhelm SW, RML McKay, MR Twiss, GS Bullerjahn, RA Bourbonniere, HJ Carrick, NE Ostrom, MMD Al-Rshaidat, GR LeClerc, RW Sterner, CJ Marvin and REH Smith. Winter assessment of microbial biomass and metabolism (WAMBAM): The implications of ice formation on biological activity in a Laurentian Great Lake. IAGLR, Peterborough, ON, May 2008.
- Twiss MR, SW Wilhelm, RML McKay, and GS Bullerjahn. The CACHE: a unique limnological feature in ice covered Lake Erie. IAGLR, Peterborough, ON, May 2008
- Rogers ED, TB Henry, MJ Twiner, RJ Strange, GL Boyer, GS Saylor and SW Wilhelm. Global gene expression in larval Zebrafish exposed to *Microcystis aeruginosa*: more than just microcystin. IAGLR, Peterborough, ON, May 2008
- ***2008 HydroLab Award for best student oral presentation**
- Allender, CJ and SW Wilhelm. Identifying the source of unknown microcystin genes and predicting microcystin variants by linking multi-gene diversity within uncultured cyanobacteria. IAGLR, Peterborough, ON, May 2008
- Saxton MA, D Truitt, RML McKay, RA Bourbonniere and SW Wilhelm. Defining the role(s) of phosphorus in promoting toxic cyanobacterial blooms. IAGLR, Peterborough, ON, May 2008
- Juby AL, RS Davis, SW Wilhelm and MR Twiss. Thallium resistance in bacteria isolated from the St. Lawrence River. Great Lakes Research Consortium, Syracuse NY, March 2008
- Gobler CJ, DL Berry, SW Wilhelm, I Grigorev, A Terry, M Berg, ST Dyhrman, C. Koyne, J Berges, J Collier. Preliminary insight from the first genome sequence of a harmful algal bloom species, the brown tide alga, *Aureococcus anophagefferens*. ASLO Orlando, March 2008.
- Rogers ED, TB Henry, MJ Twiner and SW Wilhelm. Changes in global gene expression in larval zebrafish exposed to microcystin. The Society of Environmental Toxicology & Chemistry, Milwaukee, Wisconsin, USA. November 2007
- Wilhelm SW and GL Boyer. Molecular characterization of toxic cyanobacterial communities in the lower great lakes: a seven-year synopsis. Fourth symposium on Harmful Algae in the US. Woods Hole, MA, October 2007.
- Gobler CJ, SW Wilhelm, DL Berry, L Poorvin, N Sarode, A Terry, I Grigorev, M Berg and The *Aureococcus Genome Consortium*. Preliminary insight from the first genome-sequence of a harmful algal bloom species, the brown tide alga, *Aureococcus anophagefferens*. Fourth symposium on Harmful Algae in the US. Woods Hole, MA, October 2007.
- Ivanikova NV, GS Bullerjahn, LC Popels, RML McKay, AR Cupp, E Zinser and SW Wilhelm. 2007. Genetic diversity and population dynamics of picocyanobacteria in Lakes Superior and Erie. 30th International Congress on Limnology (SIL 2007), Montreal Quebec, Canada, August 2007.

- Wilhelm SW, GS Bullerjahn, RA Bourbonniere, ER Zinser and AR Cupp. Insights into ecosystem metabolism from community structure analyses of microbial communities in Lake Erie. IAGLR, University Park, PA, May 2007.
- Wilhelm SW, JM Rinta-Kanto, GL Boyer and RA Bourbonniere. The ecology and biogeography of Lake Erie *Microcystis* blooms. IAGLR, University Park, PA, May 2007.
- Boyer GL, J Makarewicz, MC Watzin, SW Wilhelm. Development of a unified monitoring strategy for cyanobacterial toxins in large lake ecosystem. IAGLR, University Park, PA, May 2007.
- Feng Y, DA Hutchins, CE Hare, K Leblanc, GR DiTullio, SW Wilhelm, J Sun, JM Rose, U Passow and N Nemcek. The interactive effects of increased temperature and pCO₂ on the north Atlantic spring bloom phytoplankton community. ASLO, Santa Fe, NM, February 2007.
- Gobler CJ, DL Berry, TW Davis, GL Boyer and SW Wilhelm. Distribution and ecology of toxic and non-toxic strains of *Microcystis* populations in North American Great lakes. International Society for the Study of Harmful Algal Blooms, Copenhagen, Denmark, September 2006.
- Rowe JM, MA Saxton, DA Hutchins, GR DiTullio and SW Wilhelm. Characterization of virus dynamics in the Sargasso Sea and during the North Atlantic spring bloom (NASB 2005). ASLO, Victoria, BC. June 2006.
- Rowe JM, JR Dunlap, AD Frazier, CJ Gobler, OR Anderson, MD Gastrich, and SW Wilhelm. Isolation and characterization of bacterial and viral agents infectious to *Aureococcus anophagefferens*. SCOR WG126 – Marine Virus Ecology Meetings, Vancouver, BC. June 2006.
- Rinta-Kanto JM and SW Wilhelm. The effect of virus size class enrichment on bacterial production. SCOR WG126 – Marine Virus Ecology Meetings, Vancouver, BC. June 2006.
- Wilhelm SW, CJ Gobler, RA Bourbonniere, TW Davis and MA Saxton. Microbial mortality mechanisms prior to and during the onset of seasonal hypoxia in the central basin of Lake Erie. IAGLR, Windsor, ON May 2006.
- Gouvê SP, C Melendez, MJ Carberry, GS Bullerjahn, SW Wilhelm, TA Langen and MR Twiss. Assessment of phosphorus-microbe interactions in Lake Ontario by multiple techniques: LOLA September 20-25, 2003. IAGLR, Windsor, ON May 2006.
- Cupp AR, GS Bullerjahn, L Popels and SW Wilhelm. Phylogenetic analysis of photosynthetic picoplankton and bacterioplankton in Lake Erie during seasonal hypoxia. IAGLR, Windsor, ON May 2006.
- Rinta-Kanto JM, R Li, GL Boyer, RA Bourbonniere and SW Wilhelm. New views on the diversity of toxic cyanobacterial populations on Lake Erie. IAGLR, Windsor, ON May 2006.
- Havens SM, CS Hassler, R North, SJ Guildford, SW Wilhelm, and MR Twiss. Ironing out phytoplankton abundance in the surface waters of Lake Erie (IFYLE 2005). IAGLR, Windsor, ON May 2006
- Havens SM, CS Hassler, R North, SJ Guildford, SW Wilhelm, and MR Twiss. Iron distributions in relation to phytoplankton abundance and nitrate drawdown in the surface waters of Lake Erie (IFYLE 2005). Great Lakes Research Consortium, Syracuse, NY. March 2006
- Wilhelm SW, GS Bullerjahn, AR Cupp, JM Rinta-Kanto and RA Bourbonniere. Unmasking the hidden diversity of photosynthetic picoplankton and bacterioplankton in Lake Erie during seasonal hypoxia. Fourth Annual Millenium Conference on Lake Erie, Windsor ON Feb 2006
- Gobler CJ, SW Wilhelm, RA Bourbonniere, TW Davis, and MA Saxton. Microbial mortality mechanisms (virus lysis and grazing) prior to and during the onset of seasonal hypoxia in the central basin of Lake Erie. Fourth Annual Millenium Conference on Lake Erie, Windsor ON Feb 2006
- Frew RD, PW Boyd, CS Law, DA Hutchins, SW Wilhelm. FeCycle: attempting an iron biogeochemical budget from a mesoscale sulfur hexafluoride tracer experiment in unperturbed low iron waters. ASLO / AGU Ocean Sciences Meeting, Honolulu HI, Feb 2006
- Kenst AB, Perfect E, Zhang J, McCarthy J and SW Wilhelm. Virus transport during transient flow into a horizontal air-dry soil column. American Geophysical Union, Dec 2005, San Francisco CA
- Boyer GL, JC Makarewicz, M Watzin, T Mihuc, JF Atkinson, M Sultan and Steven W. Wilhelm. MERHAB – lower great lakes - monitoring for harmful algal blooms in our inland seas. Third Symposium on Harmful Algae in the US, October 2005, Asilomar CA
- Rowe JM, JR Dunlap, CJ Gobler, MD Gastrich, OR Anderson, and SW Wilhelm. Analysis of a virus-like particle associated with the lysis of the brown tide forming algae, *Aureococcus anophagefferens*. ASLO, June 2005, Santiago de Compostela, Spain

