# GARY A. LAMBERTI

Curriculum Vitae

The Rev. Julius A. Nieuwland, C.S.C., Professor of Aquatic Science Department of Biological Sciences Director, *Stream and Wetland Ecology Laboratory* (SWEL) University of Notre Dame Notre Dame, IN 46556-0369 Phone: (574) 631-8075; Fax: (574) 631-7413 email: glambert@nd.edu Faculty page: <u>http://biology.nd.edu/people/faculty/lamberti/</u>Lab page: <u>https://swel.nd.edu/</u>

# **Education**

- B.S. 1975 University of California at Davis; Entomology (High Honors)
- Ph.D. 1983 University of California at Berkeley; Entomological Sciences Dissertation: Interactions among herbivorous insects, algae, and bacteria in a geothermally influenced stream. Advisor: Dr. Vincent H. Resh

Postdoctorate Oregon State University; Aquatic Ecology. Advisor: Dr. Stanley V. Gregory

# **Research Interests**

Stream and river ecology; wetland ecology; ecotoxicology of emerging contaminants; biology of anadromous salmonids; food web ecology; fisheries ecology; ecology of invasive species; watershed ecology; nutrient cycling in aquatic ecosystems; restoration ecology; global change biology

#### **Professional Experience**

present	Chaired Professor, College of Science, University of Notre Dame
2022	Program Director, National Science Foundation – Division of Environmental Biology
2020	Gillen Acting Director, University of Notre Dame Environmental Research Center
2020	Director, GLOBES Graduate Certificate Program in Environment and Society
2014	Chair, Department of Biological Sciences, University of Notre Dame
2008	Assistant Chair and Director of Graduate Studies, Department of Biological Sciences
present	Professor, Department of Biological Sciences, University of Notre Dame
2000	Associate Professor, Department of Biological Sciences, University of Notre Dame
1995	Assistant Professor, Department of Biological Sciences, University of Notre Dame
1989	Research Assistant Professor, Dept. of Fisheries & Wildlife, Oregon State University
1986	Postdoctoral Associate, Department of Fisheries & Wildlife, Oregon State University
1984	Postdoctoral Associate, Department of Entomological Sciences, U.C. Berkeley
	present 2022 2020 2014 2008 present 2000 1995 1989 1986 1984

#### **Other Academic Appointments**

- 2018 present Adjunct Professor, Central Michigan University
- 2018 present Graduate Faculty, Western Michigan University

#### Major Administrative Experience

2020 – 2022 *Program Director*, National Science Foundation - Division of Environmental Biology. I served as a rotating program director for the Ecosystem Science cluster in NSF's Division of Environmental Biology, where I developed and managed funding programs, oversaw review panels, made funding decisions, managed awards, and communicated with the ecological community.

- 2019 2020 *Gillen Acting Director,* University of Notre Dame Environmental Research Center. I oversaw all operations for UNDERC, the major environmental field station for Notre Dame, including education, training, and research programs.
- 2015 2020 *Director*, GLOBES Graduate Certificate Program in Environment and Society, University of Notre Dame. GLOBES is an interdisciplinary graduate program that emphasizes scholarship on Environment and Society, and draws students from the Humanities, Sciences, Law, Business, and Engineering. Current size is 30 fellows.
- 2010 2012 *Director*, Linked Experimental Ecosystem Facility (ND-LEEF), University of Notre Dame Environmental Change Initiative. I developed the initial vision and design for a \$1M environmental facility for research, teaching, and outreach near the ND campus.
- 2008 2014 *Chair,* Department of Biological Sciences, University of Notre Dame. I oversaw a department of some 50 faculty members, 80 staff, 140 graduate students, and 400 undergraduate students, with an annual budget of ~\$10 million. Faculty size and external funding grew by 40%, graduate students by 30%, and undergraduate majors by 25% during this period.
- 2001 2008 *Director of Graduate Studies* and *Assistant Chair*, Department of Biological Sciences, University of Notre Dame. I provided oversight of the biology graduate program of 125 students, mostly Ph.D., spanning recruitment through graduation.
- 2001 2006 *Co-Director and Co-PI*, Graduate Training Program in 'Risk assessment of novel chemicals in the environment'. Sponsor: U.S. Department of Education Graduate Assistance in Areas of National Need (GAANN). This program involved 10 faculty members in Engineering and Biology, and trained 10 Ph.D. students.
- 1997 1998 *President*, Society for Freshwater Science (named North American Benthological Society at the time). SFS/NABS is a society of ~1500 professional aquatic scientists. The President oversees all society operations, including finances, committees, publications, and annual meetings.
- 1994 2001Director and PI, Graduate Research Training (GRT) Program in 'Environmental<br/>stress in ecosystems: linking ecology and engineering'. Sponsor: National Science<br/>Foundation Education and Human Resources. This program engaged 10 faculty<br/>members and trained 20 Ph.D. students.

#### Teaching Experience (at the University of Notre Dame unless noted)

Undergraduate Courses	Graduate Courses	<u>Seminars</u>
Biostatistics	Stream Ecology <sup>†</sup>	Ecological Experimentation
Limnology*	Advanced Aquatic Ecology	Lentic-Lotic Linkages
Aquatic Entomology (team)	Ecological Methods	Advanced Ecological Statistics
Stream Ecology*	Restoration Ecology <sup>†</sup>	Current Theory in Community Ecology
Practicum in Aquatic	Practicum in Environmental	Aquatic Ecosystems & Global Change
Ecology (team)	Biology	Fisheries Professions*
Galapagos Islands Field	Science Communication	Environmental Law
Practicum	Research Integrity	Seminar Preparation and Presentation
	Navigating the NSF	

\*taught or co-taught at Oregon State University <sup>†</sup>cross-listed graduate and undergraduate course

#### **Professional Affiliations**

American Association for the Advancement of Science; Ecological Society of America; Indiana Academy of Sciences; Society for Freshwater Science; Indiana Water Resources Association

# Awards, Honors, and Elective Offices

- Award of Excellence, Society for Freshwater Science (2022) One award annually for leadership in freshwater research, teaching, and service over a career
- Named The Rev. Julius A. Nieuwland, C.S.C., Professor of Aquatic Science, University of Notre Dame (2022)
- Faculty Award from the University of Notre Dame (2019) One award annually to an outstanding faculty member for scholarship, leadership, and service to the university
- Elected Faculty Fellow, Pulte Institute for Global Development (2019)
- Albert Nelson Marquis Lifetime Achievement Award (2019)
- Elected Fellow, Society for Freshwater Science (2018)
- Visiting Scholar, Central Michigan University Biological Station, Summer 2018, 2019
- Speaker, Eminent Scholar Series, Florida Gulf Coast University, March 2-3, 2017
- Elected Faculty Fellow, John J. Reilly Center for Science, Technology, and Values (2015)
- Elected Fellow, American Association for the Advancement of Science (2011)
- Rev. Edmund P. Joyce, CSC, Award for Excellence in Undergraduate Teaching, University of Notre Dame (2009)
- Faculty Fellow, John A. Kaneb Center for Teaching and Learning, University of Notre Dame (2007-2008)
- Host and Lecturer, ND Alumni Association NDTravel (2014-2022)
- Distinguished Lecturer, Hesburgh Lecture Series, University of Notre Dame (2008, 2010, 2011, 2012, 2013, 2014, 2017)
- Invocation Speaker, Biological Sciences and Environmental Science Commencement, University of Notre Dame (2019)
- Commencement Speaker, Biological Sciences, University of Notre Dame (2009-2014)
- Commencement Speaker, Environmental Science, University of Notre Dame (2007)
- John A. Kaneb Award for Teaching Excellence, University of Notre Dame (2006)
- Commencement Speaker, Science-Business major, University of Notre Dame (2006)
- Reverend James A. Burns, C.S.C., Graduate School Award for Excellence in Graduate Education, University of Notre Dame (2004)
- Father James L. Shilts/Doris and Gene Leonard Teaching Award, College of Science, University of Notre Dame (2003)
- John A. Kaneb Award for Teaching Excellence, University of Notre Dame (2001)
- President (elected), North American Benthological Society (1997-1998) NABS is a society of 2000 professional aquatic scientists
- Professor of the Term Award, Mortarboard Society, Oregon State University (1987)
- Best Student Paper Award; North American Benthological Society Annual Meeting, Ann Arbor MI (1982)
- Distinguished Teaching Assistant; University of California, Berkeley (1981)
- Outstanding Graduate Student Award; Department of Entomological Sciences, U.C. Berkeley (1981)
- Union Foundation Wildlife-Fisheries Fellowship, U.C. Berkeley (1976-1977)
- National Institutes of Health Predoctoral Fellowship, U.C. Berkeley (1975-1977)

# **Professional Service**

- Member, Board of Directors, Fernwood Botanical Garden (Niles, MI) (2023 present)
- Member, Science Advisory Board, USGS John Wesley Powell Center for Analysis and Synthesis (2021 – 2022 while on leave with NSF)
- Guest Editor, Frontiers in Ecology and Evolution (2018-2020)
- Chair, International Advisory Council for joint University of Calgary City of Calgary ACWA program (Advancing Canada's Wastewater Assets) (2017 – 2018)
- Member, Independent Science Advisory Panel, Missouri River Recovery Implementation Committee (2014 – 2019)

- Panel Member for Wisconsin Sea Grant (2019, 2023)
- Member, Science Advisory Board for Central Michigan University Biological Station (2010 present)
- Chair, Science Advisory Board for Central Michigan University Biological Station (2014)
- Member, Editorial Board, Aquatic Ecology Series, University of California Press (2010 2016)
- Member, External Review Committee, Department of Biology, Kent State University (2010)
- Member, Executive Board for American Midland Naturalist (2008 present)
- Member, NEON-STEAC (Science, Technology, and Education Advisory Committee (2008 2010)
- Institutional Representative to Great Lakes Northern Forest CESU (2007 present)
- Invited Panelist, Educational Panel of Economic Summit organized by Congressman Joe Donnelly (August 7, 2007)
- Member, Science Advisory Board for the Annis Water Resources Institute, Grand Valley State University (2002 – present)
- Chair, Science Advisory Board for the Annis Water Resources Institute, Grand Valley State University (2009)
- Associate Editor, Ecological Applications (2001-2004)
- President, North American Benthological Society (1997-1998)
- President-Elect, North American Benthological Society (1996-1997)
- Invited Speaker and Dissertation Opponent, University of Uppsala, Sweden (December, 1993)
- Associate Editor, Journal of the North American Benthological Society (1991-1995)
- Chair, various committees of the North American Benthological Society: Hynes Award for New Investigators (1999-2000), Election and Place Committee (1998-1999), Constitutional Revision Committee (1993-1997), Award of Excellence Committee (1990-1991)
- Chair, Executive Committee of the North American Benthological Society (1986-1987)
- Member, Executive Committee of the North American Benthological Society (1987-1988, 1996-1999); International Issues Committee (2000-2002), Name Evaluation Committee (2003-2003), Hynes Young Investigator Award (1997-present)
- Co-Chair, Local Arrangements Committee for the North American Benthological Society Annual Meeting, Corvallis, Oregon (1985)
- Student Paper Judge: North American Benthological Society (continuous 1986-2018); Ecological Society of America (1988, 1993)
- Ad Hoc Reviewer for: Ecology, Ecological Applications, Ecology Letters, Ecosystems, Oikos, The American Naturalist, American Midland Naturalist, Environmental Entomology, Hydrobiologia, Canadian Journal of Fisheries and Aquatic Sciences, Freshwater Biology, Canadian Journal of Zoology, Journal of the North American Benthological Society, Holarctic Ecology, Marine and Freshwater Research, Transactions of the American Fisheries Society, Archiv fur Hydrobiologie, Environmental Pollution, Oecologia, BioScience, Limnology and Oceanography, American Entomologist, Journal of Phycology, Environmental Toxicology & Chemistry, Water Quality Research Journal of Canada, Conservation Biology, Aquatic Sciences, International Review of Hydrobiology, Environmental Management, Restoration Ecology, Journal of Conservation Biology, Chemosphere, Environmental Science and Technology, Green Chemistry, Evolutionary Applications, Biological Invasions, Aquatic Ecology, PLoS One, River Research and Applications, Earth Surface Processes and Landforms, Ecosphere
- Grant Referee for: National Science Foundation (DEB Ecosystem Science & PCE Programs); NSF/EPA/USDA Joint Water and Watersheds Research Program; Swiss National Science Foundation; NOAA - Sea Grant, Ohio Sea Grant College Program, Michigan Sea Grant College Program, Minnesota Sea Grant College Program, NSERC of Canada; Great Lakes Fishery Trust; Wisconsin Sea Grant College Program
- Panel Member for National Science Foundation: NSF-EPA Water and Watershed Research (1995), Graduate Research Training Workshop (1997); Graduate Research Fellowships (1999, 2001, 2002); Science and Technology Centers (2003); Population and Community Ecology (2012)
- Panel Member for USDA Managed Ecosystems Program (2006)
- Book Reviewer for: *Ecology, Journal of the North American Benthological Society, NABS Bulletin,* Oxford University Press, Prentice-Hall, Chapman & Hall, Academic Press, J. Ross Publishing
- Symposium Organizer: American Fisheries Society, Oregon Chapter (1989), North American Benthological Society (1992, 1993, 2000); Society for Freshwater Science (2016, 2018, 2023); Entomological Society of America (1993)

 Invited Speaker at Meetings of: Entomological Society of America (1983, 1989); Society for Freshwater Science / North American Benthological Society (1982, 1989, 1990, 1991, 1992, 1993, 1997, 1998, 2000, 2011, 2013; 2016; 2018; 2022); California Licensed Foresters Association (1987); American Society of Foresters (1986); California Salmon and Trout Restoration Association (1988); Zebra Mussel & Aquatic Nuisance Species Conference (1999); Illinois-Indiana Sea Grant Researchers' Meeting (2001; 2023); State of Lake Michigan Conference (2003); International Conference on Ionic Liquids (2005); Society for Chemical Engineering and Biotechnology (2007)

# University Service

- Member (appointed): Faculty Senate (1992); Institutional Animal Care and Use Committee (1995-2001); Provost's Task Force on Strategic Directions in Science and Engineering -- Chair of Environmental Science subcommittee (1999); Provost's Task Force on Environmental Research and Education (2000-2001); UND Committee on Research Challenges and Opportunities (2001-2002); Fellowships Office Faculty Advisory Board (2004-2005); Vice President's Task Force on Graduate Student Academic Life (2005); Fulbright Scholarship Evaluation Committee (2006-2007); Provost's Task Force on Statistics (2006-2007); Provost's Task Force on the Environment (2006-2007); Office of Research Limited Submissions Committee (2007-2010); Shilts-Leonard Teaching Award Selection Committee (2008-present); College of Science Council (2008-2014); Burns Award Selection Committee (2011); UNDERC Land O' Lakes Strategic Planning Committee (2012-2013); UNDERC Advisory Board (2012-2020); Notre Dame Haiti Program review committee (2013-2014); Water Sustainability Working Group (2017-2019)
- Member (elected): College of Science Council (1994-1997; 2001-2005); Graduate Council (1998-2001); Dept. of Biological Sciences Committee on Appointments and Promotions (CAP) (1999-2008); Chair of CAP (2008-2014); University Committee on Admissions, Scholarships, and Financial Aid (2018-present); Committee for 5-Year Review of Dean of Science (2019); University Committee on Research and Sponsored Programs (2022-present)
- Member or Chair: various departmental committees including over 40 graduate student thesis committees in three Colleges and chair or co-chair of 10 faculty search committees.
- Presenter for Junior Parents Weekend (2009-2014), Early Action Students (2009-2014), BIOS Graduate Student Recruitment (2009-2014)
- Urban Plunge Faculty Facilitator (2011)
- Faculty Mentor for Dr. Marie Denise Milord (2014), Dr. Kenneth Filchak (2020-2022)
- Institutional Lead, Great Lakes Northern Forest Cooperative Ecosystem Studies Unit (2007 present)

