

**Jan Trybula**

Associate Professor of Biology

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**Degrees**

Ph.D., Miami University, Department of Zoology, Oxford, Ohio, 1998. Sheldon I. Guttman, advisor. Dissertation: "The distribution and genetic structure of larval gomphid odonate populations exposed to acid mine drainage in a stream basin." Received a Dissertation Research Scholarship, a non-service award to work on dissertation preparation.

M.S., The University of Houston, Department of Biology, Houston, Texas, 1989. David L. Jameson, advisor. Thesis: "Relatedness of *Bufo woodhousei* subspecies based on mitochondrial DNA restriction site polymorphisms."

B.S., The Ohio State University, Department of Genetics, Columbus, Ohio, 1985.

**Professional History**

Chair, SUNY Potsdam, Department of Biology. Course scheduling and budgets. Spring 2016 – Fall 2021

Associate Professor with continuing appointment, SUNY Potsdam, Department of Biology. Instruct lower and upper division genetics courses for majors and non-majors, including lecture and laboratory courses. Conduct research with undergraduates. Spring 2009 – present

Assistant Professor, SUNY Potsdam, Department of Biology. Instruct lower and upper division genetics courses for majors and non-majors, including lecture and laboratory courses. Conduct research with undergraduates. Fall 2003 – Fall 2008

Adjunct Professor, Union Institute & University, Graduate College, Cincinnati, Ohio. Serve as voting member of Doctoral Committee for Michael A. Secrest. May 2003 – August 2009

Postdoctoral Research Scholar. Miami University, Department of Zoology. Co-Principal Investigator and Project Director of NSF sponsored teacher development program connecting ecology and genetics through conservation biology. Conduct summer workshops. Instruct participants in laboratory techniques. Facilitate capstone research project conducted by participants and their students in their home districts. Analyze data obtained by participants. January 1999 – Summer 2003

Visiting Assistant Professor. Miami University, Department of Zoology. Instruct lecture, laboratory, and seminar courses for majors and non-majors on both Oxford campus and Hamilton regional campus. Spring 1999 – Spring 2003

Visiting Instructor. Miami University, Department of Zoology. Instruct lecture and laboratory courses for majors and non-majors on the Oxford campus and the Hamilton and Middletown regional campuses. 1996 - 1998

Contractual Field Researcher. Ohio Biological Survey, Columbus, Ohio. Collect nocturnal semi-aquatic insects by light trap. Separate taxa for further analysis by OBS personnel. 1995 - 2001

Research Associate. Miami University, Department of Zoology. Supervise undergraduate researchers. Coordinate collection of field samples and laboratory analysis under an Ohio Chapter of The Nature Conservancy Grant, "Genetic structure of Unionid Mussel Populations in the Little Miami River Basin: A Conservation Biology Approach," to D. J. Berg and S. I. Guttman. 1995 - 1996

Laboratory Research Coordinator. Miami University, Department of Zoology. Organize and coordinate undergraduate student researchers and graduate students. Review laboratory protocols. Keep inventories. Order supplies. Teach data entry and analysis. Supervise work for faculty members in Zoology and Botany. Prepare project reports for contract work. 1994 - 1996

Graduate Research Assistant. Miami University, Department of Zoology. Develop allozyme electrophoresis protocols for detoxifying enzymes in fathead minnows in conjunction with an EPA grant to Guttman, Taylor, and Oris. 1993 - 1994

### **Teaching Experience**

BIOL 483 Current Topics in Biology: a Speaking Intensive (SI) seminar-style course. SUNY Potsdam, Potsdam, New York.  
 Genetics of Populations. Spring 2004  
 Speciation and Phylogenetics. Spring 2005  
 Biological Controversies: Cloning, Stem Cells, and GMOs. Fall 2008  
 Biology of Race and Gender. Spring 2010  
 Are You Smarter than a First-year Student? Fall 2013  
 All the Biodiversity You Don't Know. Fall 2014  
 Molecular Ecotoxicology. Spring 2019

BIOL 455 Molecular Genetics. SUNY Potsdam, Potsdam, New York. Lecture for majors focusing on replication, transcription, translation, and gene regulation. Prerequisite of BIOL 311 Genetics. Every other year.  
 Listed as BIOL 495 in 2004  
 Listed as BIOL 455 in 2006 – present  
 Approved for Writing Intensive (WI) general education requirement

BIOL 445 Human Genetic Diseases. SUNY Potsdam, Potsdam, New York. Lecture for majors and non-majors focusing on recent advances in the understanding of human genetic traits and diseases. Prerequisite of BIOL 105 or BIOL 311 and at least Junior standing. Every other year.