- Gobler CJ, G Pererya, MD Gastrich, OR Anderson and SW Wilhelm. Environmental and biological factors influencing the ability of viruses lyse the harmful brown tide pelagophyte, *Aureococcus anophagefferens*. ASLO, June 2005, Santiago de Compostela, Spain.
- Twiss MR, TA Langen, GS Bullerjahn, SW Wilhelm and DA Rockwell. LOLIPOP: Lake Ontario Limnology Practicum Opportunity. IAGLR, May 2005, Ann Arbor, MI
- Wilhelm SW, GS Bullerjahn, and ML Eldridge. *Synechococcus* and *Prochlorococcus* associated with the Lake Erie “dead zone”. ASLO, February 2005, Salt Lake City UT
- Higgins JL, I Kudo, A Tsuda, and SW Wilhelm. Tracking the response of the virus community to a mesoscale iron fertilization in the subarctic Pacific. ASLO, February 2005, Salt Lake City UT
- Poorvin L, CE Mioni, and SW Wilhelm. Characterization and bioavailability of iron released by viral lysis of marine plankton. ASLO, February 2005, Salt Lake City UT.
- Mioni CE, L Poorvin and SW Wilhelm. Bioluminescent bacterial reporters: A tool of biological and chemical relevance to estimate iron bioavailability in aquatic systems. ASLO, February 2005, Salt Lake City UT.
- Rinta-Kanto JM, GL Boyer, MF Satchwell, MT Smith, R Li and SW Wilhelm. Analysis of toxic *Microcystis* blooms on Lake Erie using quantitative real-time PCR. ASLO, February 2005, Salt Lake City UT.
- Li R, W Carmichael, MM Watanabe, and SW Wilhelm. Water bloom forming *Raphidiopsis* (Cyanobacteria): Its taxonomy, phylogeny and toxins. Phycological Society of American, Williamsburg VA, August 2004.
- Boyer GL, Makarewicz JC, Watzin M, Mihuc T, Atkinson JF and Wilhelm SW. Monitoring strategies for harmful algal blooms in the Lower Great Lakes: Lake Erie, Lake Ontario and Lake Champlain, USA. XIth International Conference on Harmful Algae, Cape Town, South Africa, 15-19 November 2004.
- Dean AL, JM Rinta-Kanto, JL Higgins, JM DeBruyn, SW Wilhelm. Viruses in Lake Erie microbial communities. IAGLR, Waterloo, ON, May 2004.
- Rinta-Kanto JM, NL Neal, GL Boyer, AJA Ouellette and Steven W. Wilhelm. Real time PCR based detection and quantification of *Microcystis* in the lower Great Lakes. IAGLR, Waterloo, ON, May 2004.
- Eldridge M.L., MW Cadotte, KW Bruland and SW Wilhelm. The effect of iron availability on microbial community structure: A comparison of natural and artificial Fe gradients. ASLO, Savannah, GA, June 2004.
- Rinta-Kanto JM, MR Twiss, T Bridgeman, GL Boyer, SW Wilhelm. Detection of toxic *Microcystis* on Lake Erie through quantitative real-time PCR. Great Lakes Research Consortium, Syracuse, NY. March 2004.
- ***Awarded Great Lakes Research Consortium student award for excellence in research and presentation.
- Twiss MR, GS Bullerjahn, T.A. Langen, and S.W. Wilhelm. Lake Ontario Great Lakes Science Practicum 2003: a field course sponsored by the Clarkson University Center for the Environment and the USEPA-GLNPO. Great Lakes Research Consortium, Syracuse, NY. March 2004.
- Boyd PW, DA Hutchins, CS Law, SW Wilhelm, RML McKay, RD Frew, M Maldonado, E Abraham, J Hall, and S Nodder. FeCycle – A sulfur hexafluoride labeled mesoscale study of iron biogeochemistry in unperturbed HNLC waters. ASLO/TOS Ocean Sciences Meeting, Honolulu HI, Feb 2004
- Gobler GJ, G Pererya, MD Gastrich, OR Anderson, and SW Wilhelm. Characterization of viruses isolated from New York estuaries capable of lysing the harmful brown tide alga, *Aureococcus anophagefferens*. ASLO / TOS Ocean Sciences Meeting, Honolulu HI, Feb 2004
- Twiss MR, SP Gouvêa, SW Wilhelm, RML McKay, A Mistry, TD Patey, D Polet. Responses of pelagic Great Lakes phytoplankton communities to trace metal (Fe, Co, Cd, Zn) enrichments. ASLO / TOS Ocean Sciences Meeting, Honolulu HI, Feb 2004
- Higgins JL, A Cumming, L Poorvin, J Hall and SW Wilhelm. Viral production rates in the Antarctic subtropical convergence: estimates of Fe regeneration. ASLO / TOS Ocean Sciences Meeting, Honolulu HI, Feb 2004
- Gobler CJ, J Krause, K Mauer, G Pererya, MD Gastrich, OR Anderson, and SW Wilhelm. Impacts of viruses isolated from New York waters on growth of the brown tide alga, *Aureococcus anophagefferens*: a field and laboratory assessment. Second Symposium on Harmful Algae in the USA, Woods Hole, MA, Dec 2003.
- Gastrich MD, OR Anderson, CJ Gobler, SW Wilhelm, J Leigh-Bell, CA Rentz, R Lathrop, S Haag, MP Weinstein, M Danko, DA Caron, R Schaffner. Viruses as potential regulators of regional brown tide blooms caused by the alga, *Aureococcus anophagefferens* and the assessment of brown tide blooms and related environmental factors in coastal waters of New Jersey (2000-2002). Symposium on Harmful Algae in the USA, Woods Hole, MA, Dec 2003.