# **Community and Church Service**

- Integration of BIOS 35506 (Galapagos) with students at Robinson Community Learning Center (2022)
- Integration of BIOS 35506 (Galapagos) with students at La Casa de Amistad, South Bend (2019)
- Integration of BIOS 35506 (Galapagos) with students at South Bend Center for the Homeless (2017)
- Integration of BIOS 35506 (Galapagos) with students at Robinson Community Learning Center (2016)
- Volunteer Soccer Manager and Assistant Coach of U12 Girls, Indiana Invaders (2013)
- Volunteer Girls' Soccer Coach, Christ the King Grade School (2011-2014; league champions 2014)
- Assistant Manager, Indiana Invaders Soccer Club U15 Boys (2011)
- Member, Corpus Christi Grade School Board of Education (2006 2008)
- Volunteer Speaker, UND College Mentors for Kids (2006)
- Outreach Educator, Young Naturalist Club, Shedd Aquarium, Chicago, IL (2003 2006)
- Volunteer Science Educator, Corpus Christi Catholic School, South Bend (2005)
- Volunteer Science Educator, Christ the King Catholic School, South Bend (2013 2014)
- Volunteer Reader, Montessori Preschool, South Bend Center for the Homeless (2003 2010)
- Volunteer Boys' Soccer Coach, Michiana Soccer Association (2004 2006)
- Volunteer Girls' Soccer Coach, Michiana Soccer Association (2006 2009)
- Volunteer Boys' Soccer Coach, Corpus Christi Catholic School, South Bend (2007)
- Mentor for Local High School Science Fair Projects (15 high school students to date)
- Chair, Junior Life Science Division, Northern Indiana Regional Science Fair (2002 present)

• Judge, Northern Indiana Regional Science Fair (annually 1990 - present)

# Other Recognitions and Selected Media Stories

- NPR Story on PFAS in Lake Michigan fish: <u>https://radio.wcmu.org/local-regional-news/2022-12-</u> 12/study-finds-pfas-in-game-fish-can-accumulate-be-passed-down
- South Bend Tribune Viewpoint: In Defense of Wetlands
   <u>https://www.southbendtribune.com/news/opinion/viewpoint/viewpoint-let-indiana-legislators-know-you-value-the-states-remaining-wetlands/article\_8a67bebe-6a39-11eb-847b-ebf12a5aab5a.html
  </u>
- *PBS Documentary*; Featured in widely distributed documentary film on Great Lakes coastal wetlands: <u>https://www.pbs.org/video/linking-land-and-lakes-hdo22u/</u>
- *EM&T paper* (publication #132) on heavy metals in wetland turtles featured in multiple radio (e.g., NPR), television (e.g., WSBT), and web stories; see for example: <u>http://wsbt.com/news/local/notre-dame-researchers-doing-something-new-to-test-great-lakes-pollution</u>
- TAFS paper (publication #127) on restoring stream connectivity following culvert replacement featured in numerous press and web stories following story reported in Capital News Service: <u>http://news.jrn.msu.edu/capitalnewsservice/2015/11/06/fish-may-benefit-from-replacing-culvertswith-bridges/</u>
- ES&T paper (publication #115) on contaminant biotransport by Great Lakes salmon featured in ND press release and picked up by over 20 internet sites, including phys.org, enn.com, scienceblog.com, etc.
- Nature commentary (publication #107) on internet trade of endangered plants featured in various print, radio, and internet media stories including the Los Angeles Times, BBC, and NPR
- Featured Researcher for Great Lakes Regional Research Information Network (October 2007)
- Salmon research featured in UND Pathways magazine (Fall 2005, Fall 2007)
- River restoration research featured in NDWorks Notre Dame staff newspaper (November 1, 2007)
- Principal Investigator for research on invasive fish that was recognized as 1 of 162 U.S. "Scientific Breakthroughs" for 1998 cited in a report to Congress by *The Science Coalition*
- Senior author of paper (*Ecology* 64:1124-1135) recognized as one of "The 10 Most Cited Papers in Plant Herbivory, 1981-1993" by *The Scientist* (June 26, 1991) from review of *Science Citation Index*
- Research in invasive fishes featured in *The Helm* popular publication of the Illinois-Indiana Sea Grant College Program.
- Listed in: Who's Who in Science and Technology; Who's Who in the Midwest; Who's Who in America; Who's Who in the World, Who's Who in American Education, American Men and Women of Science, Who's Who in Science Higher Education (1991-present)

# Graduate Students and Postdoctorates

Graduate students advised:

# Oregon State University:

Steven Hurley – M.S. 1994; Cynthia Tait (co-advised) – Ph.D. 1997

# University of Notre Dame:

Patrice Charlebois – M.S. 1994; Thomas Horvath – Ph.D. 1997, Aimee Fullerton – M.S. 1998; Danielle Tillman – Ph.D. 1999; Robert Stelzer – Ph.D. 1999; Eric Strauss – Ph.D. 2000; Ashley Moerke – M.S. 2000; Nicole Mitchell – M.S. 2002; Candice Bauer – Ph.D. 2003; Ashley Moerke – Ph.D. 2004; Jean Miesbauer – M.S. 2004; Asako Yamamuro – M.S. 2004; Michelle Evans-White – Ph.D. 2005; Anthony Cak – M.S. 2005; James Larson (co-advised) – Ph.D. 2006; Sally Entrekin (co-advised) – Ph.D. 2008; Konrad Kulacki – Ph.D. 2009; Angela Bobeldyk – Ph.D. 2009; David Costello – Ph.D. 2010; Andrea Fowler – M.S. 2010; Janine Rueegg – Ph.D. 2011; David Janetski – Ph.D. 2012; Patrick Shirey – Ph.D. 2013; Matthew Cooper – Ph.D. 2014; Nathan Evans – Ph.D. 2016; Brandon Gerig – Ph.D. 2017; Carmella Vizza (co-advised) – Ph.D. 2018; Katherine O'Reilly – Ph.D. 2022; Whitney Conard – Ph.D. 2022; Elise Snyder (co-advised) – Ph.D. in progress; Alison Zachritz – Ph.D. in progress; Amaryllis Adey – Ph.D. in progress

*Postdoctorates advised*: Jason Knouft 2001-2002; Emma Rosi (co-advised) 2002-2004; Dominic Chaloner 2000-2004; Paul Frost 2002-2005; Randall Bernot 2003-2005; Aline Matsuo 2005-2006; Scott Tiegs 2006-2008; Daniele Almeida Miranda 2021-present; Katherine O'Reilly 2022

Research Assistant Professor supervised: Dominic Chaloner 2004-2007

#### Awards and Honors to Advised Students

Amaryllis Adey – REACT Scholarship, \$500 (2023); GLOBES Mini-Grant Recipient, \$3000 (2023) Candice Bauer – Clair Booth Luce Graduate Fellowship (1998-2003); Best Oral Presentation in Applied Research, North American Benthological Society, LaCrosse, WI (2001)

- Angela Bobeldyk Best Poster Presentation in Basic or Applied Research at the Annual Meeting of the North American Benthological Society in Vancouver, BC (2004); Selected Participant in *Ecosystem Ecology* Course, Institute of Ecosystem Studies, NY (2004); Downes Travel Award (2004); Best Oral Presentation Award, Indiana Lakes Management Society (2006); UND Travel Award (2006); Best Student Paper Award (runner-up), NALMS, International Lakes Management Society Meeting (2006); Graduate Fellow - *Center for Aquatic Conservation* (2007); Kaneb Teaching Assistant Award (2007); NABS President's Award (2007); Knauss Policy Fellowship (2008-2009)
- Whitney Conard ND-LEEF Research Award, \$1500 (2016); GLOBES Graduate Fellow; UND GLOBES Mini-Grant Recipient, \$1716 (2017); IWRRC Research Grant \$15,000 (2017); Kaneb Center Outstanding Graduate Student Teaching Award (2018); UND GLOBES Mini-Grant Recipient, \$3000 (2018); UND GLOBES Mini-Grant Recipient, \$2500 (2019); Best Student Oral Presentation, 40<sup>th</sup> Annual Indiana Water Resources Association Symposium (2019); University of Notre Dame Center for Environmental Science and Technology (CEST) Predoctoral Fellowship (2020, 2022)
- Matthew Cooper NSF IGERT-Globes Fellowship (2009-2012); University of Notre Dame Presidential Graduate Fellowship (2009-2014); Highly-cited paper award (co-author) – *Journal of Great Lakes Research* (2010); NSF-IGERT Student Meeting Best Poster Award (2012); Distinguished Alumnus Award at Annis Water Resources Institute, Grand Valley State University (2015)
- David Costello UNDERC Summer Research Fellowship (2005, 2006); UND Travel Award (2005); Selected Participant in *Ecosystem Ecology* Course, Institute of Ecosystem Studies, NY (2006); Downes Travel Grant (2006), Sigma Xi Grant-in-Aid of Research (2006-2007); Best Oral Presentation in Basic Research (runner-up) at the Annual Meeting of the North American Benthological Society in Columbia, SC (2007); NABS President's Award (2007); NSF Doctoral Dissertation Improvement Grant (2008); Bayer Predoctoral Fellowship (2008); UNDERC Summer Research Fellowship (2008); Award for Excellence in Teaching, Kaneb Center for Teaching and Learning (2009).
- Sally Entrekin Selected Participant in *Ecosystem Ecology* Course, Institute of Ecosystem Studies, NY (2005); NABS President's Award (2006); Sigma Xi Grant-in-Aid of Research (2006), Gordon Travel Grant (2006); NABS Best Oral Presentation Award in Applied Research (2008)
- Michelle Evans-White NSF Graduate Research Traineeship (2000-2001); Best Oral Presentation in Basic Research, North American Benthological Society, LaCrosse, WI (2001); Summer Grant-Writing Fellowship (2002); U.S. Dept. of Education GAANN Fellowship (2002-2005); Bayer Predoctoral Research Fellowship (2003-2004); UMBS Summer Research Scholarship (2003) ); Sigma Xi Grant-in-Aid of Research (2004); NABS Student Travel Award (2004); The Eli J. and Helen Shaheen Graduate School Award in Science (2006)
- Nathan Evans University of Notre Dame Center for Environmental Science and Technology (CEST) Predoctoral Fellowship (2014-2015)
- Andrea Fowler Arthur J. Schmitt Presidential Fellowship (2005-2009); UNDERC Summer Research Fellowship (2006)
- Aimee Fullerton NSF Graduate Research Traineeship (1995-1998)

Brandon Gerig – USEPA STAR Fellowship (2015-2017); International Association of Great Lakes Research-Baldwin Scholarship Runner-Up (2016); Great Lakes Fishery Commission Travel Award (2016); UND REACT Fellowship, \$1500 (2017); Dolan Award for Quantitative Research, International Association of Great Lakes Research, \$1500 (2017; Baldwin Scholarship, International Association of Great Lakes Research, \$3000 (2017-2018)

Thomas Horvath - 2004 Richard Siegfried Junior Faculty Prize for Academic Excellence, State University College at Oneonta

- David Janetski Arthur J. Schmitt Presidential Fellowship (2006-2010); Best Oral Presentation in Applied Research at Annual Meeting of the North American Benthological Society in Columbia, SC (2007); Skinner Award (Honorable Mention) - American Fisheries Society (2010); Bayer Predoctoral Fellowship (2010)
- Konrad Kulacki U.S. Dept. of Education GAANN Fellowship (2003-2005); Best Oral Paper Award, Ohio Valley Chapter of SETAC (2006); UNDERC Summer Research Fellowship (2008); Best Student Presentation, Ohio Valley Chapter of SETAC (2008)
- James Larson UNDERC Summer Research Fellowship (2004); U.S. Dept. of Education GAANN Fellowship (2003-2005); Indiana Academy of Sciences Grant-in-Aid of Research (2005); Bayer Predoctoral Fellowship (2005-2006); Best Oral Paper Award, Ohio Valley Chapter of SETAC (2006)
- Natalie Levesque Schmitt Presidential Fellow, University of Notre Dame (2018-2023); GLOBES Graduate Fellow (2019-present); UND GLOBES Mini-Grant Recipient, \$2500 (2019); UND REACT Travel Grant for Data Science, \$1250 (2019); UND GLOBES Mini-Grant Recipient, \$1250 (2021) Jean Miesbauer – UNDERC Summer Research Fellowship (2002)
- Ashley Moerke Finalist, Proctor & Gamble Co. Research Award (1999); NSF Graduate Research Traineeship (2000-2001); Kaneb Outstanding Teaching Assistant Award (2001); Bayer Predoctoral Research Fellowship (2002-2003); Associate Fisheries Professional Certification (2003), Warner-Lambert Fellowship (2003-2004); NABS Presidents' Award (2004), Graduate Teaching Achievement Award (2004), DIALOG participant (2005), Excellence in Academic Advising Award (2010-2011), Michigan Distinguished Professor of the Year Nominee (2012), LSSU Distinguished Teaching Award (2011-2012).
- Katherine O'Reilly Best Student Research Poster Award, State of Lake Michigan/Great Lakes Beach Association (SOLM/GLBA) Annual Meeting (2015); GLOBES Graduate Fellow; SFS Travel Award (2016); ND-LEEF Research Award, \$1500 (2016); SFS General Endowment Award (2016); IAGLR Student Travel Award (2016); Bayer Predoctoral Fellowship (2017); Outstanding Graduate Student Teacher Award, University of Notre Dame Kaneb Center for Teaching and Learning (2017); Founding Treasurer of the American Fisheries Society's Science Communication Section (2017); Norman S. Baldwin Fishery Science Scholarship, International Association for Great Lakes Research, \$3000 (2017); NOAA-National Sea Grant Knauss Marine Policy Fellowship (2018-2019); UND GLOBES Mini-Grant Recipient, \$2500 (2019)
- Janine Rueegg Selected Participant in *Ecosystem Ecology* Course, Institute of Ecosystem Studies, NY (2008); NABS President's Award (2008); Bayer Predoctoral Fellowship (2009); Award for Excellence in Teaching, Kaneb Center for Teaching and Learning (2010)
- Patrick Shirey NSF IGERT-Globes Fellowship (2007-2011); Center for Aquatic Conservation Fellowship (2009); Graduate Student Policy Award from the Ecological Society of America (2010); GLOBES Fellow Representative to NSF IGERT 2010 Project Meeting; Skinner Memorial Award from American Fisheries Society (2010); CEST Bayer Predoctoral Fellowship (2011-12); ESA Emerging Issues Conference Travel Award (2012); NPS George M. Wright Climate Change Fellowship (2012); 2016 Emerging Leaders Mentorship Award from the American Fisheries Society
- Elise Snyder GLOBES Mini-grant Recipient, \$3000 (2022, 2023); Best Student Poster Presentation, Society for Freshwater Science Annual Meeting (2022)
- Robert Stelzer Best Poster at Annual Meeting of the North American Benthological Society, Kalispell, MT (1996); Indiana Academy of Science Research Award (1996, 1997); UND Navari Graduate Fellowship (1995); NSF Doctoral Dissertation Improvement Grant (1997); NSF Graduate Research Traineeship (1998-1999); The Eli J. and Helen Shaheen Graduate School Award in Science (2000); TRISS Endowed Professorship at the University of Wisconsin – Oshkosh (2015).
- Eric Strauss NSF Graduate Research Traineeship (1995-2000); NSF Doctoral Dissertation Improvement Grant (1997)
- Danielle Tillman Clare Booth Luce Graduate Fellowship (1992-1997); NSF Graduate Research Fellowship (1993-1998); Selected Participant in *Ecosystem Ecology* Course, Institute of Ecosystem Studies, NY (2013)
- Carmella Vizza Dean's Fellowship (2012-2017); Downes Memorial Fund Award for Professional Development (2012); Scholarship Recipient for *Ecosystem Ecology* Course, Institute of Ecosystem Studies, NY (2013); Endowment Research Award from Society for Freshwater Science (2013); NSF Graduate Research Fellowship (2013-2016); UND GSU Travel Award (2016); UND Nominee for the Midwestern Association of Graduate Schools Excellence in Teaching Award (2018); Kaneb Center Outstanding Graduate Student Teaching Award (2018)