Listed as BIOL495 in 2008

Listed as BIOL 445 in 2010 – present

Approved for Writing Intensive (WI) general education requirement

BIOL 415 Virology. SUNY Potsdam, Potsdam, New York. Lecture for majors focusing on various aspects of viruses. Prerequisite of BIOL 151 and 152 and Junior standing. Spring semesters only 2012 – present

BIOL 311 Genetics. SUNY Potsdam, Potsdam, New York. Lectures and laboratories for majors covering the breadth of genetics. Fall semester only 2003 – 2007. Spring semesters only 2008 – present

BIOL 152 General Biology II Laboratory. SUNY Potsdam, Potsdam, New York. Laboratory for majors covering the breadth of biology. Spring 2006 – 2007

BIOL 151 General Biology I Laboratory. SUNY Potsdam, Potsdam, New York. Laboratory for majors covering evolutionary, biodiversity, and physiological aspects of biology. Fall 2003

BIOL 151 General Biology I. SUNY Potsdam, Potsdam, New York. Lectures for majors covering cellular and molecular aspects of biology. Fall 2005 & 2006, Fall 2010, and substituted for Dr. L. Rhoads for 6 weeks in Fall 2003

BIOL 125 Biological Concepts. SUNY Potsdam, Potsdam, New York. Laboratory for Childhood and Early Childhood Education majors covering all aspects of biology. Spring 2005 and 2006  
Lecture in Fall 2008

BIOL 107 Human Biology. SUNY Potsdam, Potsdam, New York. Lectures for non-majors on many aspects of human biology, especially cells, tissues, and physiology. Spring 2005

BIOL 105 Introduction to Human Genetics. SUNY Potsdam, Potsdam, New York. Lectures for non-majors on current topics in genetics and how it influences humans. Most semesters Fall 2003 – present

Honors section Spring 2007 & 2008, Fall 2009, Spring 2011

Approved for Critical Thinking (FC) general education requirement

BIOL 100 Principles of Biology Laboratory. SUNY Potsdam, Potsdam, New York. Laboratory for non-Biology majors covering various aspects of biology. Fall 2009

INTD 450 Honors Research Colloquium. SUNY Potsdam, Potsdam, New York. Discussion and seminar on how to work through your honors research project and prepare your material for presentation in a variety of formats. Fall 2018, Spring 2019

FYSS 100 First Year Success Seminar. SUNY Potsdam, Potsdam, New York. Discussion with first year students in the Natural Science First-Year Interest Group. Falls 2007 – present