- Applegate BM Jr., NG Bright, CE Mioni, SM Hussein, SW Wilhelm, LJ Mauer, and BM Applegate, Sr. Development of a bioluminescence-based assay to evaluate the efficacy of lactoferrin as a bacteriostatic agent. Institute of Food Technologies Annual Meeting, Chicago, IL, July 2003
- McKay RML, D Porta, SW Wilhelm, MR Twiss and GS Bullerjahn. Iron availability in the Great Lakes assessed using a luminescent bioreporter. Third European Phycological Congress, Belfast Ireland, July 2003.
- McKay RML, D Porta, MR Twiss, SW Wilhelm, L Poorvin, GS Bullerjahn. Iron availability in Lake Erie assessed using a luminescent bioreporter. IAGLR, Chicago, IL, June 2003.
- Carberry MJ, ML Eldridge, L Poorvin, F Chen and SW Wilhelm. Viruses infecting *Synechococcus* in Lake Erie – Diversity and Characterization. IAGLR, Chicago, IL, June 2003
- DeBruyn JM, RML McKay, MR Twiss, O Gillor, RA Bourbonniere, and SW Wilhelm. P-Loading, phytoplankton community structure and the microbial ecology of Lake Erie. IAGLR, Chicago, IL, June 2003
- Ouellette AJA, SM Handy, M Satchwell, GL Boyer and SW Wilhelm. Development and application of molecular probes for *Microcystis* in Lake Erie. IAGLR, Chicago, IL, June 2003.
- Twiss MR, SW Wilhelm, RA Bourbonniere, and RML McKay. Field investigations (1999-2002) of P, Zn, and Fe limitation in Lake Erie phytoplankton. IAGLR, Chicago, IL, June 2003.
- Wilhelm SW, JM DeBruyn, O Gillor, MR Twiss, RA Bourbonniere, CG Trick, and RML McKay. The effect of phosphorus amendments on present day plankton communities in pelagic Lake Erie. The Third Biennial Conference of the Lake Erie Millennium Network. Windsor, ON, Canada, May 2003
- Ouellette AJA, MF Satchwell, ET Howell, SM Handy, GL Boyer and SW Wilhelm PCR methods to detect and quantify toxic *Microcystis*: applications in Lakes Erie and Ontario. The Third Biennial Conference of the Lake Erie Millennium Network. Windsor, ON, Canada, May 2003
- Twiss, MR, SW Wilhelm, RA Bourbonniere and RML McKay. Field investigations (1999-2002) of P, Zn, and Fe limitation in Lake Erie phytoplankton. The Third Biennial Conference of the Lake Erie Millennium Network. Windsor, ON, Canada, May 2003
- Balsom AL, JM Grebmeier, LW Cooper and SW Wilhelm. Sediment bacterial and viral abundances in the SBI study region of the Chukchi and Beaufort Seas. Western Arctic Shelf-Basin Interactions (SBI) Project Phase II PI meeting, Miami, FL March 4-7, 2003
- DeBruyn JM, JA Leigh-Bell, M Falcone, RML McKay, RA Bourbonniere, and SW Wilhelm. Phosphorus loading in Lake Erie: Impacts on microbial food web dynamics. Great Lakes Research Consortium, Syracuse, NY, March 2003.
- Deonarine S, CJ Gobler, J. Leigh-Bell, MD Gastrich, OR Anderson, and SW Wilhelm. Phytoplankton ecology of algal communities dominated by *Aureococcus anophagefferens*: importance of nutrients, viruses, and zooplankton. ASLO, Salt Lake City, UT, Feb 2003.
- Carberry MJ, ML Eldridge, L Poorvin, and SW Wilhelm. What are marine cyanophage doing in Lake Erie? Great Lakes Research Consortium, Syracuse, NY. March 2003
- Ouellette AJA, Satchwell MF, Howell ET, Boyer GL, and SW Wilhelm. PCR methods to detect and quantify toxic *Microcystis*: applications in Lakes Erie and Ontario. Great Lakes Research Consortium, Syracuse, NY. March 2003
- DeBruyn JM, JA Leigh-Bell, M. Falcone, RML McKay, RA Bourbonniere and SW Wilhelm. Phosphorus loading in Lake Erie: impacts on microbial food web dynamics Great Lakes Research Consortium, Syracuse, NY. March 2003.
- Ouellette AJA, GL Boyer and SW Wilhelm. Quantitative PCR and sequence analysis for determination of microbial community structure and the detection of toxic *Microcystis* in Lake Erie. Tenth International Conference on Harmful Algae, St. Petersburg FL October 2002.
- Gobler C J, C Debenham, M Donoghue, DA Caron, and SW Wilhelm, AL Dean. The role of nutrients, microzooplankton grazing, and viral lysis in the occurrence of brown tide blooms (*Aureococcus anophagefferens*) in New York, USA. Tenth International Conference on Harmful Algae, St. Petersburg FL October 2002.
- Porta D, GS Bullerjahn, K Durham, SW Wilhelm, MR Twiss, R Sterner and RML McKay. Physiological characterization of a *Synechococcus* sp. PCC 7942 iron-dependent bioreporter grown in defined media. ASLO, Victoria BC June 2002.
- Wilhelm SW, JM Rinta-Kanto, L Poorvin and DA Hutchins. Viral generation of dissolved organic-Fe in a coastal HNLC system. Ocean Sciences Meeting-American Geophysical Union, Honolulu HI February 2002.
- Poorvin L, J Donat and SW Wilhelm. The fate of cellular Fe in marine microbes following viral lysis. Ocean Sciences Meeting-American Geophysical Union, Honolulu HI February 2002.