Asako Yamamuro – Notre Dame Diversity Graduate Fellowship (2001-2003); UNDERC Summer Research Fellowship (2002)

Alison Zachritz – UND GLOBES Mini-Grant Recipient, \$2500 (2021, 2022, 2023); Eppley Foundation Grant-in-Aid, \$27,500 (2022); USGS-WRRI 104b Grant Recipient \$25,000 (2022); Cary Institute Ecosystem Science course scholarship (2022, deferred to 2023); Outstanding Graduate Student Leader of the Year, Honorable Mention (2023)

#### Placement of Advised Graduate Students and Postdoctorates

Graduate Student	Degree, Yr	Current Employer	Current Position
Patrice Charlebois	M.S., 1994	Illinois-Indiana Sea Grant	Outreach Program Leader
Steven Hurley	M.S., 1994	U.S. Fish & Wildlife Service	Fisheries Biologist
Cynthia Tait	Ph.D., 1997	U.S.D.A. Forest Service (Ret.)	Regional Aquatic Ecologist
Thomas Horvath	Ph.D., 1997	Cal State Univ. – Monterey	Associate Dean
Aimee Fullerton	M.S., 1998	Natl. Marine Fisheries Service	Research Scientist
Robert Stelzer	Ph.D., 1999	U. of Wisconsin – Oshkosh	Professor
Danielle Tillman	Ph.D., 1999	NOAA – OAR/OPPE	Physical Scientist
Eric Strauss	Ph.D., 2000	U. of Wisconsin – La Crosse	Professor
Nicole Mitchell	M.S., 2002	Earlham College	Biology Instructor
Candice Bauer	Ph.D., 2003	USEPA – Region 5	Research Scientist
Ashley Moerke	Ph.D., 2004	Lake Superior State University	Dean
Jean Cordova	M.S., 2004	CDOT (Colorado)	Water Quality Manager
Asako Yamamuro	M.S., 2004	USFS – Region 6/PNWRS	Conservation Biologist
Anthony Cak	M.S., 2005	CUNY – ASRC	Associate Director
Michelle Evans-White	Ph.D., 2005	University of Arkansas	Professor
James Larson	Ph.D., 2006	USGS UMESC	Research Biologist
Sally Entrekin	Ph.D., 2008	Virginia Tech	Associate Professor
Konrad Kulacki	Ph.D., 2009	Exponent Inc.	Senior Scientist
David Costello	Ph.D., 2009	Kent State University	Associate Professor
Angela Bobeldyk	Ph.D., 2009	US Army Corps of Engineers	Program Manager
Andrea Fowler	M.S., 2010	City of Milwaukee	Environmental Attorney
Janine Rueegg	Ph.D., 2011	Université de Lausanne	Research Scientist
David Janetski	Ph.D., 2012	Indiana University of PA	Associate Professor
Patrick Shirey	Ph.D., 2013	University of Pittsburgh	Assistant Professor
Matthew Cooper	Ph.D., 2014	Grand Valley State University	Assistant Professor
Nathan Evans	Ph.D., 2016	USFWS – Great Lakes Region	Lead Biologist/Station Mgr.
Brandon Gerig	Ph.D., 2017	National Park Service	Research Coordinator
Carmella Vizza	Ph.D., 2018	Hawaii Pacific Univ.	Assistant Professor
Katherine O'Reilly	Ph.D., 2022	Illinois-Indiana Sea Grant	Invasive Species Specialist
Whitney Conard	Ph.D., 2022	USEPA – Region 10	Research Scientist

Postdoctorate Current Employer		Current Position
Jason Knouft	St. Louis University	Professor
Dominic Chaloner	University of Notre Dame	Teaching Professor
Emma Rosi	Cary Institute of Ecosystem Studies	Senior Scientist
Paul Frost	Trent University	Chaired Professor
Randall Bernot	Ball State University	Associate Professor
Aline Matsuo	Yale School of Medicine	Associate Research Scientist
Scott Tiegs	Oakland University	Professor
Daniele Miranda	University of Notre Dame	Research Assistant Professor
Katherine O'Reilly	Illinois-Indiana Sea Grant (NOAA)	Invasive Species Specialist

Scholarly Presentations (number only; full list provided upon request)

Invited Seminars, Addresses, and Lectures: 70 Invited Symposium Contributions (Presenting author): 30 Invited Symposium Contributions (Co-author): 20 Symposia Organized: 11 Contributed Papers (Presenting Author): 35 Contributed Papers and Posters (Co-Author): ~400

### **PUBLICATIONS**

#### Refereed Journal Papers (Current Google Scholar h-index = 71)

\*advised graduate student; #advised undergraduate student; ^advised postdoctorate; \*other student

- 1. **Lamberti, G.A.,** and V.H. Resh. 1979. Substrate relationships, spatial distribution patterns, and sampling variability in a stream caddisfly population. *Environmental Entomology* 8:561-567.
- 2. Rosenberg, D.M., and 13 others including **G.A. Lamberti**. 1981. Recent trends in environmental impact assessment. *Canadian Journal of Fisheries and Aquatic Sciences* 38:591-624.
- 3. Resh, V.H., T.S. Flynn, **G.A. Lamberti**, E.P. McElravy, K.L. Sorg, and J.R. Wood. 1981. Responses of the sericostomatid caddisfly *Gumaga nigricula* (McL.) to environmental disruptions. *Series Entomologica* (The Hague) 20:311-318.
- 4. **Lamberti, G.A.**, and V.H. Resh. 1983. Stream periphyton and insect herbivores: an experimental study of grazing by a caddisfly population. *Ecology* 64:1124-1135. <u>doi.org/10.2307/1937823</u>
- Lamberti, G.A., and V.H. Resh. 1983. Geothermal effects on stream benthos: separate influences of thermal and chemical components on periphyton and macroinvertebrates. *Canadian Journal of Fisheries and Aquatic Sciences* 40:1995-2009. <u>https://doi.org/10.1139/f83-229</u>
- Resh, V.H., G.A. Lamberti, and J.R. Wood. 1984. Biology of the caddisfly *Helicopsyche borealis* (Hagen): a comparison of North American populations. *Freshwater Invertebrate Biology* 3:172-180.
- 7. Resh, V.H., **G.A. Lamberti**, and J.R. Wood. 1984. Biological studies of *Helicopsyche borealis* (Hagen) in a coastal California stream. *Series Entomologica* (The Hague) 30:315-319.
- Lamberti, G.A., and V.H. Resh. 1985. Comparability of introduced tiles and natural substrates for sampling lotic bacteria, algae, and macroinvertebrates. *Freshwater Biology* 15:21-30. <u>doi.org/10.1111/j.1365-2427.1985.tb00693.x</u>
- Lamberti, G.A., and V.H. Resh. 1985. Distribution of benthic algae and macroinvertebrates along a geothermal stream gradient. *Hydrobiologia* 128:13-21. <u>https://link.springer.com/article/10.1007/BF00008935</u>
- 10. Schwan, T.G., and **G.A. Lamberti**. 1986. Influence of oxygen concentration on the respiratory behavior of tilapia (*Sarotherodon alcalicus grahami*) in Lake Nakuru, Kenya. *African Journal of Ecology* 24:199-202.
- 11. **Lamberti, G.A.,** and V.H. Resh. 1987. Seasonal patterns of suspended bacteria and algae in two northern California streams. *Archives fur Hydrobiologie* 110:45-57.
- 12. Lamberti, G.A., J.W. Feminella, and V.H. Resh. 1987. Herbivory and intraspecific competition in a stream caddisfly population. *Oecologia* 73:75-81. <u>https://link.springer.com/article/10.1007/BF00376980</u>

- 13. Lamberti, G.A., L.R. Ashkenas, S.V. Gregory, and A.D. Steinman. 1987. Effects of three herbivores on periphyton communities in laboratory streams. *Journal of the North American Benthological Society* 6:92-104.
- 14. Steinman, A.D., C.D. McIntire, S.V. Gregory, **G.A. Lamberti**, and L.R. Ashkenas. 1987. Effects of herbivore type and density on taxonomic structure and physiognomy of algal assemblages in laboratory streams. *Journal of the North American Benthological Society* 6:175-188.
- 15. Steinman, A.D., and **G.A. Lamberti**. 1988. Lotic algal communities in the Mt. St. Helens region six years following the eruption. *Journal of Phycology* 24:482-489.
- 16. McElravy, E.P., **G.A. Lamberti**, and V.H. Resh. 1989. Year-to-year variation in the aquatic macroinvertebrate fauna of a northern California stream. *Journal of the North American Benthological Society* 8:51-63.
- 17. Steinman. A.D., C.D. McIntire, S.V. Gregory, and **G.A. Lamberti**. 1989. Effects of irradiance and grazing on lotic algal assemblages. *Journal of Phycology* 25:478-485.
- Lamberti, G.A., S.V. Gregory, L.R. Ashkenas, A.D. Steinman, and C.D. McIntire. 1989. Productive capacity of periphyton as a determinant of plant-herbivore interactions in streams. *Ecology* 70:1840-1856. <u>https://doi.org/10.2307/1938117</u>
- 19. Stream Solute Workshop (19 authors including **G.A. Lamberti**). 1990. Concepts and methods for assessing solute dynamics in stream ecosystems. *Journal of the North American Benthological Society* 9:95-119.
- 20. DeNicola, D.M., C.D. McIntire, **G.A. Lamberti**, S.V. Gregory, and L.R. Ashkenas. 1990. Temporal patterns of grazer-periphyton interactions in laboratory streams. *Freshwater Biology* 23:475-489.
- 21. Lamberti, G.A., S.V. Gregory, L.R. Ashkenas, R.C. Wildman, and K.M.S. Moore. 1991. Stream ecosystem recovery following a catastrophic debris flow. *Canadian Journal of Fisheries and Aquatic Sciences* 48:196-208. <u>doi.org/10.1139/f91-027</u>
- 22. Bergey, E.A., S.S. Balling, J.N. Collins, **G.A. Lamberti**, and V.H. Resh. 1992. Bionomics of invertebrates within an extensive *Potamogeton pectinatus* bed of a California marsh. *Hydrobiologia* 234:15-24.
- Lamberti, G.A., S.V. Gregory, C.P. Hawkins, R.C. Wildman, L.R. Ashkenas, and D.M. DeNicola. 1992. Plant-herbivore interactions in streams near Mount St. Helens. *Freshwater Biology* 27:237-247. (*Note: Cover Featured Article*)
- 24. <sup>+</sup>Pearsons, T.N., H.W. Li, and **G.A. Lamberti**. 1992. Influence of habitat complexity on resistance to flooding and resilience of stream fish assemblages. *Transactions of the American Fisheries Society* 121:427-436.
- 25. <sup>#</sup>Ehrman, T.P., and **G.A. Lamberti**. 1992. Hydraulic and particulate matter retention in a 3rd-order Indiana stream. *Journal of the North American Benthological Society* 11:341-349.
- 26. \*Tait, C.K., \*J.L. Li, **G.A. Lamberti**, \*T.N. Pearsons, and H.W. Li. 1994. Relationships between riparian cover and the community structure of high desert streams. *Journal of the North American Benthological Society* 13:45-56.
- Li, H.W., G.A. Lamberti, \*T.N. Pearsons, \*C.K. Tait, \*J.L. Li, and J.C. Buckhouse. 1994. Cumulative effects of riparian disturbances on high desert trout streams of the John Day Basin, Oregon. *Transactions of the American Fisheries Society* 123:627-640.
- 28. Lamberti, G.A., and M.B. Berg. 1995. Invertebrates and other benthic features as indicators of environmental change in Juday Creek, Indiana. *Natural Areas Journal* 15:249-258.

- 29. Lamberti, G.A., S.V. Gregory, L.R. Ashkenas, J.L. Li, A.D. Steinman and C.D. McIntire. 1995. Influences of grazer type and abundance on plant-herbivore interactions in streams. *Hydrobiologia* 306:179-188.
- 30. <sup>#</sup>Maloney, D.C., and **G.A. Lamberti**. 1995. Rapid decomposition of summer-input leaves in a northern Michigan stream. *American Midland Naturalist* 133:184-195.
- 31. \*Horvath, T.G., **G.A. Lamberti**, D.M. Lodge, and +W.L. Perry. 1996. Zebra mussels in lake-stream systems: source-sink dynamics? *Journal of the North American Benthological Society* 15:564-575.
- 32. \*Charlebois, P.M., and **G.A. Lamberti**. 1996. Invading crayfish in a Michigan stream: direct and indirect effects on periphyton and macroinvertebrates. *Journal of the North American Benthological Society* 15:551-563.
- 33. <sup>+</sup>Perry, W.L., D.M. Lodge, and **G.A. Lamberti**. 1997. Impact of crayfish predation on exotic zebra mussels and native invertebrates in a lake-outlet stream. *Canadian Journal of Fisheries and Aquatic Sciences* 54:120-125.
- 34. Lamberti, G.A., and A.D. Steinman. 1997. A comparison of primary production in stream ecosystems. *Journal of the North American Benthological Society* 16:95-104.
- 35. \*Horvath, T.G., and **G.A. Lamberti**. 1997. Drifting macrophytes as a mechanism for zebra mussel (*Dreissena polymorpha*) invasion of lake-outlet streams. *American Midland Naturalist* 138:29-36.
- 36. \*Fullerton, A.H., **G.A. Lamberti**, D.M. Lodge, and M.B. Berg. 1998. Prey preferences of Eurasian ruffe and yellow perch: comparison of laboratory results with composition of Great Lakes benthos. *Journal of Great Lakes Research* 24:319-328.
- 37. \*Horvath, T.G., and **G.A. Lamberti**. 1999. Recruitment and growth of zebra mussels (*Dreissena polymorpha*) in a coupled lake-stream system. *Archives fur Hydrobiologie* 145:197-217.
- 38. \*Horvath, T.G., and **G.A. Lamberti**. 1999. Mortality of zebra mussel, *Dreissena polymorpha* (Pallas), veligers during downstream transport. *Freshwater Biology* 41:1-8.
- \*Horvath, T.G., <sup>#</sup>K.M. Martin, and G.A. Lamberti. 1999. Effect of zebra mussels, *Dreissena polymorpha*, on macroinvertebrates in a lake-outlet stream. *American Midland Naturalist* 142:340-347.
- 40. \*Stelzer, R.S., and **G.A. Lamberti**. 1999. Independent and interactive effects of crayfish and darters on a stream benthic community. *Journal of the North American Benthological Society* 18:524-532.
- 41. <sup>+</sup>Lewis, K.M., J.L. Feder, and **G.A. Lamberti**. 2000. Population genetics of the zebra mussel, *Dreissena polymorpha* (Pallas): Local allozyme differentiation within Midwestern lakes and streams. *Canadian Journal of Fisheries and Aquatic Sciences* 57:637-643.
- 42. \*Fullerton, A.H., **G.A. Lamberti**, D.M. Lodge, and F.W. Goetz. 2000. Potential for resource competition between Eurasian ruffe and yellow perch: growth and RNA responses in laboratory experiments. *Transactions of the American Fisheries Society* 129:1331-1339.
- 43. \*Strauss, E.A., and **G.A. Lamberti**. 2000. Regulation of nitrification in aquatic sediments by organic carbon. *Limnology and Oceanography* 45:1854-1859. doi.org/10.4319/lo.2000.45.8.1854
- 44. <sup>+</sup>Lewis, K.M., J.L. Feder, \*T.G. Horvath, and **G.A. Lamberti**. 2000. Heterozygosity and fitness: no strong association in Great Lakes populations of the zebra mussel, *Dreissena polymorpha* (Pallas). *Malacologica* 42:113-122.

