

Allison Niggemyer Evans

Department of Microbiology
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EDUCATION

Ph.D. (2016) in Fisheries Science, Oregon State University, Corvallis, OR, Department of Fisheries and Wildlife. Dissertation title: The ecophysiology of Thiamine Deficiency Complex: Evaluating sources of thiaminase in Great Lakes food webs

M. Sc. (2001) in Environmental Science (Microbial Ecology focus), University of Idaho, Moscow, ID, Program in Environmental Science. Thesis title: Isolation and characterization of a novel As(V) reducing bacterium: Implications for arsenic mobilization and the genus *Desulfitobacterium*

B.A. (1998) in Biology and Music with honors (*summa cum lauda*), DePauw University, Greencastle, IN.

PROFESSIONAL EXPERIENCE

Instructor: Department of Microbiology, Oregon State University, Corvallis, OR (Sept 2017-present)

Postdoctoral Researcher: Department of Fisheries and Wildlife; Oregon State University, Corvallis, OR (Oct 2016 - present)

Instructor: Department of Biology, University of Oregon; Oregon Institute of Marine Biology; Charleston, OR (June 2017-Aug 2017).

Instructor / Graduate Research Assistant / Graduate Teaching Assistant: Oregon State University, Corvallis, OR (Sept 2007 - Sept 2016): For a detailed list of my teaching experience, please see "*Teaching Experience*" on pg 2.

Fishery Research Program Associate: Great Lakes Fishery Commission, Ann Arbor, MI (July 2003- Aug 2007)

Associate Environmental Scientist: Surface Water Resources, Inc., Sacramento, CA (June 2002-July 2003)

Environmental Scientist: Surface Water Resources, Inc., Sacramento, CA (November 2001-May 2002)

Graduate Research Assistant: University of Florida, Gainesville, FL (January 2000-September 2001): Department of Molecular Genetics and Microbiology, College of Medicine: Laboratory of R. Frank Rosenzweig

- Characterized reductive microbial transformations of arsenic, selenium, sulfate, and chlorinated organics using a novel arsenate-reducing bacterium.
- Amplified the *E. coli* genome for use in construction of microarrays for gene expression profiling analysis.
- Expanded understanding of medical microbiology, cancer biology, virology, mechanisms of drug action, and biotechnology applications to medical research (use of ribozymes and AAV-mediated gene therapy) through attendance at departmental research colloquium and journal clubs.

Graduate Research and Teaching Assistant: University of Idaho, Moscow, ID (June 1998-December 1999): Environmental Science Program: Laboratory of R. Frank Rosenzweig

- Cultured, isolated, and characterized a novel arsenate-reducing bacterium from the sediments of Lake Coeur d'Alene, Idaho.
- Investigated bacterial community diversity in metalloids-contaminated sediments through use of a sequence-sensitive method of DNA separation, DGGE.
- Prepared and analyzed water and sediment samples for chemical and water quality-related parameters.

Summer Research Fellow: Fred Hutchinson Cancer Research Institute Summer Undergraduate Research Program, Seattle, WA (June 1997-Aug. 1997): Laboratory of Michael Emerman

- Gained experience using laboratory techniques including PRC, RT-PCR, cloning, restriction digests, sequencing, and tissue culture.
- Investigated the Fas system as a mechanism for cell death during HIV infection using deletion constructs to identify potential regions of protein-protein interactions.

Laboratory Intern: Graduate School of Biomedical Sciences at the University of Texas, Houston, TX (June 1996-August 1996, January 1996): Laboratory of Craig Hanis

- Participated in genetic research exploring the causes of Adult Onset (Type II) Diabetes
 - Learned laboratory techniques including the PCR, the use of YAC libraries, and SSCP.
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TEACHING EXPERIENCE