- Mioni CE, AM Howard, JM DeBruyn, NG Bright, BM Applegate and SW Wilhelm. Characterization and preliminary field trials of a bioluminescent reporter of iron bioavailability. Ocean Sciences Meeting-American Geophysical Union, Honolulu HI February 2002.
- Balsom AL, JM Grebmeier, LW Cooper and SW Wilhelm. Benthic community composition and biomass distribution: viral, bacterial, and infaunal associations from the Gulf of Alaska to the Canadian Archipelago. Ocean Sciences Meeting-American Geophysical Union, Honolulu HI February 2002.
- Jeffrey WH, AL Dean, DL Mitchell, J Meador and SW Wilhelm. Ultraviolet radiation induced DNA damage in marine viruses along a latitudinal gradient. Ocean Sciences Meeting, AGU, Honolulu HI February 2002.
- Trick CG, R Weaver, DA Hutchins and SW Wilhelm. Short-term iron acquisition rates amongst group-specific phytoplankton: studies in HNLC waters of the subtropical Pacific Ocean and the Laboratory. Ocean Sciences Meeting-American Geophysical Union, Honolulu HI February 2002.
- Chen F, Y Zhong, J.R. Lu, L Poorvin, SW Wilhelm, and R Hodson. What do you learn from gene and genomic sequences of cyanophages? Ninth International Symposium of Microbial Ecology, Amsterdam, Netherlands, August 2001
- McKay RML, MR Twiss, RA Bourbonniere, CG Trick and SW Wilhelm. Trace metals in pelagic Lake Erie: toxic or tonic? Ninth International Symposium of Microbial Ecology, Amsterdam, Netherlands, August 2001
- Wilhelm SW, RA Bourbonniere, RML McKay, CG Trick and MR Twiss MR. Stimulation of autotrophic picoplankton photosynthesis in Lake Erie: the roles of Fe, Zn, Co and Cd availability. IAGLR, Green Bay, WI, June 2001.
- Eldridge ML, KW Bruland, GR DiTullio, DA Hutchins, CG Trick, and SW Wilhelm. Influence of iron availability on microbial communities in HNLC waters of the eastern subtropical Pacific Ocean. American Society of Microbiology, Orlando, FL, May 2001.
- Pakulski JD, A Baldwin, AL Dean, S Durkin, D Karentz, C Kelley, SW Wilhelm, and WH Jeffrey. Translatitudinal assessment of biological acclimation to solar conditions in the oceans (TABASCO). American Society of Limnology and Oceanography, Albuquerque, NM, Feb 2001.
- Wilhelm SW, Poorvin L, and DA Hutchins. Viral regeneration of bioavailable iron in the coastal Californian upwelling. ASLO, Albuquerque, NM, Feb 2001.
- Trick CG, DiTullio GR, Hutchins DA, Weaver RS and SW Wilhelm. Effects of artificial chelators on phytoplankton community structure in the oligotrophic subtropical pacific. ASLO, Albuquerque, NM, Feb 2001.
- McKay RML, Twiss, Bourbonniere R., Trick CG, and SW Wilhelm. Evidence of trace element limitation of phytoplankton growth in pelagic Lake Erie. ASLO, Albuquerque, NM, Feb 2001.
- Eldridge ML, Trick CG, Alm MB, DiTullio GR, and SW Wilhelm. Influence of iron availability on group-specific phytoplankton success in HNLC waters of the subtropical Pacific Ocean. ASLO, Albuquerque, NM, Feb 2001.
- McKay RML, MR Twiss, RA Bourbonniere, X Qin and SW Wilhelm. Effect of trace nutrient additions on phytoplankton growth and photosynthetic response in Lake Erie. International Association for Great Lakes Research, Cornwall, ON, May 2000.
- Bright NG, BM Applegate, ML Eldridge, GS Saylor and SW Wilhelm. Development of a bioluminescent reporter for the determination of aqueous iron bioavailability. American Society of Microbiology, Los Angeles May 2000.
- Eldridge ML and SW Wilhelm. The ferric uptake regulatory (fur) gene is common amongst marine prokaryotes. Ocean Sciences Meeting-American Geophysical Union, San Antonio, TX, January 2000.
- Kirby RS and SW Wilhelm. Response of the blue-green algae *Microcystis aeruginosa* to levels of ultraviolet radiation. International Association for Great Lakes Research (42nd Meeting), Cleveland, OH, May 1999.
- Wilhelm SW and REH Smith. Viral ecology and bacterial production in Lake Erie. ASLO, Santa Fe, NM, February 1999.
- Smith REH, Allen C and SW Wilhelm. Solar ultraviolet radiation and bacterial communities in Lake Erie. ASLO, Santa Fe, NM, February 1999.
- Wilhelm SW, Jeffrey WH, Suttle, CA and DL Mitchell. Decay rates *in situ* of marine viral infectivity and its relationship to pyrimidine dimer formation: an argument for the use of viruses as dosimeters for the exposure of aquatic communities to biologically damaging radiation. ISME, Halifax, NS, August 1998.
- Wilhelm SW, S Brigden and CA Suttle. Microbial dynamics in stratified and tidally mixed regimes in the Strait of Georgia Ocean Sciences Meeting- AGU, San Diego CA, February 1998. Eos Transactions 79(1): OS 21N-5.
- Wilhelm SW, MG Weinbauer and CA Suttle. Quantifying photoreactivation in marine viral communities. ASM, Miami FL, May 1997.

Wilhelm SW, MG Weinbauer, DR Garza, RJ Pledger, DL Mitchell and CA Suttle. Sunlight-mediated DNA damage in marine viral communities. ASLO. Santa Fe, NM. Feb 1997.

Weinbauer MG, SW Wilhelm and CA Suttle. Significance of photoreactivation in maintaining concentrations of infectious viruses in the sea. American Society of Microbiology, New Orleans, May 1996.

Wilhelm SW, MG Weinbauer, DR Garza, KM Rodda, WH Jeffrey and CA Suttle. Light driven decay and repair of viruses in the Gulf of Mexico. Ocean Sciences Meeting-AGU, San Diego CA, February 1996. Eos Transactions 76: OS 51 I-10.

Suttle CA, AM Chan, SM Short, MG Weinbauer, SW Wilhelm. The effect of cyanophages on *Synechococcus* during a bloom in the western Gulf of Mexico. Ocean Sciences Meeting-American Geophysical Union, San Diego CA, February 1996. Eos Transactions 76: OS 51 I-7.

Weinbauer MG, SW Wilhelm, DR Garza and CA Suttle. Photoreactivation of ultraviolet radiation induced damage in marine bacteriophages. Ocean Sciences Meeting-AGU, San Diego CA, February 1996.

Wilhelm SW. Iron acquisition in *Synechococcus* spp.; a change in affinity. ASLO DIALOG Symposium, Bermuda Biological Station, December 1994.

