

Molly C. Gildea

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<http://www.mollycgildea.com>

Teaching Certifications and Qualifications

New York State Professional Certification in Biology 5 through 12, and Math 7 through 12

Tenured in RCSD in math

Professional Goal: To engage youth in science and math through my enthusiasm for research, depth and breadth of knowledge in biology and training in inquiry education. To increase literacy practices in secondary science education.

Skills: Practiced with Common Core and Next Generation Science and Math Standards, proficient in Spanish, word processing, data analysis (r, excel, sheets), molecular and field biology methods, web site construction, SmartBoard, technology to create/disseminate dynamic audio and video supporting innovative lessons, Google classroom and other education technology tools, and building consensus among peers.

Teaching Experience

Rochester City School District

Rochester, New York

- Math Teacher, 7th, 8th, Intervention and Algebra, Wilson Foundation Academy January 2016 to Present
- Math Teacher, 7th and 8th grade, John Walton Spencer 16 September 2015 to 2016
- Math teacher, 7th and 8th grade, John Williams School 5 September 2014 to 2015
- Math teacher, 7th and 8th grade, NorthWest College Preparatory September 2013 to 2014

Finger Lakes Community College, Canandaigua, NY

Fall 2008

- Adjunct Professor • Biology 122, Evolution and Biodiversity
Wrote and presented lectures on evolution and biodiversity for introductory biology course. Led weekly labs.
http://www.mollycgildea.com/Molly_C_Gildea/FLCC_Bio_122.html
 - Adjunct Professor • Biology 119, Evolution and Biodiversity for non-majors Fall 2011, 2012
Taught lectures, labs and discussions on evolution and biodiversity for introductory biology.
http://www.mollycgildea.com/Molly_C_Gildea/FLCC_Bio_119.html
 - Adjunct Professor • Biology 110, Essentials of Anatomy and Physiology Spring 2012
Taught lectures, labs and discussions for introductory anatomy and physiology.
http://www.mollycgildea.com/Molly_C_Gildea/FLCC_Bio_110.html
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Education

University of Rochester, NY

Warner School of Education • **Master of Science, August 2011 • Teaching and Curriculum**

Robert Noyce (NSF) full tuition scholarship for students committed to teaching science in high needs schools

Department of Biology • Completed Doctor of Philosophy coursework in Ecology and Evolution, 2005-2006 currently on leave

University of Washington, Seattle

School of Aquatic and Fisheries Sciences • **Master of Science, August 2003 • Advisor:** Dr. James J. Anderson
Thesis: "Stress, growth and survival of juvenile chinook salmon"

University of California, Berkeley

Bachelor of Science, **December 1998 • Molecular Environmental Biology**

A vertically integrated biology program requiring courses at the biochemical/genetic level through developmental/physiological to ecological levels. Coursework emphasized ecological processes.

Research Experience

University of Rochester

Fall 2005 to Fall 2006

Research Assistant • Designed and completed field collections, DNA extraction, PCR, sequencing and flow cytometric analysis of aquatic plant family, Potamogetonaceae. Managed one field and one lab assistant.

Washington Cooperative Fish and Wildlife Research Unit

October 2003 to June 2004

Research Scientist I • Wrote project proposals, made contacts, performed field and lab work necessary to use otolith micro-structural analysis to evaluate chinook salmon residence and growth in Puget Sound estuaries.

Columbia Basin Research Group, University of Washington

October 2000 to August 2003

Research Assistant • Located and entered historical data for Columbia Basin Research Web Site • Designed and carried out laboratory challenge experiments required for thesis • Analyzed salmon otolith microstructure

Environmental Careers Organization with East Bay Municipal Utilities District

October 1999 to May 2000

Field research on salmonids, raptors, reptiles and amphibians, invertebrates • Organized vehicle maintenance, managed Access database, worked with ArcView and GPS systems, sorted invertebrates, maintained equipment.

Grants and Scholarships

Noyce Fellow, University of Rochester, Warner School of Education	2010
United Way grant for Monroe Village Task Force	2009
Casner Foundation equipment grant	2004
Full support for master of science research at University of Washington	2000 to 2003

Publications and Presentations

- Gildea, M., L. Swartz. (2014) Professional Development on increasing vocabulary in math classrooms through the use of paint chips. Rochester City School District's Superintendents Conference Day. Douglass Campus.
- Gildea, M. (2012). Known knowns, known unknowns, unknown unknowns: pushing students to identify gaps in their own understanding. Collaborative conversations in science education: pushing the envelope. Warner School of Education, Get Real! Science, Noyce Program. Rochester, NY.
- Johnson, S. (presenter), M. Gildea, M. Hunter, T. Lucero, H. Williams (2011). Facilitating student reflection through self-assessment. NSF Noyce Teacher Scholarship Program Conference. Washington, D.C.
- Anderson, J.J., M.C. Gildea, D.W. Williams, Ting Li (2007). "Linking growth, survival, and heterogeneity through vitality." American Naturalist 171: E20-E43.
- Cobleigh, Molly M. (2003). Stress, growth and survival of juvenile chinook salmon. University of Washington Press.

Volunteer

Rochester City School District, School 23	Fall 2010 to present
SBPT parent representative, PTA Officer, weekly classroom volunteer with literacy and science lessons	
Monroe Village Task Force, Rochester, NY	March 2007 to 2013
Quality of Life Committee, Chairperson	
Fostering a stronger sense of community by creating interactions between neighbors and merchants	
Monroe Village Farmers Market, Manager	
Co-ordinate efforts and goals of neighbors, Monroe Village Task Force, and volunteers from Blessed Sacrament Church to start a farmers' market in our neighborhood.	