

Michael Sawey

Curriculum Vitae

Contact Information

TCU Department of Biology

TCU Box 298930

Fort Worth, TX 76129

m.sawey@tcu.edu

Academic Background

Education

- MS - Texas Christian University, Environmental Science (2008)
- BS - Texas Wesleyan University (Honors), Biology (1994)

Professional Experience

- Senior Instructor, Biology Department, Texas Christian University (2020 – present)
- Instructor II, Biology Department, Texas Christian University (2014-2020)
- Instructor I, Biology Department, Texas Christian University (2008-2014)
- Graduate Teaching Assistant, Texas Christian University (2006-2008)
- Teacher - Biology, Environmental Science, Health, Cassata High School, Fort Worth, TX (2003-2006)
- Teacher - Algebra II & Pre-Calculus, Rio Vista High School, Rio Vista, TX (2002-2003)

Institute Affiliation

- Affiliated Faculty Status, Andrew's Institute of Mathematics and Science Education, Texas Christian University (June 2022 – present)

Honors, Awards, and Recognitions

- Appreciation for Service to Students, Fort Worth Academy Board of Directors, Fort Worth, TX (2015)
- Outstanding Use of Classroom Technology, Non-Majors Biology Leadership Conference, San Francisco, CA (2012)
- Outstanding Course Design, Non-Majors Biology Leadership Conference, Atlanta, GA (2011)
- Graduate Teaching Assistant of the Year, Biology Department, TCU (2008)
- Outstanding Graduate Student of the Year, Biology Department, TCU (2008)
- 1st place poster (Biology), Student Research Symposium, TCU (2008)
- Adkins Research Fellowship (\$3000), TCU (2007)

Teaching

Courses Taught at TCU

- Contemporary Issues in Biology (BIOL 10003)
- Natural History (BIOL 30613)
- Teaching Intro Level Biology (BIOL 40320)
- Graduate Teaching in Biology (BIOL 60111)
- Advanced Teaching in Biology (BIOL 60703)
- Teaching Practicum in Biology (BIOL 80703)
- Intro to University Life (UNLF 10211)

Public Speaking and other Teaching Activities

- Member of panel discussing Science and Religion. Religion and Science (RELI 30723). Dr. David Grant, TCU, April 2021.
- Member of panel discussing Science and Religion. Religion and Science (RELI 30723). Dr. David Grant, TCU, April 2020.
- Introduction to plant pressing, and construction of 25 plant presses for 2nd graders at Fort Worth Academy. April 2019.
- Member of panel discussing Science and Religion. Religion and Science (RELI 30723). Dr. David Grant, TCU, April 2019.
- Introduction to plant pressing, and construction of 25 plant presses for 2nd graders at Fort Worth Academy. April 2018.
- Invited to lead Book Club discussion of Silent Spring by Rachel Carson. Botanical Research Institute of Texas. April 2018.
- Member of panel discussing Science and Religion. Religion and Science (RELI 30723). Dr. David Grant, TCU, April 2017.
- Introduction to plant pressing, and construction of 20 plant presses for 2nd graders at Fort Worth Academy. April 2017.
- Member of panel discussing Science and Religion. Religion and Science (RELI 30723). Dr. David Grant, TCU, April 2015.
- Science and Religion: Why can't they get along? Theology on Tap, Young Adult Ministry, Diocese of Fort Worth, December 2012
- Careers in Science. Invited to speak to students at Monnig Middle School about careers in science. October 2012.

Research and Creative Activities

Presentations at Scholarly Meetings

- Sawey, M.** 2014. University Student Responses to the Inclusion of Environmental Curricula. North American Association of Environmental Educators (NAAEE), Ottawa, Canada.

Sawey, A., **Sawey, M.**, Place-based environmental education: Creating a professional learning community. 2013 Ecological Society of America, Life Discovery Conference. St. Paul, MN.

Sawey, M., Sawey, A., Using Wikispaces for collaborative content creation in a non-major's biology lab. 2013 Ecological Society of America, Life Discovery Conference. St. Paul, MN.