Wilhelm SW and CG Trick. Growth in a low iron environment; the cyanobacterial response. ASLO DIALOG Symposium, Bermuda, December 1994.

Lewis BL, SW Taylor, GW Luther III, PD Holt, A Butler, SW Wilhelm and CG Trick. Voltametric estimation of iron (III) thermodynamic stability constants for catecholate siderophores isolated from marine bacteria and cyanobacteria. American Chemical Society. November 1994.

Wilhelm SW and CG Trick. Iron-limited physiology of *Synechococcus* sp. ASLO. Edmonton, ALTA. June 1993.

Trick CG, SW Wilhelm, KE Murphy and NM Rooney. Iron-limited algal ecology. ASLO. Edmonton, ALTA. June 1993.

Wilhelm SW and CG Trick. Physiology of iron stress in *Synechococcus* spp. Northeast Algal Society. Woods Hole, MA. April 1993.

Wilhelm SW and CG Trick. Iron acquisition in *Synechococcus*. Northeast Algal Society. Woods Hole, MA. April 1992.

Wilhelm SW and CG Trick. Siderophore variability in *Synechococcus* spp. (Cyanophyceae). ASLO. Santa Fe, NM. Feb 1992.

Wilhelm SW and CG Trick. Response of cyanobacteria to low iron and vitamin B12. Northeast Algal Society. Woods Hole, MA. April 1991

Brown CM, SW Wilhelm and CG Trick. Iron limitation in *Oscillatoria tenuis*. ASLO. San Diego, CA. February 1991.

Technology Disclosures

A tool for the validation of degenerate primer sets and for data mining using publicly available metagenomes: DeMetaST-BLAST. C Gulvik, TC Effler, SW Wilhelm and A Buchan. April 2012.

Treatment of malaria by modulating the gut microbiota and/or their metabolic products. NW Schmidt and SW Wilhelm. February 2014.

Invited Workshop Participation

Lake Superior Chautauqua – Duluth MN, November 2000.

Lake Erie Trophic Status Study (EPA) – Windsor ON, November 2002 and again May 2003

EPA – International Symposium on Cyanobacterial Harmful Algal Blooms – Raleigh NC, September 2005. Panelist: “International Symposium on Cyanobacterial Harmful Algal Blooms”. EPA/NOAA Durham NC, Sept 2005 EPA – US/China Harmful Cyanobacterial Work, Morehead City, NC, March 2007

NOAA - National Scientific Research, Development, Demonstration, and Technology Transfer Plan on Reducing Impacts from HABs (RDDTT Plan)", Woods Hole, MA, June 2007.

Panelist: Woodrow Wilson Center “Comprehensive environmental assessment of potential ecological impacts of synthetic biology”, July 2011.

Panelist and Expert. New York Department of Environmental Conservation Harmful Algae Symposium, SUNYESF, March 2018.

Panelist and committee member, Lake Erie Aquatic Life Use Panel, The State of Ohio – Oct 2020 – present.

Professional Affiliations, Activities and Service

Associate Editor: Limnology and Oceanography: Methods (October 2002 – present)

Editorial Board Member: Harmful Algae (Jan 2011 – August 2021)

Editorial Board Member: Applied and Environmental Microbiology (Jan 2007 – present)

Editorial Board Member: The ISME Journal (Jan 2013 – present)

Publications committee: American Society for Limnology and Oceanography (ASLO, Sept 2011 – 2015) American Academy of Microbiology – Academy subcommittee on elections (2022 – present)

Co-chair. Scientific Committee on Oceanographic Research working group on marine viruses (2005 – 2009) • Adjunct member, Scientific Committee on Oceanographic Research working group marine carbon cycles (2009 – 2012).

Member, International Committee on the Taxonomy of Viruses (Fungus Virus Subcommittee, Mimiviridae Study Group) (2013 – 2017)

Co-Chair. NIMBioS working group on marine viruses (2011 – 2015)

Contracted advisor to the *International Joint Commission* for the Great Lakes concerning harmful algae (2013)

Chair – Environmental Microbiology Communications committee for the *American Society for Microbiology* (2015 – 2016)

Steering committee – CIFAR Continuum of Persistence meeting, Portugal May 2017.

Member - Large Basin Microbial Water Quality Study Plan working group of the International Joint Commission for the Great Lakes (2022)

Organizing committee – Aquatic Virus Workshop (conference in Laval, PQ, May 2023)

Grant Panels

NSF, IRES – Feb 2021, Jan 2023

NSF, BioOce – Nov 2020

NSF, IOS – EDGE – August 2016.

NASA, Exobiology, October 2014 (virtual member) NSF, Dimensions of Biodiversity, July 2013.

NIH, Bacterial Pathogenesis Study Section, special reviewer, June 2013

Ontario Ministry for Research and Innovation – OCRIF, September 2011, 2012 NSF, IOS – Organism Environment Interactions, March 2011, March 2015

NSF, STC – Site Visit Review Team (Chair) for NSF STC (C-MORE), Feb 2010.

NSF, SBIR – Agricultural Biotechnology RFP, March 2006

NSF, SBIR - Marine Biotechnology and Aquaculture RFP (March 2003, October 2003, September 2004)

DOE, LDRD Program (ORNL), August 2003

NSF, Biocomplexity in the Environment RFP, June 2001

Other Service

DIALOG (Dissertation Initiatives and Abstracts for Limnology and Oceanography) Review Panel (ASLO), July 2003

Invited panelist - DIALOG “Workshop for Landing the Right Job: Applications to Interviews”, Honolulu HI, Feb 2004

Technical Reviewer: The Environmental Protection Agency, Mar 2008

Darbaker Awards committee, Phycological Society of America (2011 – 2013)

Conference & meeting chair/co-chair

SCOR Marine Virus Ecology (co-chair with CA Suttle & MG Weinbauer), Vancouver, BC, Jun 2006.

SCOR Marine Virus Techniques Inter-calibration (with G Bratbak & MG Weinbauer) Bergen, Norway, Jun 2007 ASLO Emerging Issues Seminar II: Microbial Carbon Pump in the Ocean (with N Jiao, G Kattner and F Azam), San Juan, Puerto Rico, Feb 2011.

Invited Expert. NOAA Lake Erie Bloom Forecast Event, Stone Lab, Put-In-Bay, OH. July 2018.

Conference / Workshop Steering Committees

AVW11, Laval Quebec, May 2023

Ohio State Viromics Workshop – Organizing Committee. Oct 2017.