| Course Number | Year | Course Title | Institution | Role | Credits (Contact hours per week) | Number of Students | Delivery Method |
|---------------|-----------|--|----------------|--|----------------------------------|--------------------|---------------------------------------|
| MB 303 | 2018 | General Microbiology Lab | OSU | Instructor | 2 (4) | 48 | On campus |
| MB 230 | 2017 | Introductory Microbiology | OSU | Instructor | 3 (3) | 140 | On campus |
| BI 457 | 2017 | Biology of Fishes | U of O | Instructor | 8 (24) | 8 | Field, lab, lecture, and experiential |
| FW476/576 | 2017 | Fish Physiology | OSU | Instructor of Record | 4 | 18 | Ecampus with lab |
| FW471/571 | 2017 | Environmental Physiology of Fishes | OSU | Teaching Assistant | 4 (6) | 18 | On campus with lab |
| FW476/576 | 2016 | Fish Physiology | OSU | Instructor of Record | 4 | 26 | Ecampus with lab |
| FW476/576 | 2015 | Fish Physiology | OSU | Instructor of Record | 4 | 11 | Ecampus with lab |
| FW473/573 | 2015 | Fish Ecology | OSU | Instructor of Record | 3 | 11 | Ecampus with lab |
| FW475 | 2015 | Animal Behavior | OSU | Teaching Assistant | 3 | 50 | Ecampus |
| FW321 | 2014 | Applied Community and Ecosystem Ecology | OSU | Teaching Assistant | 3 (3) | 25 | On campus |
| FW473 | 2013 | Fish Ecology | OSU | Teaching Assistant | 4 (9) | 25 | On campus with lab |
| FW473 | 2012 | Fish Ecology | OSU | Teaching Assistant | 4 (9) | 25 | On campus with lab |
| FW445/545 | 2009 | Ecological Restoration | OSU | Teaching Assistant | 4 (3) | 40 | On campus |
| FW454/554 | 2009 | Fishery Biology (<i>WIC course</i>) | OSU | Instructor of Record | 4 | 18 | Ecampus with lab |
| FW454/554 | 2009 | Fishery Biology (<i>WIC course</i>) | OSU | Teaching Assistant | 4 (4) | 20 | On campus with lab |
| FW323 | 2009 | Management Principles of Pacific Salmon in the Northwest | OSU | Instructor of Record | 3 | 16 | Ecampus |
| BIO201 | 1998-1998 | Introductory Biology for Majors | Univ. of Idaho | Teaching Assistant & Head Teaching Assistant | 4 (8) | 200 | On campus with lab |

PROFESSIONAL DEVELOPMENT RELATED TO TEACHING

Developing an Online Course: E-campus Faculty Development Training, Oregon State University, Corvallis, OR (Summer 2017)

- Completed 6-week intensive training course covering pedagogy and delivery techniques for on-line college courses. Topics included developing learning outcomes, course development planning, assessment (formative and summative), content development for the online learning environment, delivery techniques, accessibility, learner engagement, course administration in Canvas, best practices for online teaching, and time management strategies.

Survival Skills for Instructors: Center for Teaching and Learning, Oregon State University, Corvallis, OR (November 2008)

- Participated in a workshop designed to teach new instructors best practices for use in classrooms. Topics included effective teaching methods, creating a productive teaching/learning environment, discipline, and student motivation.

7th Biennial Conference on University Education in Natural Resources: Oregon State University, Corvallis, OR (March 13-15, 2008)

- Attended a variety of presentations designed to showcase advances in education methods used for fields of study in natural resources. Topics ranged from practical elements such as syllabus design to case studies describing non-traditional methods for engaging students in natural resources fields.

Classroom Assessment Techniques: Center for Teaching and Learning, Oregon State University, Corvallis, OR (March 2008)

- Participated in a workshop designed to teach instructors about the purpose of classroom assessment, how assessment can be used to improve teaching, and the types of assessment techniques available.

Success in the College Classroom: Oregon State University, Corvallis, OR (January-March 2008)

- Participated in a 10-week course designed to train graduate students in the sciences to become effective college teachers.
- Gained experience in developing syllabi, articulating learning outcomes, teaching to varied learning styles, developing lectures, creating learner-centered activities, managing groups in a classroom, handling behavioral difficulties, engaging students, developing distance education course; conducting assessment; documenting teaching effectiveness, and developing a teaching philosophy.

FUNDING RELATED TO COURSE DEVELOPMENT

- E-campus Course Revision (\$4,000): Revision of Fish Physiology (FW476/576) with lab for Ecampus. Oregon State University. (2017-2018). Revised course due end of Winter 2018. [ANE role: wrote proposal and is currently conducting all course development work.]

DIRECTED STUDENT MENTORSHIP

- Carrie Kozel: MS, University of Vermont. Research topic: Can early feeding in lake trout fry ameliorate thiamine deficiency? (2015-2017)
 - Served as an academic and professional advisor to Carrie during her time as an MS student
- Saturday Academy Apprenticeships in Science and Engineering (Portland, OR):
 - Developed mentorship plan for high school students interested in science. Mentored two high school students in Heppell lab for 8 weeks in each of two summers. Responsibilities included project development, research mentorship and coordination, permitting, data analysis, and professional development (Oregon State University: Summers 2008 and 2009).