**Supervision of Student Research, Internships, etc.**Student Research (BIOL 485 Research in Biology except as noted \*)

- Adam Sokoloff. Internet-based research project on the COVID Pandemic. Spring 2021.
- Channel Dudley. Presidential Scholars work investigating various aspects of JC Virus (Human Polyomavirus 2). Fall 2020
- Lili DeGraw. Preliminary investigation into caddisfly genetic biodiversity. Spring 2020
- Wilyendy Mir Rosario. Continued work on allozyme biomarkers in *Drosophila* strains. Spring 2020
- Enibokun Uzamere & Aleisann Wolliaston. Continued work on microsatellite biomarkers in *Drosophila* strains. Fall 2019 – Spring 2020
- Jonelle King & Shaina Nedderman. Preliminary work to conduct microsatellite analysis on various *Drosophila* strains to establish biomarkers for future study. Spring 2019
- Adama Dukure & Aoua Dukure. Continued work on comet assay in *Drosophila*. Spring 2019 – Fall 2019, Fall 2020 (internet background research)
- Katherine Garcia Gil. Preliminary work to conduct allozyme analysis on various *Drosophila* strains to establish biomarkers for future study. Fall 2018 – Spring 2020
- Andry Rosario. General lab research. Spring 2018
- Brandon Scharpf. Preliminary work to conduct comet assays on *Drosophila*. Fall 2017 – Fall 2018
- Samsuhang Limbu. Comparative DNA microsatellite analysis in *Drosophila* strains. Fall 2017
- Triston Riley. General lab research on a variety of projects. Spring 2015 – Spring 2016
- Erica Grossman & Andrew Weinstein. Joint Presidential Scholars work. Comparison of antibiotic resistance of *S. aureus* on first-year versus fourth-year students at SUNY Potsdam. Spring 2015 – Spring 2018
- Hu-Tyson Palmer. Analysis of degrading hair for CODIS markers. Fall 2014, Spring 2015
- Fatoumata Diop. Analysis of *Staphylococcus* sample for presence of MRSA. Fall 2014
- Gregory Fiaco. Begin population genetic study in damselflies. Spring 2014
- David Matthews. Update work on antibiotic resistant strains of *S. aureus* research. Spring 2014, Fall 2014
- Bobbi Jo Lauzon. Update work on antibiotic resistant strains of *S. aureus* research. Fall 2013, Spring 2014
- Mario Belzano. Work on milkweed population study. Fall 2012, Fall 2013
- Benjamin Ng. Update work on antibiotic resistant strains of *S. aureus* research. Fall 2012, Spring 2013
- Tammy Zanker. Analysis of antioxidants preventing oxidative damage of plasmids in vitro.  
\*Presidential Scholar & volunteer Spring 2012  
Fall 2012
- Kyle Elliott. Analysis of antioxidants preventing oxidative damage of plasmids in vivo.  
\*volunteer Spring 2012  
Fall 2012, Spring 2013
- Leanna Wilson. Development of a laboratory exercise based on oxidative damage to plasmids.  
2 credit hours Spring 2012
- Christopher Torres. Identification and potential genetic typing of bacteria on campus computer keyboards. 2 credit hours Spring 2012
- Joseph Freidel and Zachary Reed. Genetic typing of ampicillin resistant *Staphylococcus* isolated from students 1 credit hour each in Fall 2011, 1 credit hour for ZR Spring 2012

Gethmini Jayasundara. Analysis of antibiotic resistant bacteria on food. Fall 2011, 3 credit hours Fall 2011 & Spring 2012

Veronica LaPosta. Preliminary analysis of using exuviae for population genetic studies. 1 credit hour. Spring 2011

Stephanie Scribner Further development of a yeast RNA extraction exercise for genetics lab. 2 credit hour. Spring 2011

Rachel McKinney. Karyotype analysis of insects. 1 credit hour. Fall 2010

Jeremiah Miller. Genetic typing of enterobacteria isolated from food products. 3 credit hours. Fall 2010 & \*volunteer Spring 2011

Stephanie Scribner. Preliminary investigations into transformation of yeast. 1 credit hour. Fall 2010

Jennifer Shimaitis. Development of DNA-DNA hybridization exercise for genetics lab. 2 credit hours. Fall 2010

Christopher Torres. Genetic typing of ampicillin resistant *Staphylococcus* isolated from students. 2 credit hours. Fall 2010 & 3 credit hours. Spring 2011

Robert Wallace. Preliminary analysis of using plasmid DNA to examine oxidative damage. 1 credit hour. Fall 2010 & 1 credit hour Spring 2011.

#### Supervision of Student Teaching Assistants (BIOL 475 Biology Laboratory Technique)

Joshua Williamson in Genetics Laboratory, BIOL 311, Spring 2012

Karen Moch and Rachel McKinney in Genetics Laboratory, BIOL 311. Spring 2010

#### Off-campus Research Internships (INTD 491)

Sckalisha Elome career exploration in physician assistant internship. Summer 2018

Kira Wood career exploration in neuroscience research. Summer 2016

Rachel Peek career exploration in dentistry. Summer 2016

Fatoumata Diop internship at Canton Potsdam Hospital to explore medical career options. Spring 2016.

Devan Olschewske medical career exploration internship at the Wound Care Center. Summer 2015.

Sarah Lucey career exploration internship in Nursing. Summer 2015

Linden Montague internship at Canton Potsdam Hospital to explore medical career options. Spring 2015

Erin Klettke career exploration in physical therapy. Spring 2014.

Darel Diaz career exploration in dentistry. Worked with Dr. Acres in Potsdam, NY. Spring 2014

Marissa McMaster Physical Therapy internship. Summer 2013

Allison Johnson in career exploration in dentistry. Worked with Dr. Acres in Potsdam, NY. Spring 2013

Cheyne Aiken in animal management at a zoological education center. Worked with The Belize Zoo and Tropical Education Center, Belize City, Belize. 3 credit hours. Winterim 2012.

Jessica Slapar in the management of an animal shelter. Worked with the Potsdam Human Society's Potsdam Animal Shelter, Potsdam, NY. 3 credit hours. Spring 2010

#### On-campus Molecular Biology Research Internship (INTD 491)

Gregory Fiacco in the genetic identification of golden rod species. 3 credit hours. Fall 2015.