Continuum of Persistence- a Joint CIFAR and GBMF workshop. Oitavos, Portugal, May 2017

Environmental Virology: A workshop on experimental methods, informatic tools, and theory, Tuscon, Jan 2013 Aquatic Virus Workshop, Texel, The Netherlands, Oct 2011

USHAB meeting, Austin, TX, November 2011

Session Organizer

Viruses and virus-mediate processes, ASLO Granada Spain (Feb 2015)

Microbial Carbon Pump: A focus on origins, cycling and storage of DOM, ASLO Puerto Rico (Feb 2011)

Viruses as drivers of global processes, ISME Seattle (August 2010)

HAB events in the Great Lakes, IAGLR Toronto (May 2010)

Twenty years of virus ecology, ASM, Philadelphia (June 2009)

Plankton Diversity, Detection & Enumeration– SIL, Montreal (Aug 2007)

The Influence of Global Climate Change on Biological Processes in Surface Waters – ASLO, Santa Fe (Feb 2007)

Hypoxia in Large Lake Ecosystems: Causes and Consequences - IAGLR, Windsor ON (May 2006)

Viruses, Microbial Diversity and Ecosystem Function – ASLO Santiago de Compostela Spain (June 2005)

The Biogeochemical Cycling of Iron in the Ocean – From Genes to Gyres, ASLO, Honolulu (Feb 2004)

Mechanisms of Microbial Mortality, AGU, San Antonio (Jan 2000)

Trace Elements from Rivers to the Sea, ASLO, Santa Fe (February 1999)

Memberships: American Society for Limnology and Oceanography; American Society of Microbiology; International Society for Microbial Ecology; International Association for Great Lakes Research; International Society for the Study of Harmful Algae, Phycological Society of America; International Society for Environmental Biogeochemistry

Frequent ad hoc reviewer for several journals including Nature, Aquatic Microbial Ecology, Canadian Journal of Botany, Limnology and Oceanography, Marine Ecology Progress Series, Journal of Phycology, Environmental Science and Technology (complete list available). Also, on the board of readers for Nature 2009-2010.

Frequent ad hoc reviewer for granting agencies including the National Science Foundation (US), Natural Environment Research Council (UK), National SeaGrant Program (US), Netherlands Earth and Life Sciences Council, Natural Science and Engineering Research Council (Canada), (complete list available).

External committee member

Clinton Hare (advisor: DA Hutchins, University of Delaware Marine Sciences –defended 2006)

Sonya Havens (advisor: MR Twiss, Clarkson University Center for the Environment – defended 2006)

Alicia Hanson (advisors E. Young and J Berges, University of Wisconsin, Milwaukee – defended 2010)

Sherry Flogge (advisor WH Wilson, Bigelow Lab / U Maine – defended 2014)

Justine Schmidt (advisor GL Boyer, SUNY ESF – defended 2014)

Kristina Mojica (advisor CPD Brussaard, U Amsterdam – defended 2015)

Dominique Derminio (advisor GL Boyer, SUNY ESF – Oct 2018 – defended May 2020)

External examiner

Jamal Al Tebrineh (University of New South Wales – defended 2011)

Te Shu Harn (Nanyang Technological University, Singapore – defended 2011)

Anne- Kristin Dahse (University of Otago, NZ – defended 2013)

Yeo Bee Hui (Nanyang Technological University, Singapore – defended 2013)
Miroslava Jonlija (University of Waterloo – defended 2014)
Ellen Cameron (University of Waterloo – defended 2021)

External tenure/promotion/qualifications review - University of Maryland (2007); University of Delaware (2009); Wisconsin-Milwaukee (2010); Rutgers (2010); University of Texas – Austin (2011); University of South Carolina (2012); South African National Research Council (2012); Columbia University (2012); Kent State (2013); College of William & Mary (2013); University of South Alabama (2013); Wisconsin-Milwaukee (2013); University of Nebraska – Lincoln (2014); UNC Marine Sciences (2015); Bristol University (UK) 2017; Max-Planck Institute for Medical Research (2017); Stroud Research Center (2017); University of North Texas Health Science Center (2017). University of Texas at Austin (2018). Hong Kong University of Science and Technology (2018); Technion University (2019); University of Georgia (2019); Miami University – OH (2019); U Texas (2020); Kent State (2020); Weizmann Institute (Israel) (2020); Tulane School of Public Health (2021); UCSD (2021); Texas A&M (2022); Virginia Tech (2022); Hong Kong UST (2022); Cornell (2023); Hebrew University of Jerusalem (2023)

University Leadership Activities

Associate Head, Department of Microbiology (2007 – 2020)
Director of Graduate Studies (2009 – 2020; 2022 - 2023)

Committees:

Search Committee – Director of the Division of Biology (99-00)
Search Committees – UTK Microbiology Positions (1998-99), (2001-02), (2002-03), (2003-04, chair), (2010-11 - chair) (2014-2015), (2016/17 – chair), (2021-22), 2023-2024 (chair)
Search Committee – Associate Dean for Research (2023)
Faculty Recruitment Committee – UT/ORNL JIBS (2005-07)
Science Alliance Grad Student Awards – Biology (2000, 2009)
Deans Advisory Committee (2002 - 03)
Scholarship Committee –Environmental Biotechnology (2001-03)
Student Advisory Committee – GST (2001- 04), Committee Chair (2004 – 05)
Graduate Affairs Committee – GST (2005 - 06)
Graduate Advisory Committee – Micro (2006 – 2020)
Microbiology Curriculum committee (2003 - 06)
Graduate Admissions Committee (Micro) (02 – 2020, chair 2008-2014, 2021-22)
Faculty Advisor for UT Clubs – UT Paintball Club (05 - 07), UT Curling Club (2010 – 2012)
Deans committee on biological reorganization (2006 -07)
Comprehensive examination committee for GST (2008)
College of Arts and Science, Promotion and Tenure committee (2011-2012)
College of Arts and Science Building design team (2012)
Chair of Departmental Communications, Development, and social media (2020-present)

Invited speaker. Workshop on Research Experience for Undergraduates (REU), UTK Office of Research, Nov 18, 2010
Faculty Mentor: UT Pre-collegiate Scholars Program (2007, 2008); RT McNair Minority Program (2001/2); NIH-RISE Program (2000); University Junior Faculty Mentoring Program (A. Buchan 2005 – 2011; E. Zinser 2005 – 2011; L. Fozo 2010-2016; J. Mikucki 2012 – 2020; J. Johnson 2019-2024); Office of Research Summer Grant writing Boot camp (A. Classen, 2011)

Student committee service (with advisor), completed (Tennessee):