PUBLIC OUTREACH

- Great Lakes Aquatic Food Chain: 60 minute presentation to elementary and middle school science classes (Waukesha STEM Academy, Waukesha, WI: October 2011; Green Springs Elementary School, Green Springs, OH: January 2005).
 - Guest Presentation: Zooplankton and their shapes: 30 minute presentation to 1st graders (Oregon Hatchery Research Center: May 2011).
 - Winter Wonderings: Developed a lecture describing scientific research and activities focused on conservation for gifted and talented 3rd and 4th grade students (Oregon State University: February 2009).
 - Student Mentor for SMILE (Science and Math Investigative Learning Experiences) Program: supervised rural students in a math and science enrichment program; project included videotaping a public service announcement, poster development, and production of a puppet show (Oregon State University: April 2008).
 - Public education: Educated the public about the Great Lakes Fishery Commission's sea lamprey control program by answering questions at boat shows and manning educational booths (throughout Great Lakes Basin: 2002-2007).
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PEER-REVIEWED PUBLICATIONS

Microbial:

- Richter, C.A., **Evans, A.N.**, Wright-Osment, M.K., Zajicek, J.L., Heppell, S.A., Riley, S.C., Krueger, C.C., and D.E. Tillitt. 2012. *Paenibacillus thiaminolyticus* is not the cause of thiamine deficiency impeding lake trout recruitment in the Great Lakes. Canadian Journal of Fisheries and Aquatic Sciences 69:1056-1064. DOI: [10.1139/f2012-043](https://doi.org/10.1139/f2012-043)
- Cummings, D.E., Snoeyenbos-West, O., Newby, D.T., **Niggemyer, A.M.**, Lovley, D.R., Achenbach, L.A., and R.F. Rosenzweig. 2003. Diversity of geobacteraceae species inhabiting metal-polluted freshwater lake sediments ascertained by 16S rDNA analyses. Microbial Ecology. 46(2):257-269. DOI: [10.1007/s00248-005-8002-3](https://doi.org/10.1007/s00248-005-8002-3)
- Niggemyer, A.**, Spring, S., Stackebrandt, E. and R F. Rosenzweig. 2001. Isolation and characterization of a novel As(V) reducing bacterium: Implications for arsenic mobilization and the genus *Desulfitobacterium*. Applied and Environmental Microbiology. 67 (12): 5568-5580. DOI: [10.1128/AEM.67.12.5568-5580.2001](https://doi.org/10.1128/AEM.67.12.5568-5580.2001)
- Riley, S.C., Munkittrick, K.R., **Evans, A.N.**, and C.C. Krueger. 2008. Understanding the ecology of disease in Great Lakes fish populations. Aquatic Ecosystem Health and Management 11: 321-334. DOI: [10.1080/14634980802301638](https://doi.org/10.1080/14634980802301638)

Fisheries, Physiology, and Ecology:

- Eiler, J.H., Peterson, J.T., **Evans, A.N.**, and C.B. Schreck. A tough trip home: Factors affecting the spawning migration of wild Chinook salmon *Oncorhynchus tshawytscha* returning to a large, free-flowing river basin. PLoS ONE. *Accepted with minor revisions*.
- Arnold, L. M., W. D. Smith, P. D. Spencer, **A N. Evans**, S. A. Heppell, and S. S. Heppell.. *In press*. The role of maternal age and context-dependent maternal effects in the offspring provisioning of a long-lived marine teleost. Royal Society Open Science.
- Ladago, B.J., Marsden, J.E., and **A. N. Evans**. 2016. Early feeding by lake trout fry. Transactions of the American Fisheries Society. 145:1-6. DOI: [10.1080/00028487.2015.1073622](https://doi.org/10.1080/00028487.2015.1073622)
- Eiler, J.H., **Evans, A.N.**, and C.B. Schreck. 2015. Migratory patterns of Chinook salmon *Oncorhynchus tshawytscha* returning to a large, free-flowing river basin. PLoS ONE 10(4): e0123127. DOI: [10.1371/journal.pone.0123127](https://doi.org/10.1371/journal.pone.0123127)
- Riley, S.C., Rinchar, J., Honeyfield, D. C., **Evans, A.N.**, and L. Begnoche. 2011. Increasing thiamine concentrations in lake trout eggs from lakes Huron and Michigan coincide with low alewife abundance. North American Journal of Fisheries Management 31: 1052-1064. DOI: [10.1080/02755947.2011.641066](https://doi.org/10.1080/02755947.2011.641066)
- Albins, M, **Evans, A.**, Ismail, G., Neilson, B., Pusack, T., Schemmel, E., Smith, W., Stoike, S., Li, H.W., and D.L.G. Noakes. 2011. Can humans coexist with fishes? A review of Gene S. Helfman. 2007. Fish conservation: A guide to understanding and restoring global aquatic biodiversity and fishery resources. Environmental Biology of Fishes. Published Online First: 6 September 2011. DOI: [10.1007/s10641-011-9866-3](https://doi.org/10.1007/s10641-011-9866-3)
- Evans, A.N.**, Neilson, B.J., Markle, D.F., and S.A. Heppell. 2009. Threatened fishes of the world: *Deltistes luxatus* (Cope, 1879) (Catostomidae). Environmental Biology of Fishes 86: 401-402. DOI: [10.1007/s10641-009-9530-3](https://doi.org/10.1007/s10641-009-9530-3)
- Tillitt, D.E., Riley, S.C., **Evans, A.N.**, Nichols, S.J., Zajicek, J.L., Rinchar, J., Richter, C.A. and C.C. Krueger. 2009. Dreissenid mussels from the Great Lakes contain elevated thiaminase activity. Journal of Great Lakes Research. 35: 309-312. DOI: [10.1016/j.jglr.2009.01.007](https://doi.org/10.1016/j.jglr.2009.01.007)
- Riley, S.C. and **A.N. Evans**. 2008. Phylogenetic and ecological characteristics associated with thiaminase activity in Laurentian Great Lakes fishes. Transactions of the American Fisheries Society. 37 (1):147-157. DOI: [10.1577/T06-210.1](https://doi.org/10.1577/T06-210.1)