- 45. <sup>+</sup>Perry, W.L., D.M. Lodge, and **G.A. Lamberti**. 2000. Crayfish (*Orconectes rusticus*) impacts on zebra mussel (*Dreissena polymorpha*) recruitment, other macroinvertebrates and algal biomass in a lake-outlet stream. *American Midland Naturalist* 144:308-316.
- 46. \*Stelzer, R.S., and **G.A. Lamberti**. 2001. Effects of N:P ratio and total nutrient concentration on stream periphyton community structure, biomass, and elemental composition. *Limnology and Oceanography* 46:356-367. doi.org/10.4319/lo.2001.46.2.0356
- 47. \*Strauss, E.A., and **G.A. Lamberti**. 2002. Effect of dissolved organic carbon quality on microbial decomposition and nitrification rates in stream sediments. *Freshwater Biology* 47:65-74.
- 48. \*Stelzer, R.S., and **G.A. Lamberti**. 2002. Ecological stoichiometry in running waters: periphyton chemical composition and snail growth. *Ecology* 83:1039-1051.
- 49. \*Strauss, E.A., \*N.L. Mitchell, and **G.A. Lamberti**. 2002. Factors regulating nitrification in aquatic sediments: effects of organic carbon, nitrogen availability, and pH. *Canadian Journal of Fisheries and Aquatic Sciences* 59:554-563.
- 50. ^Chaloner, D.T., <sup>#</sup>K.M. Martin, M.S. Wipfli, P.H. Ostrom, and **G.A. Lamberti**. 2002. Marine carbon and nitrogen isotopes in southeastern Alaska stream food webs: evidence from artificial and natural streams. *Canadian Journal of Fisheries and Aquatic Sciences* 59:1257-1265.
- ^Frost, P.C., \*R.S. Stelzer, G.A. Lamberti, and J.J. Elser. 2002. Ecological stoichiometry of trophic interactions in the benthos: Understanding the role of C:N:P ratios in littoral and lotic habitats. *Journal of the North American Benthological Society* 21:515-528.
- 52. <sup>+</sup>Kolar, C.S., \*A.H. Fullerton, <sup>#</sup>K.M. Martin, and **G.A. Lamberti**. 2002. Influence of zebra mussels on interactions of Eurasian ruffe, yellow perch, and invertebrate prey. *Journal of Great Lakes Research* 28:664-673.
- 53. Leung, B., D.M. Lodge, D. Finnoff, J.F. Shogren, M.A. Lewis, and **G.A. Lamberti**. 2002. An ounce of prevention or a pound of cure: bioeconomic risk analysis of invasive species. *Proceedings of the Royal Society of London, Series B.* 269:2407-2413. <u>doi.org/10.1098/rspb.2002.2179</u>
- 54. \*Tillman, D.C., \*A.H. Moerke, \*C.L. Ziehl and **G.A. Lamberti**. 2003. Subsurface hydrology and degree of burial affect mass loss and invertebrate colonization of leaves in a woodland stream. *Freshwater Biology* 48:98-107. (*Note: Cover Featured Article*).
- 55. \*Moerke, A.H., and **G.A. Lamberti**. 2003. Responses in fish community structure to restoration of two Indiana streams. *North American Journal of Fisheries Management* 23:748-759.
- 56. \*Bauer, C.R., \*C.H. Kellogg, S.D. Bridgham, and **G.A. Lamberti**. 2003. Mycorrhizal colonization across hydrologic gradients in restored and reference freshwater wetlands. *Wetlands* 23:961-968.
- 57. \*Moerke, A.H., and **G.A. Lamberti**. 2004. Restoring stream ecosystems: Lessons from a Midwestern state. *Restoration Ecology* 12:327-334. <u>doi.org/10.1111/j.1061-2971.2004.0340.x</u>
- 58. ^Chaloner, D.T., **G.A. Lamberti**, R.W. Merritt, \*N.L. Mitchell, P.H. Ostrom, and M.S. Wipfli. 2004. Variation in responses to spawning Pacific salmon among three southeastern Alaska streams. *Freshwater Biology* 49:587-599.
- 59. \*Moerke, A.H., \*K.J. Gerard, \*J.A. Latimore, R.A. Hellenthal, and **G.A. Lamberti**. 2004. Restoration of an Indiana, USA, stream: Bridging the gap between basic and applied lotic ecology. *Journal of the North American Benthological Society* 23:647-660.
- 60. \*Mitchell, N.L., and **G.A. Lamberti**. 2005. Responses in dissolved nutrients and epilithon abundance to spawning salmon in Southeast Alaska streams. *Limnology and Oceanography*

50:217-227.

- 61. ^Bernot, R.J., M.A. Brueseke, \*M.A. Evans-White, and **G.A. Lamberti**. 2005. Acute and chronic toxicity of imidazolium-based ionic liquids on *Daphnia magna*. *Environmental Toxicology and Chemistry* 24: 87-92. doi.org/10.1897/03-635.1
- 62. ^Bernot, R.J., #E.E. Kennedy, and **G.A. Lamberti**. 2005. Effects of ionic liquids on the survival, movement, and feeding behavior of the freshwater snail, *Physa acuta*. *Environmental Toxicology and Chemistry* 24:1759-1765.
- 63. \*Evans-White, M.A., and **G.A. Lamberti**. 2005. Grazer species effects on epilithon nutrient composition. *Freshwater Biology* 50:1853-1863.
- 64. \*Evans-White, M.A., \*R.S. Stelzer, and **G.A. Lamberti**. 2005. Taxonomic and regional patterns in benthic macroinvertebrate elemental composition in streams. *Freshwater Biology* 50:1786-1799.
- 65. ^Frost, P.C., \*J.H. Larson, <sup>#</sup>L.E. Kinsman, **G.A. Lamberti**, and S.D. Bridgham. 2005. Attenuation of ultraviolet radiation in streams of northern Michigan. *Journal of the North American Benthological Society* 24:246-255.
- \*Bobeldyk, A.M., J.M. Bossenbroek, \*M.A. Evans-White, D.M. Lodge, and G.A. Lamberti. 2005. Secondary spread of zebra mussels (*Dreissena polymorpha*) in coupled lake-stream systems. *Ecoscience* 12:339-346.
- 67. \*Fullerton, A.H., and **G.A. Lamberti**. 2006. A comparison of habitat use and habitat-specific feeding efficiency by Eurasian ruffe (*Gymnocephalus cernuus*) and yellow perch (*Perca flavescens*). *Ecology of Freshwater Fish* 15:1-9.
- ^Frost, P.C., \*J.H. Larson, C.A. Johnston, \*K.C. Young, P.A. Maurice, G.A. Lamberti, D.M. Lodge, and S.E. Bridgham. 2006. Landscape predictors of stream dissolved organic matter concentration and physiochemistry in a Lake Superior river watershed. *Aquatic Sciences* 68:40-51.
- 69. ^Rosi-Marshall, E.J., \*A.H. Moerke, and **G.A. Lamberti**. 2006. Ecological responses to trout habitat rehabilitation in a northern Michigan stream. *Environmental Management* 38:99-107.
- 70. \*Moerke, A.H., and **G.A. Lamberti**. 2006. Scale-dependent influences on water quality, habitat, and fish communities in streams of the Kalamazoo River Basin, Michigan (USA). *Aquatic Sciences* 68:193-205.
- ^Frost P.C., <sup>#</sup>A. Mack, \*J.H. Larson, S.D. Bridgham, and G.A. Lamberti. 2006. Environmental controls of UV-B radiation in forested streams of northern Michigan. *Photochemistry and Photobiology* 82:781-786.
- 72. \*Evans-White, M.A., and **G.A. Lamberti**. 2006. Stoichiometry of consumer-driven nutrient recycling across nutrient regimes in streams. *Ecology Letters* 9:1186-1197.
- 73. \*Moerke, A.H., and G.A. Lamberti. 2006. Relationships between land use and stream ecosystems: a multistream assessment in southwestern Michigan. In: R.M. Hughes, L. Wang, and P.W. Seelbach (eds.) Landscape Influences on Stream Habitats and Biological Assemblages. *American Fisheries Society Symposium* 48:323-338.
- 74. \*Cordova, J.M., ^E.J. Rosi-Marshall, \*A.M. Yamamuro, and **G.A. Lamberti**. 2007. Quantity, controls and functions of large woody debris in Midwestern USA streams. *River Research and Applications* 23:21-33.
- 75. \*Larson, J.H., ^P.C. Frost, Z. Zheng, C.A. Johnston, S.D. Bridgham, D.M. Lodge, and **G.A.** Lamberti. 2007. Effects of upstream lakes on dissolved organic matter in streams. *Limnology and*

Oceanography 52:60-69.

- ^Frost, P.C., C.T. Cherrier, \*J.H. Larson, S.D. Bridgham, and G.A. Lamberti. 2007. Effects of dissolved organic matter and ultraviolet radiation on the accrual, stoichiometry and algal taxonomy of stream periphyton. *Freshwater Biology* 52:319-330.
- 77. \*Bauer, C.R., \*A.M. Bobeldyk, and **G.A. Lamberti**. 2007. Predicting habitat use and trophic interactions of Eurasian ruffe, round gobies, and zebra mussels in nearshore areas of the Great Lakes. *Biological Invasions* 9:667-678. <u>doi.org/10.1007/s10530-006-9067-8</u>
- \*Yamamuro, A.M., and G.A. Lamberti. 2007. Influence of organic matter on invertebrate colonization of sand substrate in a northern Michigan stream. *Journal of the North American Benthological Society* 26:244-252. <u>https://doi.org/10.1899/0887-</u> <u>3593(2007)26[244:IOOMOI]2.0.CO;2</u>
- 79. ^Chaloner, D.T., **G.A. Lamberti**, \*A.D. Cak, \*N.L. Blair, and R.T. Edwards. 2007. Inter-annual variation in the water chemistry and epilithon responses to Pacific salmon spawners in an Alaskan stream. *Freshwater Biology* 52:478-490. https://doi.org/10.1111/j.1365-2427.2006.01715.x
- \*Larson, J.H., ^P.C. Frost, D.M. Lodge, and G.A. Lamberti. 2007. Photodegradation of dissolved organic matter in forested streams of the northern Great Lakes region. *Journal of the North American Benthological Society* 26:416-425. <u>https://doi.org/10.1899/06-097.1</u>
- 81. <sup>+</sup>Hoellein, T.J., J.L. Tank, ^E.J. Rosi-Marshall, \*S.A. Entrekin, and **G.A. Lamberti**. 2007. Controls on spatial and temporal variation of nutrient uptake in three Michigan headwater streams. *Limnology and Oceanography* 52:1964-1977. https://doi.org/10.4319/lo.2007.52.5.1964
- \*Kulacki, K.J., ^D.T. Chaloner, \*D.M. Costello, +K.M. Docherty, \*J.H. Larson, ^R.J. Bernot, M.A. Brueseke, C.F. Kulpa Jr., and G.A. Lamberti. 2007. Aquatic toxicity and biodegradation of ionic liquids: A synthesis. *Chemistry Today* (Chimica Oggi) 25 (suppl. 6):32-36
- Johnston, C.A., B.A. Shmagin, ^P.C. Frost, C. Cherrier, \*J.H. Larson, G.A. Lamberti, and S.D. Bridgham. 2008. Wetland types and wetland maps differ in ability to predict dissolved organic carbon concentrations in streams. *Science of the Total Environment* 404:326-334. <u>https://doi.org/10.1016/j.scitotenv.2007.11.005</u>
- 84. \*Kulacki, K.J., and **G.A. Lamberti**. 2008. Toxicity of imidazolium ionic liquids to freshwater algae. *Green Chemistry* 10:104-110. https://doi.org/10.1039/B709289J
- 85. ^Tiegs, S.D., ^D.T. Chaloner, <sup>+</sup>P. Levi, \*J. Rueegg, J.L. Tank and **G.A. Lamberti**. 2008. Timber harvest transforms ecological roles of salmon in Southeast Alaska rainforest streams. *Ecological Applications* 18:4-11. (*Note: Cover Featured Article*) <u>doi.org/10.1890/07-0655.1</u>
- \*Bernot, R.J., and G.A. Lamberti. 2008. Indirect effects of a parasite on a benthic community: An experiment with trematodes, snails, and periphyton. *Freshwater Biology* 53:322-329. <u>https://doi.org/10.1111/j.1365-2427.2007.01896.x</u>
- \*Larson, J.H., ^P.C. Frost, and G.A. Lamberti. 2008. Variable toxicity of ionic liquids to Lemna minor and the influence of dissolved organic matter. Environmental Toxicology and Chemistry 27:676-681. doi.org/10.1897/06-540.1
- \*Cak, A.D., ^D.T. Chaloner, and G.A. Lamberti. 2008. Effects of spawning salmon on dissolved nutrients and epilithon in coupled stream-estuary systems of southeastern Alaska. *Aquatic Sciences* 70:69-178. doi.org/10.1007/s00027-008-8090-5
- 89. \*Bobeldyk, A.M., and **G.A. Lamberti**. 2008. A decade after invasion: Evaluating the continuing effects of rusty crayfish on a Michigan river. *Journal of Great Lakes Research* 34:265-275.