James Rice (Sayler) – Microbiology, 1999; Sunitha Vege (McCracken)– EEB, 2000; Michael Allen (Sayler) – Microbiology, 2002; Maria Siopsis (Hallam) –Mathematics, 2003; Arianne Balsom (Grebmeier) – EEB, 2003; Terry Alford (Small) – Microbiology, 2004; Nathan verBerkmoes (Hettich)– GST, 2005; Andy Kenst (Perfect) – EPS, 2005; David McWilliams (Bruce) – GST, 2006; David Allison (Becker) – Microbiology 2007; Aysu Ozen (Sayler) – Microbiology 2007; Rachel Slightom (Buchan) – Microbiology 2007; David Mann (Sayler) – Microbiology 2007; Steven Borst (Scott McElroy) – Plant Science 2008; Steven Minkin (Becker) – Microbiology 2008; Kathleen Daumer Cusick (Sayler) – Microbiology 2009; Franklin Damann (Kilppel) – Anthropology 2010; Emily Rogers (Henry) - Fisheries & Wildlife 2010; Jeff Morris (Zinser) - Microbiology 2010; Alison Russell (Hettich) – GST 2011; Charles Budinoff (Buchan) – Microbiology 2011; Chris Gulvik (Buchan) – Microbiology 2013; Rachel Adams (Hettich) – GST 2013; Daniel Gobena (Lamour) – GST 2012; Matthew Scholz (Sayler) – Microbiology 2012; Jacqui Young (Hettich) – GST 2012; Paul Abraham (Hettich) –GST 2013; Alicia Purcell (Mikucki) – Microbiology 2014; Jeremy Chandler (Zinser) – Microbiology 2014; Zhou Li (Hettich) – GST 2014; Melissa Hage (Fedo) – EPS 2015; Latisha Brengman (Fedo) – EPS 2015; Nana Ankrah (Buchan) – Microbiology 2015; Elizabeth Padilla (Loeffler) – Microbiology 2015; Lanying Ma (Zinser) – Microbiology 2016; Kathleen Brannen (Engel)– EPS 2016; Evan Williams (Jonsson) – Microbiology (Transferred); Ashley Berg (Kah) EPS 2018; Laurel Seus (Loeffler)–Microbiology (changed program); Xiaolong Liang (Radosevich) – BESS 2019; Jonelle Basso (Buchan) – Microbiology 2019; Chris Cook (Steen) – EPS 2020; Ivan Villalobos Solis (Hettich) – GST 2020; Lauren Mullen (Steen) – EPS 2020; Spiridon Papoulis (Zinser) - Microbiology 2020; William (Quint) Brewer (Fozo) – Microbiology 2020; Bikash Bogati (Fozo) – Microbiology 2021; Briana McDowell (Loeffler) - Microbiology 2021; Ben Calfee (Zinser) – Microbiology 2021; Regan Wagner (Radosevich) – BESS 2022; Caleb Schuler (Mikucki) – Microbiology 2022; Kyla Hooker (Talmy) – GST 2022.

Current (Tennessee): Liz Glasgo (Zinser); Cameron Jackson (Buchan); Jennifer Bailey (Lloyd); Clance (Mikucki)

ACADEMIC REFERENCES

Dr Curtis A. Suttle, FRSC. Professor of the Departments of Microbiology, Botany, Earth and Ocean Sciences, The University of British Columbia, Vancouver, BC, V6T 1Z4 604-822-8610 suttle@eos.ubc.ca

Dr George S. Bullerjahn. Professor of Biological Science and former Chair, Department of Biology, Bowling Green State University, Bowling Green OH 43403 419-372-8527 bullerj@bgsu.edu

Dr R Michael L McKay, Executive Director and Professor, Great Lakes Institute for Environmental Research, The University of Windsor, Windsor, ON. N9B 3P4 519-253-3000 x 2797 Robert.McKay@uwindsor.ca

PRIOR ACADEMIC ADVISORS

Dr Charles G Trick (Doctoral advisor, *retired*)

Beryl Ivey Chair in Ecosystem Health and Professor, Department of Biology, The University of Western Ontario, London, Ontario Canada N6A 5B7 trick@uwo.ca

Dr Curtis A. Suttle, FRSC (Postdoctoral advisor)

Professor of the Departments of Microbiology, Botany, Earth and Ocean Sciences, The University of British Columbia, Vancouver, BC, V6T 1Z4 suttle@eos.ubc.ca

Recent recognition in print and the press

- Professor Wilhelm was interviewed by Science News (July 2023) regarding a recent paper on giant virus morphology
- Professor Wilhelm interviewed by Live Science (June 2022) for feedback on publication concerning global RNA viruses <https://www.livescience.com/marine-rna-viruses-function>
- Paper in SCIENCE (May 2022) was covered as a Perspective as well as across the popular press – e.g., <https://www.independent.co.uk/climate-change/news/great-lake-erie-algae-toxic-b2088374.html>
- Dr Wilhelm (along with CA Suttle) received the **John H Martin award** from ASLO. (March 4, 2021 announcement, June 22, 2021 presentation at ASLO meeting)
- Dr Wilhelm appeared on the “Finding Genius” podcast (<https://www.findinggeniuspodcast.com/podcasts/a-dive-into-the-deep-blue-green-sea-steven-w-wilhelm-phd-aquatic-microbial-ecology-research-lab-university-of-tennessee/>) – July 2020
- Story in **Tennessee Alumnus** magazine on work in winter months in Lake Erie. <https://alumnus.tennessee.edu/2020/to-the-extreme/> - May 2020
- **UT News report** on DOE funded work. <https://news.utk.edu/2020/01/27/microbiologist-receives-doe-grant-to-investigate-peatland-carbon-processes/> - Jan 2020
- Article on the results of our work studying toxic cyanobacteria posted by Arts & Sciences and Microbiology Dept.. https://micro.utk.edu/newsitem.php?news_id=1480&utm_source=newsletter&utm_medium=email&utm_content=sixth%20annual%20A0&utm_campaign=tntoday
- Our collaboration with the Bullerjahn and McKay groups was selected as a **NIEHS "Environmental Factor Paper of the Month"** – December 2019.
- Professor Wilhelm was a guest on **This Week in Virology** (#575, <http://www.microbe.tv/twiv/twiv-575/>) and our work discussed on **This Week in Evolution** (#49, <http://www.microbe.tv/twievo/twievo-49/>)
- The **National Science Foundation** featured our work published with the Bullerjahn and McKay groups (and others) on their web page. October 18, 2019. Picked up by multiple news sources.

https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=299409#Xa4fpaVsrbE.twitter

○ - https://phys.org/news/2019-10-reveals-algal-blooms-daily_1.html ○

<https://factor.niehs.nih.gov/2019/12/papers/dert/index.htm#a4> -NIEHS Environmental paper of the month

- Interviewed with [WBIR](#) and [The Knoxville News Sentinel](#) on the growing concern about harmful algal blooms across the country (August 12-13, 2019). Also with WVLT (Aug 21) and the University of Memphis Daily Helmsman (Aug 26)
- Our paper on a new giant virus (CpV) and the virophage that infect it were featured in an article in **The Atlantic**. <https://www.theatlantic.com/science/archive/2019/04/viophages-are-viruses-only-infect-other-viruses/586153/>
- Interviewed by Oregon Public Broadcasting / NPR for piece on toxic algae in Salem, OR. Aired on **All Things Considered** Sept 3, 2018. <https://n.pr/2LnF5Y8>
- Interviewed by Syracuse University student TV station concerning Governor Cuomo’s plan to abate Harmful Algal Blooms March 2018
- Research on viral infection in *Microcystis* blooms of Lake Erie – interviews and stories including Michigan NPR, Cleveland NPR, ABC (Toledo), NBC (Toledo) and Detroit Free Press.