Sawey, M., 2012. Effectively using technology to engage non-Biology majors in large lecture classes. Non-Major's Biology Leadership conference. Annual meeting, Seattle, WA.

Sawey, M., 2011. Using Contemporary Issues in Biology to engage non-Biology majors in large lecture classes. Non-Major's Biology Leadership conference. Annual meeting, Atlanta, Georgia.

Park, A. J., **M.R. Sawey**, M.M. Chumchal, R.W. Drenner, Y. Deng, and W.H. Nowlin. 2011. Biomagnification of mercury within the macroinvertebrate community of Caddo Lake. South Central Regional Chapter of the Society of Environmental Toxicology and Chemistry Annual Meeting, Denton, Texas.

Park, A. J., **M.R. Sawey**, M.M. Chumchal, R.W. Drenner, Y. Deng, J. Wadlington, W.H. Nowlin. 2010. Biomagnification of mercury within the macroinvertebrate community of Caddo Lake. Texas Academy of Science Annual Meeting, Stephenville, Texas.

Sawey, M.R.*, M.M. Chumchal, R.W. Drenner, and J.E. Pinder III. 2008. Habitat-specific differences in mercury concentrations of Mississippi grass shrimp from Caddo Lake, Texas. South Central Regional Chapter of the Society of Environmental Toxicology and Chemistry Annual Meeting, Houston, Texas.

Textbook Publications

Issues in Biology. **Sawey, M.**, Sawey, A.T., Kendall Hunt. 2019.

Digital Apps & Publications

Flora of Texas: Fort Worth Prairie Region. **Sawey, M.**, Sawey, A.T., Contributing authors for species descriptions, Published by the Botanical Research Institute of Texas, App produced by High Country Apps, LLC. (2015)

Popular Press Publications

Got a Big Class? i>Clickers Can Bring it Down to Size, **Sawey, M.**, Insights into Teaching and Learning, Koehler Center for Teaching Excellence, Texas Christian University (2013)

Invited Seminars & Workshop Presentations

- Moral Courage: Promoting Prosocial Bystander Behaviors. College of Science and Engineering, Texas Christian University (2020)

- Earth Day 2019. “Protect our species.” Featured speaker at Fort Worth Academy. Fort Worth, TX (April 2019)
- Silent Spring: 50th Anniversary of publication by Rachel Carson. Featured speaker at BRIT Book Club. Botanical Research Institute of Texas (April 16, 2018)
- Current Water Issues. Presentation given as Biology Content Specialist for Teacher Quality grant funded by Texas Higher Education Coordinating Board. Andrews Institute of Mathematics and Science Education, Texas Christian University (January 28, 2017)
- Environmental Science with Emphasis on ELL. Biology Content Specialist for Teacher Quality grant funded by Texas Higher Education Coordinating Board. Andrews Institute of Mathematics and Science Education, Texas Christian University (July 25-29, 2016)
- BRIT CARES: About Water. Intensive professional development for K-12 teachers focusing on current water issues in North Texas. Botanical Research Institute of Texas, Fort Worth, TX (July 9-13, 2012)
- Energy Crisis – Is it for real this time? Andrews Institute of Mathematics and Science Education, Texas Christian University (April 2011)
- Biodiversity – Who needs it? Andrews Institute of Mathematics and Science Education, Texas Christian University (March 2011)
- Using Contemporary Issues in Biology to engage non-Biology majors in large lecture classes. Non-Major’s Biology Leadership conference. Annual meeting, Atlanta, Georgia (February 2011)
- Environmental Systems & Science for TX Public Schools, Andrews Institute of Mathematics and Science Education, Texas Christian University (September 2010)
- Trees of North Texas, Andrews Institute of Mathematics and Science Education, Texas Christian University (July 2010)
- North Texas Weather, Andrews Institute of Mathematics and Science Education, Texas Christian University (March 2010)
- Environmental Systems Crash Course – Part 3, Andrews Institute of Mathematics and Science Education, Texas Christian University (November 2009)
- Environmental Systems Crash Course – Part 2, Andrews Institute of Mathematics and Science Education, Texas Christian University (October 2009)
- Environmental Systems Crash Course – Part 1, Andrews Institute of Mathematics and Science Education, Texas Christian University (October 2009)
- Solid Waste, Andrews Institute of Mathematics and Science Education, Texas Christian University (2009)
- North Texas Water Issues, Andrews Institute of Mathematics and Science Education, Texas Christian University (2009)
- Our Energy Future, Andrews Institute of Mathematics and Science Education, Texas Christian University (September 2009)
- Introduction to Water and the Water Cycle, Andrews Institute of Mathematics and Science Education, Texas Christian University (2008)
- The Water Crisis in North Texas, Andrews Institute of Mathematics and Science Education, Texas Christian University (2008)