Bryan Meyer in pH stress tolerance in dragonfly larvae. 6 credit hours. Fall 2011.

Yrris Joseph Stamatinos in genetic laboratory techniques. 6 credit hours. Summer 2011.

Student Tutorials

## BIOL 498

Justin Johnson Penn internet tutorial on cougar research and conservation. Summer 2021  
 Opeyemi Adeniyi internet tutorial on exploring diagnostic medical sonography. Summer 2020  
 Arielle Wolter internet and in-person tutorials on “Stem Cell Tissue Engineering” and  
 “Regenerative Medicine.” Spring 2020  
 H. Will Beebe in-person tutorial “Genetics of Aging and Disease.” Spring 2016  
 Lara Varden internet and in-person to take Molecular Genetics, which could not fit into the  
 course schedule when offered. Fall 2015  
 Calixto Mariano internet tutorial exploring RNA research methods. Summer 2015  
 Karissa Jump via internet and in-person to take Human Genetic Diseases, which could not fit  
 into the course schedule when offered. Spring 2015  
 Laurene Tudor in-person tutorial “Genetics of Cancer.” Spring 2015  
 Cassandra Negrón in-person tutorial “General Pathology.” Spring 2015  
 Matthew Mehlenbacher in-person tutorial “Medical Case-based Learning.” Fall 2013  
 Matthew Mehlenbacher in-person tutorial “Studies in Pathology”. Spring 2013  
 Scott Arno via internet and in-person meeting to take Molecular Genetics, which could not fit  
 into the course schedule when offered. Spring 2010

## BIOL 398

Amy Gaye in-person tutorial on Medical Terminology. Fall 2017  
 Dana Vullmuth via internet to conduct a tutorial course equivalent to BIOL 311 – Genetics to  
 count toward her completion of Genetics requirement. Fall 2011

**Awards and Honors Received**

Omicron Delta Kappa, National Leadership Honors Society, inducted May 2012

SUNY University Faculty Senate “President’s Leadership Award” awarded on 3 April 2014 at  
 the UFS Plenary Meeting at SUNY Empire College, Saratoga Springs, NY.

Outstanding Teacher of the Year 2011 from the SUNY Potsdam Chapter of Phi Eta Sigma, the  
 Freshman Honors Society. May 2011.

Inducted as member of the SUNY Potsdam Chapter of Phi Eta Sigma, the Freshman Honors  
 Society. May 2011.

Nominated for the President’s Award for Academic Advising. SUNY Potsdam. March 2010.

**Grants and Projects Funded**

SUNY Potsdam Presidential Scholars. “Examination of the JC Virus (Human Polyoma Virus  
 2)” *with* Chanell Dudley (Biology Undergraduate) Fall 2019 to present. Funded up to \$300  
 each semester.

SUNY Potsdam Presidential Scholars. “Determining the Antibiotic Resistance to *Staphylococcus aureus* Against Penicillin Amongst First and Fourth Year Students” with Erica Grossman and Andrew Weinstein (Biology Undergraduates) Fall 2015 to Spring 2018. Funded \$600 per academic year.

Joseph B. Kilmer Undergraduate Research Apprenticeship at SUNY Potsdam. “*In vivo test of antioxidant protection from biochemical damage in eukaryotic DNA*” with David J. Matthews (Biology Undergraduate) Fall 2013 (for Spring 2014 project). Funded \$300

Joseph B. Kilmer Undergraduate Research Apprenticeship at SUNY Potsdam. “*In vitro test of antioxidant protection from biochemical damage in eukaryotic DNA*” with Cassandra L. McNitt (Biology Undergraduate) Fall 2013 (for Spring 2014 project). Funded \$300

Joseph B. Kilmer Undergraduate Research Apprenticeship at SUNY Potsdam. “Fitness Costs of Drug Resistance Mechanisms in MRSA” with Mark Sieling (Biology Undergraduate) Fall 2013. \$300

Joseph B. Kilmer Undergraduate Research Apprenticeship at SUNY Potsdam. “Affects of Pollutants on *Asclepias syriaca*” with Mario Balzano (Biology Undergraduate) Fall 2013. \$300

SUNY Potsdam Presidential Scholars Program. “Oxidation and Antioxidants: The Protection of DNA from Oxidative Damage” with Tammy L. Zanker (Biology Undergraduate) Spring 2012 – Spring 2013. Funded \$300 each semester