MANUSCRIPTS IN PREPARATION

- Evans, A. N.**, J. L. Zajicek, S. A. Heppell, S. C. Riley, C. C. Krueger, and D. E. Tillitt. Thiaminase activity in Great Lakes zooplankton is not related to zooplankton community composition. Target journal: Limnology and Oceanography.
- Evans, A. N.**, J. L. Zajicek, S. A. Heppell, S. C. Riley, C. C. Krueger, and D. E. Tillitt. The relationship of thiaminase activity among Great Lakes fishes to environmental variables. Target journal: Journal of Great Lakes Research.
- Evans, A. N.**, J. Rinchar, J. L. Zajicek, S. A. Heppell, S. C. Riley, C. C. Krueger, and D. E. Tillitt. Thiaminase activity in planktivorous fishes in the Great Lakes is not related to multiple measures of their diet. Target journal: Freshwater Biology.
- Evans, A. N.**, C. A. Richter, C.A., J. L. Zajicek, S. A. Heppell, S. C. Riley, C. C. Krueger, and D. E. Tillitt. *De novo* synthesis the thiaminase in vertebrates: Definitive proof in zebrafish and the case for *de novo* synthesis by alewife. Target journal: Comparative Biochemistry and Physiology – Part B: Biochemistry and Molecular Biology.
- Evans, A. N.**, W. Gerth, W., L. Wyss, and C. D. Rogers. The ecology and expanded distribution of *Dumontia oregonensis*, the sole member of a primitive cladoceran family. Target journal: Journal of Crustacean Biology.
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GRANTSMANSHIP

- Great Lakes Fishery Commission (\$74,066): Are all eggs created equal?: An evaluation of variability in lake trout egg thiamine allocation. (2015-2016) Heppell, S.A., **Evans, A.N.** and S.C. Riley. [ANE role: primary proposal author]
- Great Lakes Fishery Commission (\$139,501): Can early feeding in lake trout fry ameliorate thiamine deficiency? (2012-2014) Marsden, J. E., Rinchar, J., and **A. N. Evans**. [ANE role: secondary proposal author, responsible for experimental design]
- Great Lakes Fishery Trust (\$351,864): Characterizing sources of thiaminase in Great Lakes food webs: Assessing *de novo* production of thiaminase by fish. (2010-2015) Heppell, S.A., **Evans, A.N.**, Richter, C.A., Zajicek, J., Wright-Osment, M., Riley, S.C., and D.E. Tillitt. [ANE role: primary proposal author]
- Great Lakes Fishery Commission (\$114,000): Food web dynamics and Thiamine Deficiency Complex: Identifying trophic pathways. (2006-2009) Riley, S.C., **Niggemyer, A.M.**, Rinchar, J., Nichols, S.J., Richter, C.A., Tillitt, D.E., and C.C. Krueger. [ANE role: primary proposal author]
- Great Lakes Fishery Trust (\$257,800): Identifying trophic pathways associated with Thiamine Deficiency Complex in Great Lakes food webs. (2006-2009) Riley, S.C., **Niggemyer, A.M.**, Rinchar, J., Nichols, S.J., Richter, C.A., Tillitt, D.E., and C. C. Krueger. [ANE role: primary proposal author]
- Oregon State University Research Equipment Reserve Fund (\$7,181): Leica S8 APO Stereomicroscope, imaging software, and Dell Optiplex 755 computer. (2008) Heppell, S.A., and **A.N. Evans**. [ANE role: primary proposal author]
- Metals in the Environment-Research Network (\$25,000): The Role of Bacteria in the Mobilization of Arsenic from Mine-Impacted Sediments (2001-2004). Pls: Palace, V, and R. F. Rosenzweig. [ANE role: authorship of introduction and methods]
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RESEARCH PRESENTATIONS

Microbial:

- Evans, A.N.**, Richter, C.A., Wright-Osment, M.K., Zajicek, J.L., Heppell, S.A., Riley, S.C., Krueger, C.C., and D.E. Tillitt. Of prey and proteins: Is *Paenibacillus thiaminolyticus* the cause of thiamine deficiency in Great Lakes salmonines? Oregon Chapter of the American Fisheries Society, Eugene, OR (February 2012). *Contributed paper*.
- Riley, S.C., Munkittrick, K.R., Krueger, C.C., and **A.N. Evans**. Fish Disease Ecology in the Great Lakes. American Fisheries Society Annual Meeting, Seattle, WA (September 2011). *Contributed paper*.
- Richter, C.A., **Evans, A.N.**, Wright-Osment, M.K., Zajicek, J.L., Heppell, S.A., Riley, S.C., Krueger, C.C., and D.E. Tillitt. *Paenibacillus thiaminolyticus* is not the cause of thiamine deficiency impeding lake trout recruitment in the Great Lakes. Thiamine Deficiency Complex Workshop, Ann Arbor, MI (September 28, 2010). *Contributed paper*.
- Evans, A.N.**, Richter, C.A., Wright-Osment, M., Zajicek, J., Riley, S.C., Tillitt, D.E., Heppell, S.A., and C.C. Krueger. Are bacteria the ultimate source of the thiamine deficiency observed in populations of Great Lakes salmonines? Seventh Annual Research Advances in Fisheries, Wildlife, and Ecology, Corvallis, OR (February 2, 2010). *Contributed paper*.

Fisheries, Physiology, and Ecology:

- Richter, C.A., **Evans, A.N.**, Zajicek, J.L., Cornman, R., Heppell, S.A., and D.E. Tillitt. The case for *de novo* production of thiaminase by alewife. American Fisheries Society Annual Meeting, Quebec City, QC (August 2014). *Contributed paper*.
- Richter, C.A., **Evans, A.N.**, Zajicek, J.L., Cornman, R., Heppell, S.A., and D.E. Tillitt. The case for *de novo* production of thiaminase by alewife. Columbia Environmental Research Center Seminar Series, U.S. Geological Survey, Columbia, MO (April 2014). *Invited presentation*.
- Evans, A.N.**, Richter, C.A., Zajicek, J.L., Heppell, S.A., Krueger, C.C., and D.E. Tillitt. Protein evidence for multiple sources of thiaminase in Great Lakes aquatic animals. Oregon Chapter of the American Fisheries Society, Bend, OR (February 2013). *Contributed paper*.
- Evans, A.N.**, Riley, S.C., and D.E. Tillitt. An overview of thiamine deficiency with regard to lake trout restoration. 4th Reintroduction of Native Fishes Workshop. Ann Arbor, MI (December 12-14, 2012). *Contributed paper*.
- Evans, A.N.**, Richter, C.A., Zajicek, J.L., Heppell, S.A., Krueger, C.C., and D.E. Tillitt. Protein evidence for multiple sources of thiaminase in Great Lakes aquatic animals. Thiamine Deficiency Complex Workshop, Ann Arbor, MI (September 13, 2012). *Contributed paper*.
- Evans, A.N.**, Zajicek, J.L., Rinchar, J., Riley, S.C., Heppell, S.A., Krueger, C.C., and D.E. Tillitt. Food web ecology meets enzymology: is thiaminase activity related to trophic structure in Great Lakes food webs? Oregon Chapter of the American Fisheries Society, Bend, OR (February 2011). *Contributed paper*.
- Evans, A.N.**, Riley, S.C., Zajicek, J.L., Rinchar, J., Heppell, S.A., Krueger, C.C., and D.E. Tillitt. Investigating the relationship between thiaminase activity and trophic structure in Great Lakes food webs. Thiamine Deficiency Complex Workshop, Ann Arbor, MI (September 28, 2010). *Contributed paper*.
- A.N. Evans**. Food web ecology meets enzymology: A proposal and some preliminary data. Oregon State University Stream Team. June 7, 2010. *Invited presentation*.