doi.org/10.3394/0380-1330(2008)34[265:ADAIET]2.0.CO;2

- 90. \*Entrekin, S.A., J.L. Tank, ^E.J. Rosi-Marshall, \*T.J. Hoellein, and G.A. Lamberti. 2008. Responses in organic matter accumulation and processing to an experimental wood addition in three headwater streams. *Freshwater Biology* 53:1642-1657. <u>doi.org/10.1111/j.1365-2427.2008.01984.x</u>
- 91. \*Cordova, J.M., ^E.J. Rosi-Marshall, J.L. Tank, and **G.A. Lamberti**. 2008. Coarse particulate organic matter transport in low-gradient streams of the Upper Peninsula of Michigan. *Journal of the North American Benthological Society* 27:760-771. <u>doi.org/10.1899/06-119.1</u>
- 92. \*Costello, D.M., and **G.A. Lamberti**. 2008. Non-native earthworms in riparian soils increase nitrogen flux into adjacent aquatic ecosystems. *Oecologia* 158:499-510. <u>doi.org/10.1007/s00442-008-1149-0</u>
- 93. \*Evans-White, M.A., and **G.A. Lamberti**. 2009. Direct and indirect effects of a potential aquatic contaminant on grazer-algae interactions. *Environmental Toxicology and Chemistry* 28:418-426. doi.org/10.1897/07-586.1
- 94. \*Janetski, D.J., ^D.T. Chaloner, S.D. Tiegs, and **G.A. Lamberti**. 2009. Pacific salmon effects on stream ecosystems: a quantitative synthesis. *Oecologia* 159:583-95. <u>doi.org/10.1007/s00442-008-1249-x</u>
- 95. \*Costello, D.M., <sup>#</sup>L.M. Brown, and **G.A. Lamberti**. 2009. Acute toxic effects of ionic liquids on zebra mussel (*Dreissena polymorpha*) survival and feeding. *Green Chemistry* 11:548-553. pubs.rsc.org/en/content/articlelanding/2009/gc/b822347e
- \*Entrekin, S.A., J.L. Tank, ^E.J. Rosi-Marshall, \*T.J. Hoellein, and G.A. Lamberti. 2009. Responses of secondary production by macroinvertebrates to large wood addition in three Michigan streams. *Freshwater Biology* 54:1741-1748. doi.org/10.1111/j.1365-2427.2009.02223.x
- 97. ^Tiegs, S.D., \*E.Y. Campbell, \*P.S. Levi, \*J. Rüegg, M.E. Benbow, ^D.T. Chaloner, R.W. Merritt, J.L. Tank and **G.A. Lamberti**. 2009. Separating physical disturbance and nutrient enrichment caused by Pacific salmon in stream ecosystems. *Freshwater Biology* 54:1864-1875. doi.org/10.1111/j.1365-2427.2009.02232.x
- 98. \*Costello, D.M., and **G.A. Lamberti**. 2009. Biological and physical effects of non-native earthworms on nitrogen cycling in riparian soils. *Soil Biology & Biochemistry* 41:2230-2235. doi.org/10.1016/j.soilbio.2009.08.007
- 99. Lamberti, G.A., D.T. Chaloner, and A.E. Hershey. 2010. Linkages among aquatic ecosystems. *Journal of the North American Benthological Society* 29:245-263. <u>https://doi.org/10.1899/08-166.1</u>
- 100. \*Bobeldyk, A.M., and **G.A. Lamberti**. 2010. Stream food web responses to a large omnivorous invader, *Orconectes rusticus* (Decapoda, Cambaridae). *Crustaceana* 83:641-657. <u>https://www.jstor.org/stable/27822641</u>
- 101. \*Shirey, P.D., and **G.A. Lamberti**. 2010. Assisted colonization under the U.S. Endangered Species Act. *Conservation Letters* 3:45-52. <u>doi.org/10.1111/j.1755-263X.2009.00083.x</u>
- 102. #Sena, D.W., \*K.J. Kulacki, D.T. Chaloner, and G.A. Lamberti. 2010. The role of the cell wall in the susceptibility of *Chlamydomonas reinhardtii* to ionic liquids. *Green Chemistry* 12:1066-1071. <u>doi.org/10.1039/C000899K</u>
- 103. \*Costello, D.M., ^S.D. Tiegs, and **G.A. Lamberti**. 2011. Do non-native earthworms in Southeast Alaska use streams as invasional corridors in watersheds harvested for timber? *Biological Invasions* 13:177-187. doi.org/10.1007/s10530-010-9800-1

- \*Janetski, D.J., A. H. Moerke, D.T. Chaloner, and G.A. Lamberti. 2011. Spawning salmon increase brook trout movements in a Lake Michigan tributary. *Ecology of Freshwater Fish:* 20: 209-219. doi.org/10.1111/j.1600-0633.2010.00479.x
- 105. \*Rüegg, J., ^S.D. Tiegs, D.T. Chaloner, \*P.S. Levi, J.L. Tank, and G.A. Lamberti. 2011. Salmon subsidies alleviate nutrient limitation of benthic biofilms in Southeast Alaska streams. Canadian Journal of Fisheries and Aquatic Sciences 68:277-287. doi.org/10.1139/F10-145
- 106. \*Shirey, P.A., and **G.A. Lamberti**. 2011. Regulate trade in rare plants. *Nature* 469:465-467. doi.org/10.1038/469465a
- 107. \*Campbell, E.Y., M.E. Benbow, ^S.D. Tiegs, J.P. Hudson, G. A. Lamberti, and R. W. Merritt. 2011. Timber harvest intensifies spawning-salmon disturbance of macroinvertebrates in Southeast Alaska streams. *Journal of the North American Benthological Society:* 30:49-59. <u>doi.org/10.1899/10-040.1</u>
- 108. ^Tiegs, S.D., <sup>+</sup>P.S. Levi, <sup>\*</sup>J. Rüegg, D.T. Chaloner, J.L. Tank, and G.A. Lamberti. 2011. Ecological effects of live salmon exceed those of carcasses during an annual spawning migration. *Ecosystems* 14:598-614. <u>doi.org/10.1111/j.1365-2427.2004.01213.x</u>
- Resh, V.H., M. Hannaford, J.K. Jackson, G.A. Lamberti, and P.K. Mendez. 2011. The biology of the limnephilid caddisfly *Dicosmoescus gilvipes* (Hagen) in Northern California and Oregon (USA) streams. *Zoosymposia* 5:413-419.
- 110. \*Kulacki, K.J., D.T. Chaloner, \*J.H. Larson, \*D.M. Costello, \*M.A. Evans-White, \*K.M. Docherty, ^R.J. Bernot, M.A. Brueseke, C.F. Kulpa Jr., and G.A. Lamberti. 2011. Proactive aquatic ecotoxicological assessment of room-temperature ionic liquids. *Current Organic Chemistry* 15:1918-1927. <u>doi.org/10.2174/138527211795703685</u>
- 111. <sup>+</sup>Levi<sup>,</sup> P.S., J.L. Tank, ^S.D. Tiegs, <sup>\*</sup>J. Rüegg, D.T. Chaloner, and **G.A. Lambert**i. 2011. Does timber harvest influence the dynamics of marine-derived nutrients in Southeast Alaska streams? *Canadian Journal of Fisheries and Aquatic Sciences* 68:1316-1329. <u>doi.org/10.1139/f2011-067</u>
- 112. <sup>+</sup>Collins, S.F., A.H. Moerke, D.T. Chaloner, <sup>\*</sup>D.J. Janetski, and **G.A. Lamberti**. 2011. Response of dissolved nutrients and periphyton to spawning Pacific salmon in three northern Michigan streams. *Journal of the North American Benthological Society* 30:831-839. <u>doi.org/10.1899/10-164.1</u>
- 113. \*Rüegg, J., D.T. Chaloner, \*P.S. Levi, J.L. Tank, ^S.D. Tiegs, and **G.A. Lamberti**. 2012. Environmental variability and the ecological effects of spawning Pacific salmon on stream biofilm. *Freshwater Biology* 57:129-142. doi.org/10.1111/j.1365-2427.2011.02703.x
- 114. \*Janetski, D.J., D.T. Chaloner, A.H. Moerke, R.R. Rediske, J.P. O'Keefe, and G.A. Lamberti. 2012. Resident fishes display elevated organic pollutants in salmon spawning streams of the Great Lakes. *Environmental Science & Technology* 46:8035-8043. <u>doi.org/10.1021/es301864k</u>
- 115. <sup>+</sup>Levi, P.S., J.L. Tank, ^S.D. Tiegs, \*J. Rüegg, D.T. Chaloner, and **G.A. Lambert**i. 2012. Does timber harvest influence the dynamics of marine-derived nutrients in Southeast Alaska streams? A reply to Jackson and Martin. *Canadian Journal of Fisheries and Aquatic Sciences* 69:1898-1901. <u>doi.org/10.1139/f2011-067</u>
- 116. <sup>+</sup>Hoellein, T.J., J.L. Tank, \*S.A. Entrekin, ^E.J. Rosi-Marshall, <sup>+</sup>M.L. Stephen, and G.A. Lamberti. 2012. Effects of a benthic habitat restoration on nutrient uptake and ecosystem metabolism in three headwater streams. *River Research and Applications* 28:1451-1461. <u>doi.org/10.1002/rra.1547</u>
- 117. \*Levi, P.S., J.L. Tank, \*J. Rüegg, \*D.J. Janetski, ^S.D. Tiegs, D.T. Chaloner, and G.A. Lamberti. 2013. Whole-stream metabolism response to spawning Pacific salmon in their native and introduced ranges. *Ecosystems* 16:269-283. <u>doi.org/10.1007/s10021-012-9613-4</u>

- 118. <sup>+</sup>Levi, P.S., J.L. Tank, ^S.D. Tiegs, D.T. Chaloner, and **G.A. Lamberti**. 2013. Biogeochemical transformation of a nutrient subsidy: salmon, streams, and nitrification. *Biogeochemistry* 113:643-655. <u>doi.org/10.1007/s10533-012-9794-0</u>
- 119. \*Reisinger, A.J., D.T. Chaloner, \*J. Rüegg, ^S.D. Tiegs, and G.A. Lamberti. 2013. Effects of Pacific salmon spawners on the isotopic composition of biota differ across Southeast Alaska streams. Freshwater Biology 58:938-950. doi.org/10.1111/j.1365-2427.2004.01213.x
- 120. \*Shirey, P.A., \*B.N. Kunycky, D.T. Chaloner, M.A. Brueseke, and **G.A. Lamberti**. 2013. Commercial trade of federally listed threatened and endangered plants in the United States. *Conservation Letters* 6:300-316. <u>doi.org/10.1111/conl.12031</u>
- 121. \*Janetski, D.J., D.T. Chaloner, A.H. Moerke, \*P.S. Levi, and G.A. Lamberti. 2014. Novel environmental conditions alter subsidy and engineering effects by introduced Pacific salmon. *Canadian Journal of Fisheries and Aquatic Sciences* 71:502-513. <u>doi.org/10.1139/cjfas-2013-0292</u>
- 122. \*Cooper, M.J., **G.A. Lamberti**, and D.G. Uzarski. 2014. Spatial and temporal trends in invertebrate communities of Great Lakes coastal wetlands, with emphasis on Saginaw Bay of Lake Huron. *Journal of Great Lakes Research Supplement* 40:168-182. <u>doi.org/10.1016/j.jglr.2013.12.003</u>
- 123. \*Rüegg, J., \*C.M. Currier, D.T. Chaloner, ^S.D. Tiegs, and **G.A. Lamberti**. 2014. Habitat influences Pacific salmon (*Oncorhynchus* spp.) tissue decomposition in riparian and stream ecosystems. *Journal of Aquatic Sciences* 76:623-632. <u>doi.org/10.1007/s00027-014-0359-2</u>
- 124. \*Bobeldyk, A.M., \*J. Rüegg, and **G.A. Lamberti.** 2015. Freshwater hotspots of biological invasions are a function of species-pathway interactions. *Hydrobiologia* 746:363-373. doi.org/10.1007/s10750-014-2009-z\_
- 125. \*Evans, N.T., C.W. Riley, and **G.A. Lamberti**. 2015. Culvert replacement enhances connectivity of stream fish communities in a Michigan drainage network. *Transactions of the American Fisheries Society* 144:967-976. <u>doi.org/10.1080/00028487.2015.1054519</u>
- 126. \*Evans, N.T., B.P. Olds, M.A. Renshaw, \*C.R. Turner, C.L. Jerde, A.R. Mahon, M.E. Pfrender, G.A. Lamberti, and D.M. Lodge. 2016. Quantification of mesocosm fish and amphibian species diversity via environmental DNA metabarcoding. *Molecular Ecology Resources* 16:29-41. doi.org/10.1111/1755-0998.12433
- 127. \*Cooper, M.J., G.M. Costello, S.N. Francoeur, and G.A. Lamberti. 2016. Nitrogen limitation of algal biofilms in coastal wetlands of Lakes Michigan and Huron. *Freshwater Science* 35:25-40. <u>doi.org/10.1086/684646</u>
- 128. \*Gerig, B.S., D.T. Chaloner, \*D.J. Janetski, R.A. Rediske, J.P. O'Keefe, A.H. Moerke, and G.A. Lamberti. 2016. Congener patterns of persistent organic pollutants establish the extent of contaminant biotransport by Pacific salmon in the Great Lakes. *Environmental Science & Technology* 50:554-563. doi.org/10.1021/acs.est.5b05091
- 129. <sup>+</sup>Yoo, B., B. Jing, S.E. Jones, **G.A. Lamberti**, Y. Zhu, J.K. Shah, and E.J. Maginn. 2016. Molecular mechanisms of ionic liquid cytotoxicity probed by an integrated experimental and computational approach. *Nature Scientific Reports* 6: 19889. <u>doi.org/10.1038/srep19889</u>
- \*Smith, D.L., \*M.J. Cooper, J.M. Kosiara, and G.A. Lamberti. 2016. Body burdens of heavy metals in Lake Michigan wetland turtles. *Environmental Monitoring and Assessment* 188:128-142. <u>doi.org/10.1007/s10661-016-5118-5</u>
- Olds, B.P., C.L. Jerde, M.A. Renshaw, <sup>+</sup>Y. Li, <sup>\*</sup>N. T. Evans, <sup>+</sup>C.R. Turner, K. Deiner, A.R. Mahon, M.A. Brueseke, <sup>\*</sup>P.D. Shirey, M.E. Pfrender, D.M. Lodge, and **G.A. Lamberti**. 2016. Estimating species richness using environmental DNA. *Ecology and Evolution* 6:4214-4226.

#### doi.org/10.1002/ece3.2186

- 132. \*Shirey, P.D. M.A. Brueseke, \*J.B. Kenny, and **G.A. Lamberti**. 2016. Long-term fish community response to a reach-scale stream restoration. *Ecology and Society* 21(3):11. <u>doi.org/10.5751/ES-08584-210311</u>
- Uzarski, D.G., and 26 others including G.A. Lamberti. 2017. Standardized measures of coastal wetland condition: Implementation at a Laurentian Great Lakes basin-wide scale. Wetlands 37:15-32. doi.org/10.1007/s13157-016-0835-7
- 134. \*Evans, N.T., \*P.D. Shirey, J.G. Wieringa, A.R. Mahan, and **G.A. Lamberti**. 2017. Comparative cost and effort of fish distribution detection via environmental DNA analysis and electrofishing. *Fisheries* 42:90-99. (*Note: Featured Cover Article*). <u>doi.org/10.1080/03632415.2017.1276329</u>
- 135. \*Vizza, C., \*W.E. West, S.E. Jones, <sup>#</sup>J.A. Hart, and **G.A. Lamberti**. 2017. Regulators of coastal wetland methane production and responses to simulated global change. *Biogeosciences* 14:431-446. doi.org/10.5194/bg-14-431-2017
- 136. \*Evans, N.T., \*Y. Li, M.A. Renshaw, B.P. Olds, K. Deiner, \*C.R. Turner, C.L. Jerde, D.M. Lodge, G.A. Lamberti, and M.E. Pfrender. 2017. Fish community assessment with eDNA metabarcoding: effects of sampling design and bioinformatic filtering. *Canadian Journal of Fisheries and Aquatic Sciences* 74:1362-1374. doi.org/10.1139/cjfas-2016-0306
- 137. \*Vizza, C., +J.A. Zwart, S.E. Jones, ^S.D. Tiegs, and **G.A. Lamberti**. 2017. Landscape patterns shape wetland pond ecosystem function from glacial headwaters to ocean. *Limnology and Oceanography* 62: S207-S221. <u>https://doi.org/10.1002/lno.10575</u>
- 138. Vanni, M.J., and 68 others including **G. A. Lamberti**. 2017. A global database of nitrogen and phosphorus excretion rates of aquatic animals. *Ecology* 98(5):1475 (online data paper). https://doi.org/10.1002/ecy.1792
- 139. <sup>#</sup>McGill, L.M., \*B.S. Gerig, D.T. Chaloner, and **G.A. Lamberti**. 2017. An ecosystem model for evaluating the effects of introduced Pacific salmon on contaminant burdens of stream-resident fish. *Ecological Modelling* 355: 39-48. <u>https://doi.org/10.1016/j.ecolmodel.2017.03.027</u>
- 140. \*Evans, N.T., and G.A. Lamberti. 2018. Freshwater fisheries assessment using environmental DNA: A primer on the method, its potential, and shortcomings as a conservation tool. *Fisheries Research* 197: 60-66. <u>https://doi.org/10.1016/j.fishres.2017.09.013</u>
- 141. \*Gerig, B.S., \*D.N. Weber, D.T. Chaloner, \*L.M. McGill, and **G.A. Lamberti**. 2018. Interactive effects of introduced Pacific salmon and brown trout on native brook trout: an experimental and modeling approach. *Canadian Journal of Fisheries and Aquatic Sciences* 75: 538-548. https://doi.org/10.1139/cjfas-2016-0502
- 142. \*Gerig, B.S., D.T. Chaloner, \*D.J. Janetski, A.H. Moerke, R.A. Rediske, J.P. O'Keefe, D. de Alwis Pitts, and **G.A. Lamberti**. 2018. Environmental context and contaminant biotransport by Pacific salmon interact to mediate the bioaccumulation of contaminants by stream-resident fish. *Journal of Applied Ecology* 75: 538-548 <u>https://doi.org/10.1111/1365-2664.13123</u>
- 143. \*Vizza, C., J.L. Pechal, M.E. Benbow, <sup>+</sup>J.M. Lang, D.T. Chaloner, S.E. Jones, and G.A. Lamberti. 2018. Nitrate amendment reduces biofilm biomass and shifts microbial communities in remote, oligotrophic ponds. *Freshwater Science* 37:251-263 <u>https://doi.org/10.1086/697897</u>
- 144. \*Li, Y., \*N.T. Evans, M.A. Renshaw, C.L. Jerde, B.P. Olds, \*A.J. Shogren, K. Deiner, D.M. Lodge, G.A. Lamberti, and M.E. Pfrender. 2018. Estimating fish alpha- and beta-diversity along a small stream with environmental DNA metabarcoding. *Metabarcoding and Metagenomics* 2:e24262 <u>https://doi.org/10.3897/mbmg.2.24262</u>