Title III Travel Grant to attend the 15<sup>th</sup> Annual Undergraduate Research Symposium in the Chemical and Biological Sciences. University of Maryland – Baltimore County with Kyle H. Elliott. Funded up to \$1000 for travel expenses. Fall 2012

Joseph B. Kilmer Undergraduate Research Apprenticeship at SUNY Potsdam. “*In Vivo Antioxidant Protection from Induced DNA Damage*” with Kyle H. Elliott (Biology Undergraduate)  
Spring 2012 (for summer project). Funded \$1000  
Fall 2012. \$300

Raquette River Advisory Council. “Dragonfly survey of the lower Raquette River”. Spring 2012 – Fall 2012. \$1800

Joseph B. Kilmer Undergraduate Research Apprenticeship at SUNY Potsdam. “Examination of potential *Ophiogomphus* hybrids through DNA analysis” with Michael Gendler (Biology Undergraduate) Spring 2010. \$300

National Science Foundation (NSF); Division of Undergraduate Education (DUE); Course, Curriculum, and Laboratory Improvement Program - Adaptation and Implementation. Proposal # 0737460 “The Development of Biochemistry Laboratories Centered on Hemoglobin.” with D. Gingrich (PI). May 2007. Funded May 2008 – Spring 2013. \$149,992

**Grants submitted (not funded)**

Northeastern States Research Cooperative. “Identifying microrefugia for cold-associated wetland species in the Northern Forest” *with* D.A. Patrick (P.I., Paul Smith’s College) *and* P. Raney (co-PI SUNY ESF), J.D. Corser (co-PI, NY Natural Heritage Program), M.D. Schlesinger (co-PI, NY Natural Heritage Program), T.G. Howard (co-PI, NY Natural Heritage Program). October 2013, Pre-proposal accepted. *Requested* \$168,000. December 2013, Proposal rejected for budget reasons, other four categories were above median proposal values.

**Professional Associations**

Society of Environmental Toxicology and Chemistry  
 Society for Freshwater Science  
     Formerly: North American Benthological Society (NABS)  
 Association of Northeast Biologists  
 Worldwide Dragonfly Association  
 Societas Internationalis Odonatologica (S.I.O.)

**Professional Service (internal)**Committee service (College-wide)

Middle States Self-Study (2022). SUNY Potsdam.  
     Part of the Standard 1 & 7 working group Fall 2020 – 2022

Lougheed Learning Commons (LLC) Advisory Board. SUNY Potsdam.  
     Member Fall 2019 – present

The Academic Standards Committee. SUNY Potsdam.  
     Review dismissal waivers. Fall 2015 – present

SUNY Potsdam Presidential Search Committee  
     Elected as member of the search committee, Spring 2013 – Spring 2014

Employee Awards Committee. Fall 2012 – present  
     Review nominations for President’s Awards  
     Review nominations for Chancellor’s Awards for Excellence

Middle States Self-Study (2012). SUNY Potsdam.  
     asked to serve on Steering Committee Fall 2009 – 2012  
     part of the Standard 11 & 13 working group Fall 2010 – 2012

CSTEP Advisory Board. SUNY Potsdam.  
     asked to serve from Spring 2009 – 2015

IACUC (Institutional Animal Care and Use Committee). SUNY Potsdam.  
     appointed by the Provost from Spring 2009 – present



appointed as Chair from Fall 2010 – 2015

Faculty Senate. SUNY Potsdam.

Elected Senator to SUNY University Faculty Senate May 2016 – present

Elected Chair May 2011 – 2015

Elected Vice Chair May 2008 – May 2010, re-elected May 2010 for another two-year term

Chair pro tem for Fall 2008

Became Chair for remainder of previous Chair's term, October 2010 – May 2011

Elected Chair of the Academic Planning and Standards Committee May 2006 – May 2008

Elected member of APSA May 2004 – May 2006

PACES, Potsdam Auxiliary and College Educational Services

Appointed member of the PACES Board Fall 2008 – present

Served various officer positions, currently Board president

Served on the Executive Director search committee, Spring 2021 to present

Radiation Safety Committee. SUNY Potsdam

asked to serve from 2007 – present?

Health Professions Advisory Committee. SUNY Potsdam.

asked to serve from 2006 – 2015

### Non-committee Service

Multi-year activities:

Represented the Department of Biology at A Major Affair in Fall terms 2003 – present in the Barrington Student Union, SUNY Potsdam.