- A.N. Evans.** Thiaminase dynamics in aquatic food chain: Is thiaminase activity related to food web structure and composition? Investigator co-ordination meeting for GLFT-funded research on Thiamine Deficiency Complex. USGS-Great Lakes Science Center. Ann Arbor, MI (May 11, 2010). *Invited presentation.*
- Evans, A.N.,** Riley, S.C., Edsall, C.C., Allen, J.D., Honeyfield, D.C., Holey, M.E., and S.A. Heppell. Take your vitamins! Describing the relationship between egg thiamine (vitamin B₁) and mortality in Lake Michigan lake trout. Oregon American Fisheries Society Annual Conference, Bend, OR (February 24-27, 2009). *Contributed paper.*
- Evans, A.N.,** Riley, S.C., Edsall, C.C., Allen, J.D., Honeyfield, D.C., Holey, M.E., and S.A. Heppell. Exploring the relationship between lake trout egg thiamine concentration and fry survival in Lake Michigan from 1996 through 2003. Sixth Annual Research Advances in Fisheries, Wildlife, and Ecology, Corvallis, OR (November 11, 2008). *Contributed paper.*
- Evans, A.N.,** Riley, S.C., Edsall, C.C., Allen, J.D., Honeyfield, D.C., Holey, M.E., and S.A. Heppell. Exploring the relationship between lake trout egg thiamine concentration and fry survival in Lake Michigan from 1996 through 2003. Thiamine Deficiency Complex Workshop., Ann Arbor, MI (November 6-7, 2008). *Contributed paper.*
- Niggemyer, A.M.,** Riley, S.C., Nichols, S.J., Rinchar, J., and C. C. Krueger. Predicting the occurrence of thiaminase in Great Lakes fishes using ecological information. 5th International Symposium on Aquatic Animal Health, San Francisco, CA (September 2-6, 2006). *Contributed paper.*
- Goddard, C. I., Leonard, N., **Niggemyer, A.**, Engel, M. Great Lakes: a model for human induced problems and solutions in fisheries. 2004. American Fisheries Society 134th Annual Meeting, Madison, WI (August 22 – 26, 2004). *Contributed paper.*

RESEARCH POSTERS

Microbial:

- Wright-Osment, M. K., Richter, C. A., Zajicek, J. L., Riley, S. C., **Evans, A. N.**, Nichols, S. J., Rinchar, J., Krueger, C. C., Honeyfield, D. C., Fitzsimons, J. D., and D. E. Tillitt. Screening method for bacterial thiaminase I protein in extracts of fish, dreissenid mussels, and plankton. Thiamine Deficiency Complex Workshop., Ann Arbor, MI (November 6-7, 2008).
- Niggemyer, A.**, Spring, S., and R. F. Rosenzweig. Isolation and Characterization of a Novel As(V)-reducing Bacterium. American Society of Microbiology 101st General Meeting, Orlando, FL (May 20 – May 24, 2001).
- Cummings, D. E., Snoeyenbos-West, O., **Niggemyer, A.**, Passavant, C. W., Lovley, D. R., Rosenzweig, R. F., and L.A. Achenbach. Changes in Composition of *Geobacteraceae* Communities along an Environmental Gradient of Metal Contaminants. American Society of Microbiology 101st General Meeting. Orlando, FL (May 20 -24, 2001).
- Ramamoorthy, S., Harrington, J., Wielinga, B., **Niggemyer, A.**, and R. F. Rosenzweig. Sulfidogenesis Underlies Metal Sequestration In Heavy Metal-Contaminated Freshwater Sediments. American Society of Microbiology 99th General Meeting, Chicago, IL (May 30-June 3, 1999).
- Niggemyer, A.**, Cummings, D., Caccavo, F., and R. F. Rosenzweig. A Rapid Colorimetric Method for Quantifying As(V) and As(III). American Society of Microbiology Northwest Regional Conference, Post Falls, ID (Sept. 17-19, 1998).

Fisheries, Physiology, and Ecology:

- Evans, A.N.,** Wyss, L., Gerth, W., and C. D. Rogers. The ecology and expanded distribution of *Dumontia oregonensis*, the sole member of a primitive cladoceran family. Joint Aquatic Sciences Meeting, Portland, OR (May 18-23, 2014).
- Riley, S.C. and **A. N. Evans.** Thiaminase status is related to phylogeny and ecological characteristics of Great Lakes fishes. Thiamine Deficiency Complex Workshop., Ann Arbor, MI (November 6-7, 2008).

HONORS, SCHOLARSHIPS, AND AWARDS

Academic

- Munson Wildlife Graduate Travel Scholarship (\$500): Awarded for travel to a professional society meeting. Oregon State University, Corvallis, OR (March 2014).
- Fred F. and Corinne McKenzie Memorial Fellowship (\$2,000): Awarded to one student studying reproductive physiology of animals. Department of Animal Science, Oregon State University, Corvallis, OR (May 2013).
- Best Student Paper Award: Awarded to the best student presentation at the Annual Meeting of the Oregon Chapter of the American Fisheries Society, Eugene, OR (February 2012).
- American Fisheries Society Travel Grant (\$500): Awarded by the Western Division of the American Fisheries Society for travel to National and Divisional AFS meeting in Seattle, WA (September 2011).
- Hugo Krueger Graduate Research Award in Fish Physiology (\$1500): Nominated by faculty and awarded to an outstanding graduate student studying fish physiology. Oregon State University, Corvallis, OR (June 2011).
- M. A. Ali Graduate Chair Award in Fisheries Biology (\$200): Nominated by faculty and recognizes one student annually for accomplishments in research, communication of science, participation in the graduate program, and evidence of their leadership. Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR (June 2011).