- 145. \*Cooper, M.J., **G.A. Lamberti**, and 10 others. 2018. An expanded fish-based index of biotic integrity for Great Lakes coastal wetlands. *Environmental Monitoring and Assessment* 190:580 <u>https://doi.org/10.1007/s10661-018-6950-6</u>
- 146. \*Gerig, B.S., #N.T. Hermann, D.T. Chaloner, and G.A. Lamberti. 2019. Using a dynamic bioenergetics-bioaccumulation model to understand mechanisms of uptake and bioaccumulation of salmon-derived contaminants by stream resident fish. *Science of the Total Environment* 652:633-642 <u>https://doi.org/10.1016/j.scitotenv.2018.10.149</u>
- 147. \*Gerig, B.S., D.T. Chaloner, A.H. Moerke, R. Greil, \*S.A. Cullen, K. Kapucinski, and G.A. Lamberti. 2019. Trophic ecology of Atlantic salmon (*Salmo salar*) in relation to other salmonine predators in Northern Lake Huron. *Journal of Great Lakes Research* 45:160-166 <u>https://doi.org/10.1016/j.jglr.2018.11.003</u>
- 148. #Hart, J.A., \*C. Vizza, <sup>+</sup>W.E. West, D.T. Chaloner, S.E. Jones, and G.A. Lamberti. 2019. Methane cycling contributes to distinct patterns in carbon stable isotopes of wetland detritus. Wetlands 39:361–370 <u>https://doi.org/10.1007/s13157-018-1119-1</u>
- 149. Kovalenko, K.E., L.B. Johnson, V.J. Brady, J.J.H. Ciborowski, M.J. Cooper, J.P. Gathman, G.A. Lamberti, A.H. Moerke, C.R. Ruetz III, and D.G. Uzarski. 2019. Hotspots and bright spots in functional and taxonomic fish diversity. *Freshwater Science* 38:480-490. <u>https://doi.org/10.1086/704713</u>
- Uzarski, D.G., and 20 others including G.A. Lamberti. 2019. Leveraging a landscape-level monitoring and assessment program for developing resilient shorelines throughout the Laurentian Great Lakes. Wetlands 29:1357-1366. <u>https://doi.org/10.1007/s13157-019-01139-w</u>
- 151. \*Larson, C.E., J.L. Pechal, \*B.S. Gerig, D.T. Chaloner, G.A. Lamberti, and M. E. Benbow. 2020. Microbial community response to a novel salmon resource subsidy. *Frontiers in Ecology and Evolution* 7:505. <u>https://doi.org/10.3389/fevo.2019.00505</u>
- 152. \*Shirey, P.D, \*J.B. Kenny, M.A. Brueseke, and **G.A. Lamberti**. 2020. Stream habitat provided by large wood at risk under drainage law. *Earth Surface Processes and Landforms* 45:1318–1324. https://doi.org/10.1002/esp.4828
- 153. \*Rüegg, J., D.T. Chaloner, F. Ballantyne, \*P.S. Levi, C. Song, J.L. Tank, ^S.D. Tiegs, and G.A. Lamberti. 2020. Understanding the relative roles of salmon spawner enrichment and disturbance: a high-frequency, multi-habitat field data and modeling approach. *Frontiers in Ecology and Evolution* 8:19. <u>https://doi.org/10.3389/fevo.2020.00019</u>
- 154. Benbow, M.E., J.P. Receveur, and **G.A. Lamberti**. 2020. Death and decomposition in aquatic ecosystems. *Frontiers in Ecology and Evolution* 8:17. <u>https://doi.org/10.3389/fevo.2020.00017</u>
- 155. \*Entrekin, S.A., ^E.J. Rosi, J.L. Tank, <sup>+</sup>T.J. Hoellein, and **G.A. Lamberti**. 2020. Quantitative food webs indicate modest increases in the transfer of allochthonous and autochthonous C to macroinvertebrates following a large wood addition to a temperate headwater stream. *Frontiers in Ecology and Evolution* 8:114. <u>https://doi.org/10.3389/fevo.2020.00114</u>
- 156. <sup>#</sup>Currier, C.M., D.T. Chaloner, \*J. Rüegg, ^S.D. Tiegs, D. D'Amore, and **G.A. Lamberti**. 2020. Beyond nitrogen and phosphorus subsidies: Pacific salmon (*Oncorhynchus* spp.) as potential vectors of micronutrients. *Aquatic Sciences* 82:50. <u>https://doi.org/10.1007/s00027-020-00725-z</u>
- 157. \*Gerig, B.S., \*D.J. Janetski, D.T. Chaloner, and **G.A. Lamberti.** 2020. Contaminant biotransport by Pacific salmon in the Great Lakes. *Frontiers in Ecology and Evolution* 8:199. https://doi.org/10.3389/fevo.2020.00199

- 158. #Hermann, N.T., D.T. Chaloner, \*B.S. Gerig, and **G.A. Lamberti**. 2020. Ecological consequences of Great Lakes salmon subsidies for stream-resident brook and brown trout. *Canadian Journal of Fisheries and Aquatic Sciences* 77:1758-1771. <u>https://doi.org/10.1139/cjfas-2020-0086</u>
- 159. \*McElroy, M.E., T.L. Dressler, G.C. Titcomb, E.A. Wilson, K. Deiner, T.L. Dudley, E.J. Eliason, \*N.T. Evans, S.D. Gaines, K.D. Lafferty, G.A. Lamberti, Y. Li, D.M. Lodge, M.S. Love, A.R. Mahon, M.E. Pfrender, M.A. Renshaw, K.A. Selkoe, and C.L. Jerde. 2020. Calibrating environmental DNA metabarcoding to conventional surveys for measuring fish species richness. *Frontiers in Ecology and Evolution* 8:276 <u>https://doi.org/10.3389/fevo.2020.00276</u>
- Lamberti, G.A., \*N.M. Levesque, M.A. Brueseke, D.T. Chaloner, and M.E. Benbow. 2020. Editorial: Animal mass mortalities in aquatic ecosystems: how common and influential? *Frontiers in Ecology* and Evolution 8:602225 <u>https://doi.org/10.3389/fevo.2020.602225</u>
- 161. <sup>+</sup>Marcantonio, R.A., <sup>+</sup>S.P. Field, P. Bai Sesay, and **G.A. Lamberti**. 2021. Identifying human health risks from precious metal mining in Sierra Leone. *Regional Environmental Change* 21:2 <u>https://doi.org/10.1007/s10113-020-01731-5</u>
- 162. <sup>#</sup>Houssein, F.A., \*K.E. O'Reilly, B.W. Peters, M.A. Brueseke, and **G.A. Lamberti**. 2021. Highfrequency photographic imaging provides novel insights into nesting bald eagle diet and opportunities for public engagement. *American Midland Naturalist* 186:122-135 <u>https://doi.org/10.1674/0003-0031-186.1.122</u>
- 163. "Bosio, S.F., \*P.D. Shirey, \*S.A. Entrekin, \*T.J. Hoellein, \*A.H. Moerke, ^E.J. Rosi, J.L. Tank, and G.A. Lamberti. 2021. Dynamics of large wood added to midwestern USA streams. *River Research* and Applications 37:843-857 <u>https://doi.org/10.1002/rra.3798</u>
- 164. \*Conard, W.M., \*B.S. Gerig, <sup>#</sup>L.M. Lovin, D.B. Bunnell, and **G.A. Lamberti**. 2021. Metal accumulation in Lake Michigan prey fish: Influence of ontogeny, trophic position, and habitat use. *Journal of Great Lakes Research* 47:1746-1755 <u>https://doi.org/10.1016/j.jglr.2021.08.019</u>
- 165. \*Vizza, C., S.E. Jones, #J.A. Hart, \*W.E. West, and G.A. Lamberti. 2022. Pond methane dynamics, from microbial communities to ecosystem budget, during summer in Alaska. *Limnology and Oceanography* 67:450–467 <u>https://doi.org/10.1002/lno.12003</u>
- 166. ^Miranda, D.A., G.F. Peaslee, \*A.M. Zachritz, and G.A. Lamberti. 2022. A worldwide evaluation of trophic magnification of per- and polyfluoroalkyl substances in aquatic ecosystems. *Integrated Environmental Assessment and Management* 18:1500-1512 <u>https://doi.org/10.1002/ieam.4579</u>
- 167. #Gentine, J.A., \*W.M. Conard, \*K.E. O'Reilly, and 8 others including G.A. Lamberti. 2022. Environmental predictors of phytoplankton chlorophyll-a in Great Lakes coastal wetlands. *Journal of Great Lakes Research* 48:929-934 <u>https://doi.org/10.1016/j.jglr.2022.04.015</u>
- 168. \*Conard, W.M., \*H.D. Whitehead, \*K.J. Harris, G.A. Lamberti, G.F. Peaslee, and A.A. Rand. 2022. Maternal offloading of per- and polyfluoroalkyl substances to eggs by Lake Michigan salmonids. *Environmental Science & Technology Letters* 9:937-942 <u>https://doi.org/10.1021/acs.estlett.2c00627</u>
- 169. \*O'Reilly, K.O., \*M.J. Cooper, P.S. Forsythe, C.J. Houghton, \*J.S. Shrovnal, J.J. Student, D.G. Uzarski, and G.A. Lamberti. 2023. Lakescape connectivity: Mobile fish consumers link Lake Michigan coastal wetland and nearshore food webs. *Ecosphere* 14 (2): e4333 <a href="https://doi.org/10.1002/ecs2.4333">https://doi.org/10.1002/ecs2.4333</a>
- 170. \*Brandão-Dias, P.F.P., D.M.C. Hallack, \*E.D. Snyder, J.L. Tank, D. Bolster, \*S. Volponi, A.J. Shogren, G.A. Lamberti, K. Bibby, and S.P. Egan. 2023. Particle size influences decay rates of environmental DNA in aquatic systems. *Molecular Ecology Resources* 23:756-770 <u>https://doi.org/10.1111/1755-0998.13751</u>

171. ^Miranda, D.A., \*A. Zachritz, \*H. Whitehead, S.R. Cressman, G.F. Peaslee, and G.A. Lamberti. Online prior to publication. Occurrence and biomagnification of perfluoroalkyl substances (PFAS) in Lake Michigan fishes. *Science of the Total Environment* 895, 164903 https://doi.org/10.1016/j.scitotenv.2023.164903

#### Papers Submitted/In Press

- 172. \*Conard, W.M., \*K.E. O'Reilly, \*C. Hartlage, and G.A. Lamberti. Online prior to publication. Widespread microplastic pollution in Indiana, USA, rivers. *River Research and Applications* 2023:1-10 <u>https://doi.org/10.1002/rra.4204</u>
- 173. \*Brandão-Dias, P.F.P., J.L. Tank, \*E.D. Snyder, U.H. Mahl, B. Peters, D. Bolster, A.J. Shogren, G.A. Lamberti, K. Bibby, and S.P. Egan. Online prior to publication. Suspended materials affect particle size distribution and removal of environmental DNA in flowing waters. *Environmental Science and Technology* 57:13161-13171. <u>https://doi.org/10.1021/acs.est.3c02638</u>
- 174. \*Snyder, E.D., J.L. Tank, \*P.F.P. Brandão-Dias, K. Bibby, A.J. Shogren, A.W. Bivins, B. Peters, #E.M. Curtis, D. Bolster, S.P. Egan, and G.A. Lamberti. Online prior to publication. Environmental DNA (eDNA) removal rates in streams differ by particle size under varying substrate and light conditions. *Science of the Total Environment* 903, 166469 https://doi.org/10.1016/j.scitotenv.2023.166469
- 175. \*Gerig, B.S., D.T. Chaloner, R.R. Rediske, G. Paterson, and **G.A. Lamberti**. Online prior to publication. Pacific salmon as vectors of environmental contaminants: An experimental test confirms synoptic surveys in natural streams. *Environmental Pollution* 336, 122355 <a href="https://doi.org/10.1016/j.envpol.2023.122355">https://doi.org/10.1016/j.envpol.2023.122355</a>
- 176. \*Zachritz, A.M, \*K.E. O'Reilly, <sup>#</sup>D.L. Smith, \*M.J. Cooper, <sup>#</sup>K. Schlaht, and **G.A. Lamberti.** In revision. Bioaccumulation of mercury in Lake Michigan painted turtles (*Chrysemys picta*). *Environmental Monitoring and Assessment*

#### **Books and Monographs**

- 177. Resh, V.H., **G.A. Lamberti**, E.P. McElravy, J.R. Wood, and J.W. Feminella. 1984. Quantitative methods for evaluating the effects of geothermal energy development on stream benthic communities at The Geysers, California. *Calif. Water Res. Center Contr. No. 190.* 57 pp.
- 178. Lamberti, G.A., and A.D. Steinman (editors). 1993. Research in Artificial Streams: Applications, Uses, and Abuses. *J. N. Am. Benthol. Soc.* 12:313-384.
- 179. Hauer, F.R., and **G.A. Lamberti** (editors). 1996. *Methods in Stream Ecology*. Academic Press, San Diego, CA. 674 pp.
- 180. Hauer, F.R., and **G.A. Lamberti** (editors). 2006. *Methods in Stream Ecology*, Second Edition. Elsevier, Amsterdam. 877 pp.
- 181. Hauer, F.R., and **G.A. Lamberti** (editors). 2017. *Methods in Stream Ecology*, Third Edition. Volume 1: Ecosystem Structure. Elsevier, London, UK. 494 pp.
- 182. Lamberti, G.A., and F.R. Hauer (editors). 2017. *Methods in Stream Ecology*, Third Edition. Volume 2: Ecosystem Function. Elsevier, London, UK. 362 pp.
- 183. Benbow, M.E., and G.A. Lamberti (editors). 2020. Death and Decomposition in Aquatic Ecosystems. Lausanne: Frontiers Media SA. 140 pp. <u>https://www.frontiersin.org/research-topics/8260/death-and-decomposition-in-aquatic-ecosystems#articles</u>