Represented the Department of Biology at various open houses

Advisor to student organizations

- Pagan Studies Organization at SUNY Potsdam. Spring 2006 – present.

became Metaphysical Studies Organization Fall 2015.

- Biology Club at SUNY Potsdam. Fall 2007 – 2015.

- Men's Rugby at SUNY Potsdam. Spring 2010 – present.

Athletic Academic Coordinator

- Men's and Women's Swimming and Diving Team. Fall 2010 – 2015.

First-year Programs Planning Committee, Summer 2010

Washington Center's 2010 National Summer Institute on Learning Communities. Part of campus contingent to develop upper division interdisciplinary learning communities for SUNY Potsdam.

**Professional Service (external)**Peer-review of journal manuscripts

Annals of the Entomological Society of America. Review of manuscript entitled “Non-lethal Tissue Sampling Techniques and Microsatellite Markers used for First Report of Genetic Diversity in Two Populations of the Endangered *Somatochlora hineana* (Odonata:Corduliidae).” June 2010

Review of textbooks and textbook chapters

*Viruses: Biology, Applications, and Control*, 1<sup>st</sup> edition by Harper. Review of entire textbook content and organization as part of preparation for 2<sup>nd</sup> edition. Taylor & Francis Group, Publishers. Fall 2021.

*Essential Genetics: A Genomics Perspective*, 5<sup>th</sup> edition by Hartl. Review of textbook organization. Jones and Bartlett, Publishers. January 2011.

Judging presentations/posters

Miami University Graduate Research Forum.

Judging platform presentations by graduate students in various disciplines.  
Through Miami University (Miami Ohio), November 6, 2020.

International Science and Engineering Fairs.

Judging in various biological sciences

Intel ISEF 2017. Los Angeles, CA. May 14-19, 2017

Intel ISEF 2019. Phoenix, AZ. May 12-17, 2019

Regeneron ISEF 2021. Online. May 16-21, 2021

15<sup>th</sup> Annual Undergraduate Research Symposium in the Chemical and Biological Sciences.

University of Maryland – Baltimore County, Baltimore, MD. Attended, presented a poster with Kyle H. Elliott, and was part of the judging committee. Judged six posters in Molecular Biology and Biochemistry. Fall 2012

Assisting local biodiversity organizations

New York Dragonfly and Damselfly Survey (New York Odonate Group Jan 2010 – 2017)

Advisory Committee April 2005 – 2009

Northern NY Regional Resource Person April 2005 – 2009

Reviewer of photographic submissions 2006 – 2009

Adirondack All Taxa Biodiversity Inventory (AATBI)

Steering Committee August 2006 – 2015

Science Committee August 2006 – 2015

Dragonfly Taxonomic working group coordinator August 2006 – 2015

Coordinator of Dragonfly component of the BioBlitz July 2007

**Professional Development workshops completed**

- “Exploring Race & Ethnicity – Reflections on Collaboration and Networking in SFS.” Presented by the Society of Freshwater Science JEDI (Justice, Equity, Diversity, and Inclusion) Taskforce online. September 29, 2021
- “Online with LSE: Evidence-based Teaching Guide – On Inclusive Teaching.” Presented by The American Society for Cell Biology, CBE: Life Science Education. May 7, 2021
- SUNY SPECTRUM conference on LGBTQI\* student issues. June 19-20, 2018
- Prior Learning Assessment. SUNY Potsdam. April 28, 2017
- EAB Campus-SSC training. SUNY Potsdam. December 13, 2016
- Oracle Business Intelligence training. SUNY Potsdam. September 1, 2016
- SUNY Voices Campus Governance Leaders Leadership Institute. Albany, NY June 4, 2015
- “Inclusive Excellence: Ensuring Inclusive Campuses for LGBTQ Students, Staff, and Faculty,” Summer Institute of The Consortium of Higher Education LGBT Resource Professionals. University at Albany, June 26, 2015
- LTEC presentation on Prior Learning Assessment. 1:00 – 2:30, February 4, 2015.
- LTEC presentation on Flipped Classrooms. 12:00 – 1:00, February 20, 2015.
- Attended the McGraw-Hill Education Life Sciences Virtual Symposium. Topics included critical thinking, active learning, and flipped classrooms. 11:00 – 3:00, March 6, 2015.
- “Searching for Grants” by Catherine Sajna, at the LTEC at SUNY Potsdam, March 6, 2013.
- “Successful Proposal Writing” by Catherine Sajna & William Romey, at the LTEC at SUNY Potsdam, April 24, 2013
- “Grant Writing Workshop” with Dr. Tom Wenzel by the Title III Strengthening Institutions Grant to SUNY Potsdam. April 5, 2011.
- “Development of Upper Division Learning Communities” at the National Summer Institute for Learning Communities at the Washington Center of Evergreen State College, Olympia, Washington. June 27 – July 1, 2010