<http://tntoday.utk.edu/2017/05/31/ut-study-shows-virus-infection-linked-toledo-water-crisis/>

<http://www.wtol.com/story/35560458/scientists-make-discovery-on-virus-that-caused-2014-water-crisis>

<http://www.detroitnews.com/story/news/local/michigan/2017/05/31/algae-blooms/102360464/>

<http://www.13abc.com/content/news/Study-shows-425590933.html>

<http://nbc24.com/news/local/bgsu-studies-suggest-2014-lake-erie-water-crisis-may-be-linked-to-a-viral-infection>

<http://michiganradio.org/post/study-virus-likely-contributed-2014-toledo-water-shutdown>

- Research on single virus genomics highlighted in US and European reports (May 2017) <http://tntoday.utk.edu/2017/05/19/ut-scientists-discover-hidden-world-giant-viruses-seawater/> • Environmental Health Perspectives – Dr Wilhelm interviewed for *Microcystis* story (Feb 2017)
- Scientific American article on our malaria microbiome study (Feb 2016) <http://www.scientificamerican.com/podcast/episode/gut-microbes-lessen-mice-malarial-malaise/>
- Earth Day Going Green – feature on NSF website of our research (April 2015) http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=134374&org=NSF

- Featured in the 2013 annual report from the **UT Office of Research** (Oct 2014)
- Interviewed for Lab Links – ThermoScientifics internal newsletter (Sept 2013 issue)
- Interviewed and quoted for an article in the trade journal Lab Manager.
<http://photos.labmanager.com/magazinePDFs/2013/LMM-Jul-2013.pdf> (July 2013)
- Quoted for an article in the online magazine Motherboard (<http://motherboard.vice.com/blog/global-warmingplays-favorites>) (June 2013)
- Pre-game showcase presentation was the topic of an article in **UTK's Daily Beacon**
<http://utdailybeacon.com/news/2012/nov/12/pregame-showcase-discusses-critical-water-quality/>
- Our metatranscriptomics project on Lake Erie *Microcystis* was featured in the **Science Alliance 2011-2012 Making Opportunities** report for October 2012 <http://scialli.utk.edu/troubled-waters-steven-wilhelm/>
- Our Lake Erie winter limnology collaboration was covered in Fall 2012 Ohio SeaGrant's Twinline (pg 14-15)
<http://ohioseagrant.osu.edu/publications/twinline/>;
- New NSF projects from the DIMENSIONS IN BIODIVERSITY and INSPIRE programs were featured in **Tennessee Today**, and **UTK's Daily Beacon** (Aug 2012) <http://www.utk.edu/tntoday/2012/08/28/nsfsupport-study-toxic-water-china/>
- Wilhelm and Suttle 1999 (from **BioScience**) was republished (2011) in a compilation of top papers in a compendium entitled Topics in Prokaryotic and Virus Biology <http://www.ucpressjournals.com/ucpress.php?page=BioProkaryotic>
- Research on winter limnology in the Great Lakes was covered in **Science News** (Jan 2012)
<http://www.sciencedaily.com/releases/2012/01/120110192723.htm>
- A story on our winter research in Lake Erie was published in the **Erie Times-News** (goerie.com) (Nov 2011)
- Funding from NOAA generated press releases picked up by local television (WVLT) and newspapers in Columbus (IN) and Park Forest (IN). <http://www.utk.edu/tntoday/2011/11/10/microbiologist-develops-biofilter/>
- Research article in the Journal of Great Lakes Research highlighted in a IAGLR press release
(http://www.iaglr.org/jglr/release/37/2011.07.004_wilhelm.php)
- Interviewed for article in **SCIENCE** on condition in Lake Taihu, (Vol 333:1210-1211, 2011).
- Interviewed for article in Yale's **Environment 360** (July 21, 2011).
http://e360.yale.edu/feature/on_lake_taihu_china_moves_to_battle_massive_algae_blooms/2429/
- Interviewed by **BlinkFilms (UK)** for documentary on microbes (June 29, 2011)
- Featured in the **Stratford Beacon Herald** news article (front page, May 7, 2011)
- Interviewed for the **Buckeye Sportsman** radio show regarding Lake Erie and Grand Lake St Marys (Mar 26, 2011)
<http://www.buckeyesportsman.net>
- Featured in the **Knoxville News Sentinel** (Mar 2011) <http://www.knoxnews.com/news/2011/mar/20/scientists-crack-code/>
- Featured in the **Chancellor of The University of Tennessee's** report for 2010.
<http://chancellor.utk.edu/annualreport/2010/>.
- Our publication by Gobler et al. 2011 was featured in the **New York Times** online
<http://green.blogs.nytimes.com/2011/02/22/genetic-code-of-brown-tides-cracked/?partner=rss&emc=rss>
- Press release from UTK and stories by a freelance writer in **C&EN News** feature our publication by Rogers et al. 2011 <http://pubs.acs.org/cen/news/89/i07/8907scene1.html>
- Featured article in **QUEST** (published by UTK Office of Research). Fall 2010, pp 20-21. http://quest.utk.edu/wp-content/media/quest_fall_10.pdf
- Featured as a panel member discussing toxic cyanobacterial blooms on **PBS (The NW Ohio Journal, WBGU)**(Oct 2010) available at <http://video.wbgu.org/video/1612629426/>
- Interviewed for article in **SCIENCE** on recent publication with colleagues (Vol 328: 1476-1477, 2010)
- Work with collaborators featured in **Coastlines** (published by the New York Sea Grant, Summer 2010 issue)
- Featured in the **American Society for Limnology and Oceanography Bulletin** (Dec 2009, 18(4): 94) for work as Associate Editor of Limnology and Oceanography: Methods. ASLO Bulletin
- Work with collaborators featured in **Twinline** (published by the Ohio Sea Grant, Summer 2009 issue) • Featured in Higher Ground (cover story). Exploring the sea in Tennessee. UTK Arts and Sciences, Spring 2008 *xlix*