- Doctoral level scholarship (\$2000): Award to one doctoral student annually who has contributed to all four AFS objectives of the American Fisheries Society. Oregon Chapter of the American Fisheries Society, Portland, OR (February 2011).
- Oregon Lottery Graduate Scholarship (institutionally competitive: \$5000): Oregon State University, Corvallis, OR (2010-2011).
- Dr. Frederick F. McKenzie Endowment Graduate Student Travel Award (\$250): Supported travel to present research findings related to animal reproduction: Oregon State University, Corvallis, OR (October 2008).
- Grantsmanship Mentoring Workshop: Selected as one of 20 graduate students university-wide to participate in an intensive grant-writing workshop designed to improve grant writing skills: Oregon State University, Corvallis, OR (November 2008-May 2009).
- Yerex Graduate Fellowship (institutionally competitive: \$10,000): Oregon State University, Corvallis, OR (2008).
- Thomas G. Scott Graduate Fellowship (\$1000): recognizes research potential in graduate students: Oregon State University, Corvallis, OR (2008).
- Alumni Fellow (Tuition, Fees, and \$18,000 per year stipend): University of Florida, Gainesville, FL (January 2000-September 2001).
- NASA Center for Advanced Studies in the Space Life Sciences (\$1,200) Scholarship for Post-course Research Program. A Molecular Investigation of the Microbial Community in the Pink Layer of Salt Pond (Woods Hole, MA). Marine Biological Laboratory/Woods Hole Oceanographic Institute, Woods Hole, MA (Aug. 1999). Laboratory of Dr. John Waterbury.
- Marine Biological Laboratory Fellowship (\$3,260): Microbial Diversity Course; Marine Biological Laboratory/Woods Hole Oceanographic Institute Woods Hole, MA. (June 1999-Aug. 1999).
- Rhodes Scholar and Marshall Scholar Nominee: DePauw University, Greencastle, IN (1998).
- Phi Beta Kappa: DePauw University, Greencastle, IN (1998).
- John C. Frazier Memorial Prize for Botany/Microbiology awarded to senior with most potential for graduate research in microbiology: DePauw University, Greencastle, IN (1998).
- Wylie-Condit Science and Mathematics Scholarship awarded to outstanding junior biology student: DePauw University, Greencastle, IN (1997).

Leadership and Collaboration

- Shining Star Award: Nominated by peers; awarded for inspiring others and adding a great energy to the department. Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR (June 2014).
- Coombs-Simpson Memorial Fellowship (\$750): Nominated by peers and awarded to one graduate woman demonstrating professional dedication, integrity, leadership and service. Department of Fisheries and Wildlife, Oregon State University, Corvallis, OR (June 2012).
- Shining Star Award: Nominated by peers; awarded for positive contributions to the Department of Fisheries and Wildlife. Oregon State University, Corvallis, OR (June 2010).
- Chairman's Leadership Award (\$500): Awarded by Department Head to students demonstrating outstanding leadership: Oregon State University, Corvallis, OR (June 2009).

ACADEMIC LEADERSHIP AND PROFESSIONAL SERVICE

- Peer reviewer: Environmental Biology of Fishes, Environmental Toxicology and Chemistry, Journal of Great Lakes Research, North American Journal of Fishery Management, and Transactions of the American Fisheries Society
- Graduate Curriculum Committee Member, Department of Fisheries and Wildlife, Oregon State University (October 2016 - present)
- Editor of the Piscatorial Press, the quarterly newsletter of the Oregon Chapter of the American Fisheries Society (Jan 2010 – March 2016)
- Excellence in Fisheries Education Award Selection Panel, American Fisheries Society, (2013)
- Scholarship and Endowment Committee, Department of Fisheries and Wildlife, Oregon State University (October 2011-October 2012)
- Graduate student interviewer for Dean of the College of Agriculture, College of Agricultural Science, Oregon State University (Feb 2009)
- Chair of student review committee for Dr. Scott Baker's Promotion and Tenure review, Department of Fisheries and Wildlife, Oregon State University (December 2008).
- Department of Fish and Wildlife Graduate Student Association (Oregon State University):
 - Graduate representative: Served as liaison between faculty and graduate students by attending faculty meetings and reporting to students (2009-2010).
 - Co-president: Responsible for overseeing organization of the graduate student symposium (Research Advances in Fisheries, Wildlife and Ecology) and all association activities (2008-2009).