#### **Book Chapters and Invited Reviews**

- Lamberti, G.A., and J.W. Moore. 1984. Aquatic insects as primary consumers. Pp.164-195 In: V.H. Resh and D.M. Rosenberg (eds.). The Ecology of Aquatic Insects. Praeger Publishers, New York.
- 185. Eriksen, C.H., V.H. Resh, S.S. Balling, and G.A. Lamberti. 1984. Aquatic insect respiration. Pp. 27-37 In: R.W. Merritt and K.W. Cummins (eds.). An Introduction to the Aquatic Insects of North America. 2nd ed. Kendall-Hunt Publishers, Dubuque, IA.
- 186. Gregory, S.V., G.A. Lamberti, D.C. Erman, K.V. Koski, M.L. Murphy, and J.R. Sedell. 1986. Influence of forest practices on aquatic production. Pp. 233-255 In: E.O. Salo and T.W. Cundy (eds.). Streamside Management: Forestry and Fishery Interactions. Inst. Forest Resources, Univ. of Washington, Seattle.
- 187. Gregory, S.V., R.C. Wildman, L.R. Ashkenas, and G.A. Lamberti. 1990. The ecology and chemistry of caldera springs of Crater Lake National Park. Pp. 81-89 In: E.T. Drake, G.L. Larson, J. Dymond, and R. Collier (eds.) Crater Lake: An Ecosystem Study. Pacific Division of AAAS, San Francisco, CA.
- 188. Lamberti, G.A. 1993. Grazing experiments in artificial streams. Pp. 337-342 *In*: Lamberti, G.A., and A.D. Steinman (editors). 1993. Research in Artificial Streams: Applications, Uses, and Abuses. *J. N. Am. Benthol. Soc.* 12:313-384.
- Eriksen, C.H., V.H. Resh, and G.A. Lamberti. 1996. Aquatic insect respiration. Pp. 29-40 In: R.W. Merritt and K.W. Cummins (eds.). An Introduction to the Aquatic Insects of North America. 3rd ed. Kendall-Hunt Publishers, Dubuque, IA.
- 190. Lamberti, G.A. 1996. The role of periphyton in benthic food webs. Pp. 533-572 *In*: R.J. Stevenson, M.L. Bothwell, and R.L. Lowe (eds.). *Algal Ecology in Freshwater Benthic Ecosystems.* Academic Press, San Diego, CA.
- 191. McIntire, C.D., S.V. Gregory, A.D. Steinman, and G.A. Lamberti. 1996. Modeling benthic algal communities: an example from stream ecology. Pp. 669-704 In: R.J. Stevenson, M.L. Bothwell, and R.L. Lowe (eds.). Algal Ecology in Freshwater Benthic Ecosystems. Academic Press, San Diego, CA.
- 192. Lamberti, G.A., and S.V. Gregory. 1996. Transport and retention of CPOM. Pp. 217-229 *In*: F.R. Hauer and G.A. Lamberti (eds.). *Methods in Stream Ecology*. Academic Press, San Diego, CA.
- 193. Lamberti, G.A., and J.W. Feminella. 1996. Plant-herbivore interactions. Pp. 409-430 *In*: F.R. Hauer and G.A. Lamberti (eds.). *Methods in Stream Ecology*. Academic Press, San Diego, CA.
- 194. Steinman, A.D., and G.A. Lamberti. 1996. Biomass and pigments of benthic algae. Pp. 295-313 In: F.R. Hauer and G.A. Lamberti (eds.). Methods in Stream Ecology. Academic Press, San Diego, CA.
- 195. Hershey, A.E., and **G.A. Lamberti**. 1998. Stream macroinvertebrate communities. Pp. 165-195 *In:* R.J. Naiman and R.E. Bilby (eds.). *River Ecology and Management*. Springer, New York.
- 196. Hershey, A.E., and **G.A. Lamberti**. 2001. Aquatic insect ecology. Pp. 733-775 *In:* J.H. Thorp and A.P. Covich (eds.). *Ecology and Classification of North American Freshwater Invertebrates*. Academic Press, San Diego.
- 197. F.R. Hauer, C.N. Dahm, G.A. Lamberti and J.A. Stanford. 2003. Landscapes and ecological variability of rivers in North America: Factors affecting restoration strategies. Pp. 81-105 In: R.C. Wissmar and P.A. Bisson (eds.). Strategies for Restoring River Ecosystems: Sources of Variability and Uncertainty in Natural and Managed Systems. American Fisheries Society, Bethesda, MD.

- 198. Thorp, J.H., **G.A. Lamberti**, and A.F. Casper. 2005. St. Lawrence River Basin. Pp. 983-1028 *In:* A. Benke, and C.E. Cushing (eds.) *Rivers of North America*. Academic Press, San Diego, CA.
- Lamberti, G.A., and S.V. Gregory. 2006. CPOM transport, retention, and measurement. Pp. 273-289 In: F.R. Hauer and G.A. Lamberti (eds.). Methods in Stream Ecology, 2<sup>nd</sup> edition. Elsevier, Amsterdam.
- Lamberti, G.A., J.W. Feminella and C.M. Pringle. 2006. Primary producer-consumer interactions. Pp. 537-559 *In*: F.R. Hauer and G.A. Lamberti (eds.). *Methods in Stream Ecology*, 2<sup>nd</sup> edition. Elsevier, Amsterdam.
- Steinman, A.D., G.A. Lamberti and P.R. Leavitt. 2006. Biomass and pigments of benthic algae. Pp. 357-379 *In*: F.R. Hauer and G.A. Lamberti (eds.). *Methods in Stream Ecology*, 2<sup>nd</sup> edition. Elsevier, Amsterdam.
- Moerke, A.H. and G.A. Lamberti. 2006. Effects of watershed land use on stream ecosystems: A multi-stream assessment in the midwestern U.S. Pp. 323-338 *In:* R. M. Hughes, L. Wang, and P. W. Seelbach (eds.). Landscape influences on stream habitats and biological assemblages. American Fisheries Society Symposium 48, Bethesda, Maryland.
- 203. Bridgham, S.D., and **G.A. Lamberti**. 2009. Decomposition in wetlands. Pp. 326-346 *In:* E. Maltby and T. Barker (eds.). *The Wetlands Handbook*. Wiley-Blackwell, Oxford.
- 204. Chaloner, D.T., A.E. Hershey, and **G.A. Lamberti**. 2009. Benthic invertebrate fauna. Pp. 157-172 *In:* G.E. Likens (ed.) *Encyclopedia of Inland Waters* (Vol. 2). Elsevier, Amsterdam.
- 205. Kelly, D.W., G.A. Lamberti, and H.J. MacIsaac. 2009. The Laurentian Great Lakes as a case study of biological invasion. Pp. 205-225 In: R.P. Keller, D.M. Lodge, M.A. Lewis, and J.F. Shogren (eds.). Bioeconomics of Invasive Species: Integrating Ecology, Economics, Policy and Management. Oxford University Press.
- 206. Hershey, A.E., G.A. Lamberti, D.T. Chaloner, and R.M. Northington. 2010. Aquatic insect ecology. Pp. 659-694 *In:* J.H. Thorp and A. P. Covich (eds.). *Ecology and Classification of North American Freshwater Invertebrates* (Third Edition). Elsevier, New York, NY.
- 207. Suckow, M.A., and **G.A. Lamberti**. 2017. Institutional Animal Care and Use Committee. Pp. 65-74 In: M.A. Suckow and K.L. Stewart (eds.). *Principles of Animal Research for Graduate and Undergraduate Students*. Elsevier, London, UK.
- 208. Steinman, A.D., **G.A. Lamberti,** P.R. Leavitt, and D.G. Uzarski. 2017. Biomass and Pigments of Benthic Algae. Pp. 223–241 *In:* F.R. Hauer and G.A. Lamberti (eds.). *Methods in Stream Ecology: Volume 1: Ecosystem Structure*. Elsevier, London, UK.
- Peckarsky, B.P., and G.A. Lamberti. 2017. Invertebrate Consumer Resource Interactions. Pp. 379–398 In: F.R. Hauer and G.A. Lamberti (eds.). Methods in Stream Ecology: Volume 1: Ecosystem Structure. Elsevier, London, UK.
- Lamberti, G.A., S.A. Entrekin, N.A. Griffiths, and S.D. Tiegs, 2017. Coarse Particulate Organic Matter: Storage, Transport, and Retention. Pp. 55–69 *In:* G.A. Lamberti and F.R. Hauer (eds.). *Methods in Stream Ecology: Volume 2: Ecosystem Function*. Elsevier, London, UK.
- Buchwalter, D.B., V.H. Resh, G.A. Lamberti, and W. Verberk. 2019. Aquatic insect respiration. Pp. 43-64 In: R.W. Merritt, K.W. Cummins, and M.B. Berg (eds.). An Introduction to the Aquatic Insects of North America. 5<sup>th</sup> Edition. Kendall-Hunt Publishers, Dubuque, IA.
- 212. Lamberti, G.A., A.F. Casper, D.M. Costello, and D.J. Janetski. In press. St. Lawrence River Great Lakes Basin. Pp. xxx-xxx *In*: M.D. Delong, T.D. Jardine, A.C. Benke, and C.E. Cushing (eds.) Rivers of North America. 2<sup>nd</sup> Edition. Elsevier, Amsterdam, The Netherlands.

#### **Contributions to Symposium Proceedings**

- 213. Lamberti, G.A. and V.H. Resh. 1977. Spatial distribution patterns and sampling variability in the benthic chironomid fauna of Clear Lake, California. *Proc. Pap. Annu. Conf. Calif. Mosq. Control Assoc.* 45:222-225.
- 214. Lamberti, G.A. and V.H. Resh. 1980. Geothermal influences on the interactions of benthic algae, bacteria, and herbivorous insects in a northern California stream. p. 10-12 *In: North American Benthological Society Special Symposia*, March 26-28, 1980.
- 215. Lamberti, G.A. and V.H. Resh. 1985. Seasonal patterns of invertebrate predators and prey in Coyote Hills Marsh. *Proc. Pap. Ann. Conf. Calif. Mosq. Control Assoc.* 52:126-128.
- Lamberti, G.A., and S.V. Gregory. 1989. The importance of riparian zones to stream ecosystems. p. 24-26 *In*: C. Toole (ed.) *Proceedings of the Salmon-Trout Restoration Federation Conference*, Arcata, CA. California Sea Grant Publication UCSGEP-89-02.
- 217. Lamberti, G.A., S.V. Gregory, L.R. Ashkenas, R.C. Wildman, and A.D. Steinman. 1989. Influence of channel geomorphology on retention of dissolved and particulate matter in a Cascade Mountain stream. p. 33-40 *In*: D.L. Abell (ed.) *Proceedings of the California Riparian Systems Conference*. Gen. Tech. Rep. PSW-110, Pacific Southwest Forest and Range Experiment Station, USDA Forest Service, Berkeley, CA.
- 218. Gregory, S.V., **G.A. Lamberti**, and K.M.S. Moore. 1989. Influence of valley floor landforms on stream ecosystems. p. 3-8 *In*: D.L. Abell (ed.) *Proceedings of the California Riparian Systems Conference*. Gen. Tech. Rep. PSW-110, Pacific Southwest Forest and Range Experiment Station, USDA Forest Service, Berkeley, CA.

#### **Book Reviews**

- 219. Gregory, S. and **G. Lamberti**. 1985. *Periphyton of Freshwater Ecosystems* (R.G. Wetzel, ed.). *Bull. N. Am. Benth. Soc.* 2:69-70.
- 220. Lodge, D.M., **G.A. Lamberti**, J.M. Harding, and T.G. Horvath. 1993. *Zebra Mussels: Biology, Impacts, and Control.* (T.F. Nalepa and D.W. Schlosser, eds.). *J. N. Am. Benthol. Soc.* 12:302-304.
- 221. Lamberti, G.A. 1996. Scale is in the eye of the ecologist. Review of: *Aquatic Ecology: Scale, Pattern and Process.* (P.S. Giller, A.G. Hildrew, and D.G. Raffaelli, eds.). *Ecology* 77:565-567.
- 222. Lamberti, G.A. 2000. The Biology of Streams and Rivers. (P.S. Giller and B. Malmqvist). J. N. Am. Benthol. Soc. 19:758-760.

# **<u>GRANTS AND CONTRACTS</u>** (total funding over career >\$20M)

#### **Research Grants and Contracts**

- 1. Macroinvertebrate growth and production as influenced by beaver ponds in fluvial systems. USDA Forest Service. Role: PI. **\$21,000**, 1985-1986.
- 2. Fish habitat and riparian zone interactions: a basin perspective. U.S. Bureau of Land Management. Role: Co-PI (PI: S. Gregory). **\$165,000**, 1987-1989.
- 3. Cumulative impact of riparian cover on thermal loading, trophic processes, and juvenile steelhead trout in small streams of the John Day Basin. Water Resources Research Institute, U.S. Geological Survey. Role: PI. **\$33,000**, 1988-1990.

- 4. Plant-herbivore interactions in stream ecosystems. National Science Foundation. Role: Pl. **\$270,000**, 1990-1993.
- 5. REU Supplement: Plant-herbivore interactions in stream ecosystems. National Science Foundation. Role: PI. **\$5000**, 1991.
- 6. Establishment of a monitoring network for zebra mussels in streams of Indiana Dunes National Lakeshore. National Park Service. Role: PI. **\$3459**, 1992-1993.
- 7. Impact of zebra mussels on unionid clams of the St. Joseph River system in Indiana. Indiana Department of Natural Resources. Role: PI. **\$5043**, 1993-1994.
- 8. Invasion, impact, and interactions of zebra mussels and rusty crayfish in the St. Joseph River basin, Indiana-Michigan, and in streams of northern Wisconsin-Michigan. U.S. Environmental Protection Agency. Role: PI. **\$193,689**, 1992-1994.
- 9. Renewal: Invasion, impact, and interactions of zebra mussels and rusty crayfish in the St. Joseph River basin, Indiana-Michigan, and in streams of northern Wisconsin-Michigan. U.S. Environmental Protection Agency. Role: PI. **\$120,209**, 1994-1996.
- 10. Analysis of benthic macroinvertebrate communities in relation to stream type and habitat variables. USDA Forest Service. Role: PI. **\$2360**, 1994-1995.
- 11. Condition of stream channels and fisheries in the Ontonagon River system under current flow regimes of the Bond Falls Project. USDA Forest Service. Role: PI. **\$2400**, 1995-1996.
- 12. Limiting factors and ecological effects of zebra mussels in a southern Lake Michigan drainage. NOAA Sea Grant. Role: PI. **\$12,000**, 1996.
- 13. Analysis of river valley geomorphology using GIS. USDA Forest Service. Role: PI. **\$2400**, 1997-1998.
- 14. Potential effects of invading ruffe (*Gymnocephalus cernuus*) on benthic and pelagic ecosystems of the Great Lakes. NOAA Sea Grant. Role: PI. **\$366,513**, 1995-1999.
- 15. Dissertation research for R. S. Stelzer: Role of ecological stoichiometry in plant-herbivore interactions: a test in stream ecosystems. Role: PI. National Science Foundation. **\$4500**, 1997-1999.
- 16. Dissertation research for E. A. Strauss: Effects of dissolved organic carbon on nitrification rates in aquatic ecosystems. Role: PI. National Science Foundation. **\$9985**, 1997-1999.
- 17. Stream macroinvertebrate response to hydroelectric dam operations. USDA Forest Service. Role: PI. **\$5000**, 1999-2000.
- 18. Restoration of degraded midwestern streams: implications for water quality and biological communities. USGS-Water Resources. Role: PI. **\$75,000**, 1997-2001.
- 19. Primary production in the Kissimmee River floodplain system. South Florida Water Management District. Role: PI. **\$40,000**, 1997-2001.
- 20. Restoration of Indiana streams: A comparison of restoration strategies at a statewide level. USGS via Indiana Water Resources Research Center. Role: PI. **\$14,089**, 2000-2001.
- 21. Effects of stormwater filters on stream temperature. St. Joseph County Drainage Board, Indiana. Role: PI. **\$60,000**, 1997-2001.