### **Publications, Manuals, and Reports**

- Trybula, J. 2006. *Arigomphus cornutus*, a State Record for New York. *Argia*. 18(3):11-12
- Trybula, J. 2002. Chapter 16. Corduliidae: Emeralds. p. 253-280. *In*: Glotzhober, R. C. and D. McShaffrey (Editors). *The Dragonflies and Damselflies of Ohio*. Ohio Biological Survey Bulletin New Series Volume 14 Number 2. ix + 364 p.

Benton, M. J.; Malott, M. L.; Trybula, J.; Dean, D. M.; Guttman, S. I. 2002. Genetic effects of mercury contamination on aquatic snail populations: Allozyme genotypes and DNA strand breakage. *Environmental Toxicology and Chemistry*. 21(3):584-589

Trybula, J.; Snyder, J. M.; and Reale, J. A., Jr. 2002. LABS Workshop Capstone Project: Teacher Manual, v. 2. Miami University. Oxford, Ohio. 49 pp + appendices

Snyder, J. M.; Trybula, J.; and Reale, J. A., Jr. 2001. LABS Workshop Capstone Project: Manual. Miami University. Oxford, Ohio. 24 pp + appendices.

Guttman, S. I.; Conzelmann, P. J.; Trybula, J.; Vogl, B.; and Hoke, L. D. 1999. Starch Gel Analysis of Allozyme Frequencies in Mosquitofish (*Gambusia affinis*) Populations on a Dioxin Contaminated Site/Drainage in North Louisiana. U.S. Fish & Wildlife Service Region 4 #LFO-EC-99-01

Conzelmann, P.J.; Guttman, S.I.; Trybula, J.; and Vogl, B. 1997. Starch Gel and Cellulose Acetate Electrophoretic Analysis of Allozyme Frequencies in Barn Swallow (*Hirudinea rustica*) Populations at a Dioxin Contaminated Site in Northern Louisiana. U.S. Fish & Wildlife Service Southeast Region #LFO-EC-97-01

## **Presentations**

### Invited Seminars, not at professional meetings

Viruses and Viral Pandemics Through the Ages. Presented a three-part SOAR Lifelong Learning in the North Country class. Potsdam, New York. September 21 – October 5, 2021

How Your Genes Affect Your Health. Presented a three-part SOAR Lifelong Learning in the North Country class. Potsdam, New York. September 27 – October 4, 2016

Center For Diversity, Spiritual Panel, planner and panelist

"Biology of Race, Sex, and Gender" Multi-cultural Weekend mini-class presentation. Spring 2016

Invited panelist at the SUNY Voices Campus Governance Leaders Leadership Institute. Panel: Enhancing Representation through Diversity & Diversity Issues on Campuses. Panel moderated by Dr. Carlos Medina, Chief Diversity Officer of SUNY. Albany, NY. June 4, 2015.

How Your Genes Affect Your Health. Presented a three-part SOAR Lifelong Learning in the North Country class. Potsdam, New York. September 14 – 28, 2012

BuzzFest, at the WildCenter, helped table information about dragonflies and led walks collecting dragonflies around the Wild Center, about 30 people on the walk (mostly children), July 2, 2011, about 6 hrs

It's All in Your Genes! Presented a three-part SOAR Lifelong Learning in the North Country class. Potsdam, New York. 2010.

Everything Dragonfly! Presented a three-part SOAR Lifelong Learning in the North Country class. Potsdam, New York. October 23 – November 6, 2009

Platform presentations

Trybula, J. with Gendler, M. and LaPosta, V. The utility of exuviae in population genetic analysis of riverine odonate species. Invited to present to a special session at the North American Benthological Society, 59<sup>th</sup> annual meeting. Providence, RI. May 22-26, 2011.

Poster presentations at regional and national meetings

Trybula, J. with Elliot, K. Antioxidant Protection from UVB Induced Oxidation: An In Vivo Approach. Undergraduate Research Symposium in the Chemical and Biological Sciences. University of Maryland, Baltimore County in Fall 2012.