- Reading Group Co-leader: Organize and lead weekly graduate student reading group (2007-2008).
- Workshop Sessions Organizer: Responsible for arranging workshops for the Research Advances in Fisheries, Wildlife, and Ecology Graduate Student Symposium (Fall 2007; Fall 2009-Spring 2010).
- Search committee member for Freshwater Fishery Biologist, Department of Fisheries and Wildlife, Oregon State University (December 2007-May 2008).
- Coordinator and leader of graduate proposal peer-review group, Department of Zoology, University of Idaho (September 1998-December 1999)

WHITE PAPERS, NON-TECHNICAL ARTICLES, NEWS COVERAGE

FishSens Magazine (Daniel Kelley). Sept 2, 2015. Gene finding hints at cause of lake trout declines in Great Lakes. <http://magazine.fishsens.com/gene-finding-hints-at-cause-of-lake-trout-declines-in-great-lakes.htm>

Great Lakes Echo (Kevin Duffy). August 27, 2015. Gene discovery may help restore Great Lakes lake trout. <http://greatlakesecho.org/2015/08/27/gene-discovery-may-help-restore-great-lakes-lake-trout/>

Yanke, J., and **A. Evans**. 2012. Oregon Chapter Annual Meeting. Fisheries 37, 375. DOI: [10.1080/03632415.2012.704833](https://doi.org/10.1080/03632415.2012.704833)

Riley, S.C., Munkittrick, K.R., **Niggemyer, A.M.** and C.K. Krueger. 2006. Understanding the relationships between fish health and ecosystem dysfunction in the Great Lakes. Great Lakes Fishery Commission Research Theme Paper (http://www.glfrc.org/research/Ecosystem_dysfunction_and_fish_health.pdf).

PUBLICALLY AVAILABLE CONSULTANCY PRODUCTS

FERC-RELICENSING (Alternative Licensing Procedure): Oroville Facilities (FERC Project No. 2100).

- Assessment of potential fish passage impediments above Lake Oroville's high water mark (2001-2004). Study plan, [Report](#).
- Evaluation of the ability of Lake Oroville's cold water pool to support salmonid stocking recommendations (2001-2003). Study plan, [Report](#).
- Management practices and monitoring studies for white sturgeon (2001-2002). Study plan, [Report](#).
- Project operations influencing fish habitat and water quality in the Thermalito Diversion Pool and the Thermalito Forebay (2001-2002). Study plan.
- Fish species composition and juvenile bass recruitment in the Thermalito Afterbay (2001-2003). Study plan.
- Characterization of cold water pool availability in the Thermalito Afterbay (2001-2003). Study plan, [Report](#).
- Evaluation of water surface fluctuations on bass nest dewatering and characterization of inundated littoral habitat in the Thermalito Afterbay (2001-2003). Study plan.
- Literature review of life history and habitat requirements for Feather River fish species (2001-2004). Study plan, [Report](#).
- Fish distribution in the Feather River below the Thermalito Diversion Dam to the confluence with the Sacramento River (2001-2003). Study plan, [Report](#).
- Assessment of potential sturgeon passage impediments (2001-2003). Study plan, [Report](#).
- Assessment of potential project effects on splittail habitat (2001-2004). Study plan, [Report](#).
- Comparison of fish distribution to fish habitat in the lower Feather River (2001-2004). Study plan.
- Evaluation of potential effects of fisheries management activities on ESA-listed fish species (2001-2004). Study plan, [Report](#).
- Evaluation of flow related physical impediments in the Feather River below the Fish Barrier Dam (2001-2003). Study plan, [Report](#).
- Identification and characterization of early up-migrant Chinook salmon holding habitat and habitat use patterns (2001-2003). Study plan, [Report](#).
- Evaluation of spawning and incubation substrate suitability for salmonids in the lower Feather River (2001-2003). Study plan.
- Steelhead spawning methods (2001-2003). Products: Study plan, [Report](#).
- Evaluation of potential effects of Oroville Facilities operations on spawning Chinook salmon (2001-2003). Study plan.
- Steelhead Rearing Temperatures (2001-2003). Study plan, [Report](#).
- Literature review of devices used for enumeration of juvenile steelhead (*Oncorhynchus mykiss*) outmigrants. Study plan, [Report](#).
- Timing, thermal tolerance ranges, and potential water temperature effects on emigrating juvenile salmonids in the lower Feather River (2001-2003). Study plan.
- Evaluation of project effects on instream flows and fish habitat (2001-2003). Study plan.
- Predation PM&E Literature Review (2001-2003). Study plan, [Report](#).

ENVIRONMENTAL WATER ACCOUNT: DRAFT EIS/EIR (July 2003).

- Primary author: [Water Quality](#) (Chapter 5).

Secondary author: [Fisheries and Aquatic Ecosystems/Hydrologic Modeling](#) (Chapter 9).