- 22. Evaluation of restoration efforts in Cook's Run, Ottawa National Forest. USDA Forest Service. Role: PI. **\$8000**, 1998-2001.
- Linking marine-derived nutrients to stream ecosystem function using a 15N tracer addition combined with an experimental salmon carcass addition. NSF. Role: Co-PI. (PI: Jennifer Tank), \$26,414, 2001-2002.
- 24. Fishery response to restoration of Juday Creek on the University of Notre Dame campus. University of Notre Dame. Role: PI. **\$14,742**, 1998-2003.
- 25. Influence of marine nutrients from salmon on stream ecosystems. USDA NRI. Role: PI. **\$410,500**, 1999-2003.
- 26. Zebra mussels, round gobies, and Eurasian ruffe: predicting ecological impacts of the 'exotic triad' to improve control. Illinois-Indiana Sea Grant College Program. Role: PI. **\$116,535**, 2000-2003.
- 27. Determining the environmental impacts on aquatic ecosystems and biodegradability of new ionic liquids prior to widespread industrial use. NOAA-OAR. Role: PI. **\$250,000**, 2002-2004.
- 28. Factors limiting stream productivity in the Ottawa National Forest: a watershed perspective. USDA Forest Service. Principal Investigator, **\$23,730**, 2000-2005.
- 29. Interactive effects of climate change, wetlands, and dissolved organic matter on UV damage to aquatic foodwebs. USEPA-STAR. Role: Co-PI. (PI: Scott Bridgham). **\$895,307**, 2002-2006.
- 30. Large woody debris: Effects on stream processes and fish composition in streams of the Ottawa National Forest. USDA Forest Service. Role: PI. **\$22,500**, 2003-2005.
- 31. Toxicity of ionic liquids to a vascular plant (*Lemna minor*) in the presence of dissolved organic matter. Indiana Academy of Science. Role: PI. (Supported student: James Larson). **\$2307**, 2005.
- 32. Role of large woody debris in restoring stream ecosystem function in managed U.S. forests. USDA-NRI. Role: Co-PI. (PI: Jennifer Tank), **\$375,000**, 2002-2006.
- 33. Determining the environmental impacts on aquatic ecosystems and biodegradability of new ionic liquids prior to widespread industrial use. NOAA-OAR. Role: PI. **\$494,739**, 2004-2006.
- Pyridinium-based ionic liquids new non-volatile solvents for industrial applications. Indiana 21<sup>st</sup>-Century Research and Technology Fund. Role: Co-PI. (PI: Joan Brennecke), \$1,363,099, 2002-2007.
- 35. Determining the environmental fate, biodegradability, and impacts on aquatic ecosystems of new ionic liquids prior to widespread industrial use. NOAA-OAR. Role: PI. **\$475,900**, 2005-2007.
- 36. Ecology and food web structure of ponds on the West Copper River Delta, Alaska. USDA Forest Service. Role: Co-PI (PI: Martin Berg). \$45,000 (\$10,000 to ND). 10/01/07 04/30/08.
- 37. Ecological forecasting and risk analysis of nonindigenous species: strategic optimization using a bioeconomic approach. NSF-IRCEB. Role: Co-PI. (PI: David Lodge). **\$2,989,645**. 09/01/02 – 08/31/09.
- 38. Historical ecology of the Namekagon River system of Wisconsin. National Park Service and Wisconsin DNR. Role: PI. **\$15,000.** 7/1/08 5/31/09.
- 39. Dean John A. Knauss Marine Policy Fellowship (for Angela M. Bobeldyk). NOAA. Role: PI. **\$40,132**. 2/01/08 1/31/09.
- 40. The role of salmon-derived nutrients in managed U.S. forests. USDA-NRI. Role: PI. **\$420,000**. 04/01/06 09/30/09.

- 41. Ecology and food web structure of ponds on the West Copper River Delta, Alaska. USDA Forest Service. Role: Co-PI (PI: Martin Berg). \$45,000 (\$10,000 to ND). 11/01/08 5/31/09.
- 42. Impacts of introduced Pacific salmon on ecological communities of Great Lakes tributaries. Great Lakes Fishery Trust. Role: PI. **\$150,637**. 11/01/07 12/31/10.
- 43. DISSERTATION RESEARCH (for David Costello): Modeling the effects of invasive earthworms on watershed nitrogen dynamics. NSF-DEB. Principal Investigator. **\$9837**. 5/1/08 4/30/10.
- 44. IJC-UGLS Ecosystems Study Areas Data Coordination Team. International Joint Commission via Central Michigan University. Role: PI. \$35,000 (\$7500 to ND). 11/13/09 9/30/10.
- Contribution of freshwater wetland food webs to migratory bird diets in the Copper River Delta of Alaska. USDA Forest Service – Pacific Northwest Research Station. Role: PI. \$29,000. 9/1/09 – 8/31/11.
- Evaluating environmental DNA detection alongside standard fish sampling in Great Lakes coastal wetland monitoring. Illinois-Indiana Sea Grant College Program. Role: Co-PI (PI: David Lodge).
   \$10,000. 06/01/10 12/31/11.
- 47. Contaminant transport by introduced Pacific salmon to Great Lakes tributaries. Illinois-Indiana Sea Grant College Program. Role: Co-PI (PI: David Janetski). **\$6000**. 06/01/10 12/31/11.
- 48. Developing functional indicators of coastal wetland health. Illinois-Indiana Sea Grant College Program. Role: Co-PI (PI: Matthew Cooper). **\$6000.** 01/01/2011 12/31/2011
- 49. Fish monitoring approach for culvert replacement in the Huron-Manistee National Forest. USFS and Manistee County Highway Commission. Role: PI. **\$54,000.** 06/01/11 09/30/12.
- 50. Enhancing native brook trout in the Upper Great Lakes region. National Fish and Wildlife Foundation. Role: PI. **\$30,000**. 06/01/11 08/31/13.
- REU Supplement: An integrated molecular simulations, biophysical experimentation and toxicological assay approach for mechanistic understanding of toxic effects of ionic liquids. National Science Foundation - CBET. Role: Co-PI (PI: J. Shah). \$6000, 06/21/2012 - 09/30/2012
- 52. Climate change and ecology of the Copper River Delta, Alaska. National Fish and Wildlife Foundation. Role: Co-PI (PI: G. Reeves, USFS). \$100,000 (\$32,000 to ND). 01/01/2012 12/31/2012
- 53. George Melendez Wright Climate Change Fellowship from the National Park Service (to PhD student Patrick Shirey). Role: PI. **\$19,950**. 10/1/12 9/30/13.
- 54. Comparison of ecosystem function across tundra streams and lakes receiving Pacific salmon. U.S. Fish and Wildlife Service. Role: Co-PI (PI: J. Tank). **\$18,000**. 05/15/2012 03/31/2015
- 55. Climate change and ecology of the Copper River Delta, Alaska. National Fish and Wildlife Foundation. Co-PI (PI: M. Berg, LUC). \$200,000 (**\$65,000** to ND). 01/01/2013 6/30/2015.
- GLIC: Implementing Great Lakes Coastal Wetland Monitoring. USEPA Great Lakes Restoration Initiative. Role: Co-PI (PI: D. Uzarski, CMU). \$10,000,000 (\$538,837 to ND). 05/01/2010 – 04/30/2015. (NCE to 4/30/2016)
- Conservation of native fish communities in tributaries to the Great Lakes: Predicting the impacts of contaminants delivered by spawning Pacific Salmon. Great Lakes Fishery Trust. Role: Co-PI (PI: D. Chaloner). \$222,115. 01/01/2013 - 12/31/2014 (NCE to 12/31/2015)

- An integrated molecular simulations, biophysical experimentation and toxicological assay approach for mechanistic understanding of toxic effects of ionic liquids. National Science Foundation - CBET. Role: Co-PI (PI: J. Shah). \$346,820, 10/01/2011 - 09/30/2015 (NCE to 09/30/2016)
- Development of an environmental metagenetics approach for monitoring aquatic biodiversity. Department of Defense SERDP. Role: Co-PI (PI: D. Lodge). \$1,362,920. 05/01/2012 - 04/30/2016 (NCE to 04/30/2017)
- 60. Distribution and impacts of invasive *Elodea* on Copper River delta wetlands. USDA Forest Service. Role: Co-PI (PI: M. Berg, LUC). **\$10,895** to UND. 10/01/2015 09/30/2016
- 61. EPA STAR Fellowship for Brandon Gerig. USEPA. Role: PI. **\$84,000**. 08/16/2015 8/15/2017
- Quantifying Coastal Wetland Nearshore Linkages in Lake Michigan for Sustaining Sport Fishes. Illinois-Indiana Sea Grant College Program. Role: PI. **\$240,000.** 02/01/2014 - 01/31/2016 (NCE to 01/31/2017)
- 63. Novel diagnostics for biotransport of aquatic environmental contaminants. Advanced Diagnostics and Therapeutics SRI, University of Notre Dame. Role: PI. **\$25,509.** 01/01/2015 12/31/2017
- Incorporating environmental change in planning for healthy coastal ecosystems. Alaska Sea Grant (Prime: NOAA). Role: Co-PI (PI: A. Taylor, UAA). \$155,000 (\$19,000 to UND). 05/01/2016 – 04/30/2018
- Effects of land use type on abundance and type of microplastic pollution a contaminant of emerging concern in Indiana rivers. Indiana Water Resources Research Center (Prime: US Geological Survey). Role: PI. \$15,000. 03/01/2017 – 02/28/2018.
- 66. Exploring the Nexus of Water, Energy, and Food in a Changing Climate. Luksic Fund for UND-PUC Collaboration. Role: Co-PI (PI: A. Rocha). **\$19,000.** 10/30/2015 10/30/2018.
- 67. NOAA Knauss Marine Policy Fellowship for Katherine O'Reilly. NOAA-Sea Grant. Role: PI. **\$66,000**. 09/01/2017 01/31/2019.
- 68. Independent Science Advisory Panel for Missouri River Recovery Implementation Committee. Oak Ridge Associated Universities. Role: PI. **\$30,000 50,000/yr** (variable). 11/1/2014 12/31/2019.
- 69. Distribution and Impacts of Invasive Elodea on Copper River Delta Wetlands. Loyola University of Chicago (Prime: USDA / US Forest Service). Role: PI. **\$37,895**. 10/01/2015 04/30/2020.
- 70. NSF IPA Assignment for Dr. Gary A. Lamberti. National Science Foundation DEB. Role: PI. \$330,849 (Sponsor: **\$248,964**). 10/13/2020
- 71. Coastal Wetland Monitoring: Continued Implementation by the GLCWC. USEPA. Role: Co-PI (PI: D. Uzarski). \$10,000,000 (\$218,059 to ND). 10/01/2015 09/30/2020 (NCE to 09/30/2021). 10/12/2021.
- 72. Effects of Nutrient Loading on PFAS Bioaccumulation in Aquatic Food Webs. U.S. Geological Survey IWRRC. Role: PI. **\$25,000**. 03/01/2022 02/28/2023.
- A Survey of Southern Lake Michigan Sportfish for Per- and Polyfluoroalkyl Substances (PFAS) An Emerging Contaminant in the Great Lakes. NOAA – Illinois-Indiana Sea Grant. Role: PI. \$160,000. 02/01/2020 – 01/31/2023.
- Per- and Polyfluoroalkyl Substances (PFAS) An Emerging Environmental and Human Health Concern for the Great Lakes? U.S. Geological Survey – IWRRC. Role: PI. \$250,000. 05/01/2020 – 04/30/2023.

75. NSF IPA Assignment for Dr. Gary A. Lamberti. National Science Foundation – DEB. Role: PI. \$335,873 per year (Sponsor: **\$252,909 per year**). 10/13/2020 – 10/12/2022.

Active Grants and Contracts

- Impacts of Herbicide Treatment for Invasive Elodea on Water Quality and Planktonic Communities in Copper River Delta Wetlands of Alaska. USDA Forest Service, Pacific Northwest Research Station. Role: Pl. ~\$25,000 per year. 07/01/2019 - 12/31/2023.
- Predicting eDNA transport and degradation in flowing waters: Application of a conservation tool using integrated experimental, field, and modeling approaches. US Department of Defense – SERDP. Role: Co-PI (PI: J. Tank). \$1,499,999. 08/21/2019 – 08/21/2023.
- To Control or Eradicate? The Influence of *Elodea* on Sockeye Salmon in Eyak Lake, Cordova, AK. National Fish and Wildlife Foundation. Role: Co-PI (PI: J. Bellmore). \$127,078 (\$62,742 to ND). 6/01/2021 – 5/31/2024.
- 79. Coastal Wetland Monitoring: Continued Implementation by the GLCWC. USEPA. Role: Co-PI (PI: D. Uzarski). \$10,000,000 **(\$207,300** to ND). 10/01/2020 09/30/2025.
- 80. Introduced Salmon as Vehicles of PFAS Transport in Lake Michigan Tributaries. Eppley Foundation. Role: PI. **\$27,500**. 7/01/2022 06/30/2023
- 81. Trophic and tissue distribution of PFAS in native Lake Michigan fishes. Great Lakes Fishery Trust. Role: PI. **\$313,108**. 03/01/2023 02/31/2025.
- Occurrence of PFAS in water and sediment from the Indiana coastal zone. Role: Co-PI (PI, D. Miranda). Indiana Department of Natural Resources Lake Michigan Coastal Program (via NOAA).
   \$148,226. 09/01/2023 02/28/2025.
- 83. Quantifying PFAS distribution in coastal Lake Michigan tributaries. NOAA Illinois-Indiana Sea Grant. Role: PI. **\$199,510**. 02/01/2024 01/31/2026.
- 84. Tracking PFAS accumulation and transfer in Lake Michigan using molecular tools. USGS-IWRRC. Role: Co-PI (PI: D. Miranda). **\$278,999**. 01/01/2024 12/31/2025 [Pending]
- Drivers of Antimicrobial Resistance within Diverse Aquaculture Systems. USDA-NIFA. Role: Co-PI (PI: K. Bibby). \$1,000,000. 06/01/2024 – 05/31/2027 [Pending]

#### Instructional and Educational Grants

- Environmental stress in ecosystems: linking ecology and engineering. National Science Foundation; Graduate Research Training (GRT) Program. Role: Principal Investigator. \$562,500. 09/01/1995 – 08/31/2000.
- Risk assessments of novel chemicals in the environment. U.S. Department of Education Graduate Assistance in Areas of National Need (GAANN). Role: Co-Principal Investigator (PI, Joan Brennecke). \$497,850. 09/01/2001 – 08/31/2006.
- 88. IGERT: Global Linkages of Biology, Environment, and Society (GLOBES). National Science Foundation. Role: Co-Principal Investigator (PI, Jeffrey Feder), **\$3,387,561**. 09/01/2005 08/31/2012.
- 89. Practicum in Field Environmental Biology: Galapagos Islands. UND Center for Social Concerns Course Development Grants. Role: PI. **\$2500**. 07/01/2016 – 6/30/2017.