Trybula, J. with Arno, S.; Gendler, M.; Thiele, N.; and Torres, C. Genetic Sampling of Museum Specimens and the Potential of Nonlethal and Noninvasive Genetic Sampling. Northeast Natural History Conference XI. Albany, NY April 6-9, 2011

Trybula, J. and Gingrich, D. The Development of Biochemistry Laboratories Centered on Hemoglobin. CCLI/TUES Principal Investigators Conference. Washington, DC January 26-28, 2011

Poster presentations by students at SUNY Potsdam Learning and Research Fair

Matthews, D.J. and Trybula, J. “*In vivo* and *in vitro* test of antioxidant protection from biochemical damage in eukaryotic DNA”. poster at the SUNY Potsdam Learning and Research Fair. April 2014.

Lauzon, B. and Trybula, J. “Characterizing Collected MRSA Strains” poster at the SUNY Potsdam Learning and Research Fair. April 2014.

Balzano, M.R. and Trybula, J. “Effects of Pollutants on *Asclepias syriaca*” poster at the SUNY Potsdam Learning and Research Fair. April 2013.

Elliott, K.H. and Trybula, J. “Antioxidant Protection from UVB Induced Oxidation: An *In Vivo* Approach” poster at the SUNY Potsdam Learning and Research Fair. April 2013.

Jump, K.A. and Trybula, J. “Development of a Novel Chromosome Karyotyping Lab” poster at the SUNY Potsdam Learning and Research Fair. April 2013.

Zanker, T.L. and Trybula, J. “*In vitro* Antioxidant Protection from Induced DNA Damage” poster at the SUNY Potsdam Learning and Research Fair. April 2013.

Aiken, C. “You Better Belize It! – A cultural, professional, and educational experience abroad” poster at the SUNY Potsdam Learning and Research Fair. 18 April 2012.

Zanker, T.L., Elliott, K.H., and Trybula, J. “*In vitro* and *in vivo* Antioxidant Protection from Induced DNA Damage” poster at the SUNY Potsdam Learning and Research Fair. 18 April 2012.

Torres, C.M. and Trybula, J. “Identifying Bacteria on Library Computers” poster at the SUNY Potsdam Learning and Research Fair. 18 April 2012.

### **Conferences Attended**

Society for Freshwater Science. Annual meeting (virtual). May 23-27, 2021

Society of Environmental Toxicology and Chemistry. 37<sup>th</sup> Annual meeting and 7<sup>th</sup> SETAC World Congress. Orlando, FL. November 6-10, 2016

### **Community Service**

Northeast Regional Science and Engineering Fair  
Co-director 2018 – present

Indian Creek Nature Center

Member Spring 2009 – present

Elected to the Board of Directors several terms

Newsletter editor 2012 – present

Relay For Life, American Cancer Society fundraiser and event at SUNY Potsdam

Spring 2010 Relay

Delivered the “Celebrate” speech

Potsdam Food Cooperative

Member Fall 2003 – present

Volunteer worker about 20 hrs per year Fall 2010 – Spring 2020

### **Current Research Interests**

My main research is in biodiversity and population genetics, especially in habitats that are affected by anthropogenic stresses. I am currently involved in a few projects and working on preparing some data for publication. My current research includes:

#### Biodiversity of dragonflies and damselflies

I am studying biodiversity at the population and genetic levels for dragonflies and damselflies. Studies include basic biodiversity measures, identification of species, genetic comparisons between populations, and using genetic profiles to classify individuals to species. This work will give a firm base to other projects I’m planning for the future. Part of this work discovered a state record for a dragonfly species (*Arigomphus cornutus*), which was only known from the north central US and Canada. The rediscovery of the Skillet Clubtail (*Gomphus ventricosus*) on the Raquette River is the first sighting in NY since 1928. New site records for NY state species of greatest conservation need have also been discovered, along with what some colleagues think may be a new species.

#### The effect of environmental toxins on the genetics of various species

I have begun examining the effects of toxicants on various molecular aspects of various species, concentrating on emergent aquatic insects in the field and *Drosophila* as a lab model. Students and I are examining direct chromosomal damage (comet assays), effect on allozymes, and generalized effects using microsatellite markers.

Of specific interest is the examination of genetic diversity of chloride ion channel proteins in aquatic insects as they relate to runoff from salt used on roads to clear ice and snow in the winters in the North Country and the Adirondacks.