- Wastewater and Stormwater, Andrews Institute of Mathematics and Science Education, Texas Christian University (2008)

Service

Biology Department Service

- Biology Advisory Committee, Chair (2022-2023)
- Biology Advisory Committee (2021-present)
- Course Coordinator for BIOL 10003 (2021-present)
- Graduate TA training & orientation (2009-present)
- Biology Advancement Committee (2020-present)
- Biology Website and Social Media Committee (2020-2022)
- Lab Coordinator for BIOL 10003 (2009-2021)
- Ad hoc committee to update Departmental Handbook (2020-2021)
- Biology Advisory Committee (2018-2019)
- “Monday’s at TCU” for prospective Biology students (2014-2019)
- Faculty Bystander Intervention presenter (2016-2018)
- Ad hoc committee on accommodations (2017)
- Assessment Committee (2008-2016)
- Curriculum Committee (2009-2015)
- Ad hoc committee on departmental website redesign (2013)

College of Science & Engineering Service

- New Faculty Mentor (2023-2024)
- College Advisory Committee (2022-2023)
- Faculty Bystander Intervention presenter (2018-2020)
- Ad hoc committee on Sid Richardson lecture hall renovations (2017-2018)
- College Advisory Committee (2016-2019)
- Ad hoc committee on Instructor ranks and promotion (2011)
- Chancellor’s Award Selection Committee (2009)

University Service

- University Evaluation Committee (2021-present)
- Educational Evaluation Committee (2017-present)
- Faculty Senate (2017-present)
- Ad hoc committee to review Titles and Ranks of Non-Tenure-Track Faculty at TCU (2021-2022)
- Chair of Educational Evaluation Committee (2018-2021)
- Ad hoc committee to review Mission Statement for TCU Andrew’s Institute of Math, Science, and Technology (2018-2019)
- Pilot Program for TCU Online (2016)
- Search committee for new Learning Management System (2014-2015)

- Faculty Senate (2009-2012)
- Student Relations Committee (2009-2012)

Professional Reviews & Consultation

Textbook Review

- Fundamentals of Weed Science, 5th edition. Zimdahl, Academic Press (2018)
- Biology: Concepts and Investigations. Hoefnagels, M. McGraw Hill (2018)
- Forensic Toxicology: Principles and Concepts. Lappas, Lappas, 1st Ed. Academic Press (Jan 2017)
- Biology Now with Physiology. Houtman, Scudellari, 1st Ed. W.W. Norton (2016)
- Physiology Chapters (5 chapters) reviewed for accuracy (2015)
- Biology Now. Houtman, Scudellari, 1st Ed. W.W. Norton. Entire core book (19 chapters) reviewed for accuracy (2014)
- Biology: A guide to the natural world. David Krogh, 5th Ed. Pearson – Benjamin Cummings (2011)
- Biology: Science for Life. Belk, C., Borden Maier, V. 4th Ed. Pearson – Benjamin Cummings (2012)
- Prospectus review, Name TBD. Zurawski. Pearson – Benjamin Cummings, (2011)
- Biology: Science for Life. Belk, C., Borden Maier, V. 3rd Ed. Pearson – Benjamin Cummings (2010)
- Biology for a Changing World, W.H. Freeman and Scientific American (2011)

Manuscript/Presentation review

North American Association of Environmental Educators conference, Ottawa.
 Manuscript/Presentation reviewer. Three reviewed (2014)

Public Service

- Board of Trustees, Fort Worth Academy, 2014-2015

Professional Development

- Insights from the Generative AI Classroom, Center for Digital Expression, TCU, Fort Worth, TX (2023)
- National Science Teachers Association (NSTA), National Conference, Atlanta, GA (2023)
- Biology Green Chair Research Presentation, Tyrone Hayes, How exogenous hormones and endocrine disruptors influence amphibian development., TCU (2023)
- Biology Seminar Series, Matthew Walsh, Environmental pressures on evolution of aquatic organisms, TCU (2023)
- Biology Seminar Series, Elisa Marroquin, Relationship between gut microbiota and obesity, TCU (2023)
- Faculty 2.0 Certification for Fully Online Instruction, TCU Koehler Center (2022)

- Hybrid Teaching Certification, TCU Koehler Center (2022)
- Biology Seminar Series, Sarah Hill, “This is your brain on birth control: The surprising science of women, hormones and the law of unintended consequences.” TCU (2022)
- Interrupting Microaggressions. Office of Institutional Equity, TCU. Fort Worth (2021)
- Hybrid Course Design & Delivery. Koehler Center for Teaching Excellence, TCU. Fort Worth (2020)
- Create Course Videos Using Panopto. Koehler Center for Teaching Excellence, TCU. Fort Worth (2019)
- Improving Science Teaching: What we learned from the Summer Institutes on Scientific Teaching. Koehler Center for Teaching Excellence, TCU. Fort Worth (2019)
- STAT-CAST. Conference for the Association of Science Teachers. Fort Worth, TX (2018)
- Bystander Intervention Training: Train the Trainer. Koehler Center for Teaching Excellence, TCU. Fort Worth (2017)
- Learning Object Repository (LOR) training for TCU Online. Koehler Center for Teaching Excellence, TCU. Fort Worth (2017)
- Bystander Intervention Training for Faculty. Koehler Center for Teaching Excellence, TCU. Fort Worth (2016)
- D2L Boot Camp (TCU Online). Koehler Center for Teaching Excellence, TCU. Fort Worth (2016)
- Annual Conference of the North American Association of Environmental Educators. Ottawa, Canada (2014)
- Forest and Nature School: Place, Play, and Inquiry-Based Education. David Sobel and Marlene Power. Forest and Nature School Canada, Ottawa (2014)
- LearningStudio Dropbox with Turnitin Integration. Koehler Center of Teaching Excellence, TCU. Fort Worth (2014)
- Publish and Flourish. Text and Academic Authors Association, Fort Worth, TX (2012)
- Non-Majors Biology Leadership Conference IV: The Scholarship of Teaching and Learning. Pearson – Benjamin Cummings. Seattle (2012)
- Using i>Clicker 2 to engage students in a large lecture setting. Koehler Center for Teaching Excellence, TCU. Fort Worth (2012)
- Non-Majors Biology Leadership Conference III: Course Redesign. Pearson – Benjamin Cummings. Atlanta (2011)
- Non-Majors Biology Leadership Conference II: Increasing student participation using technology and best practices. Pearson – Benjamin Cummings. San Francisco (2010)
- SoftChalk Workshop. Koehler Center for Teaching Excellence, TCU. Fort Worth (2010)
- How to help prevent suicide with SafeTALK. Dr. Monica Kintich. TCU HR Helps. Fort Worth (2010)
- Collecting Electronic Homework Using eCollege Dropbox and MS Word. Koehler Center for Teaching Excellence, TCU. Fort Worth (2010)
- .NExT Hands-on workshop. Koehler Center for Teaching Excellence, TCU. Fort Worth (2008)
- South Central Regional Chapter of the Society of Environmental Toxicology and Chemistry Annual Meeting. Houston, Texas (2008)

Membership in Professional Organizations

- Society for College Science Teaching (2023-present)
- National Science Teachers Association (2022 – present)
- Textbook and Academic Authors (2011 – present)
- American Academy for the Advancement of Science (2008-present)
- Texas Association of Biology Teachers (2018-2019)
- North American Association for Environmental Education (2014-2015)
- Association of Science Teacher Educators (2006-2008)