

Alicia Wei awei1@nd.edu

EDUCATION

Institute	Location	Year	Area of Study
University of Rochester	Rochester, NY	May 2018	Neuroscience (BS) Mathematics (BA)
University of Notre Dame	Notre Dame, IN	Present	Bioengineering (<i>PhD Track</i>)

RESEARCH EXPERIENCE

2018 - Present	Graduate Research Assistant & Teaching Assistant University of Notre Dame, Notre Dame IN Advisor: Donny Hanjaya-Putra, Ph.D.
2015 - 2018	Undergraduate Research Assistant University of Rochester Medical Center, Rochester NY Objective: Continuing research on oxidant microdomains in order to determine why antioxidants have failed clinical trials. Advisor: Andrew Wojtovich, Ph.D.
2014 - 2015	Technical Assistant & Undergraduate Research Assistant University of Rochester Medical Center, Rochester NY Objective: Maintaining <i>C. elegans</i> stock; Observing the effects that different forms of oxidants have on novel <i>C. elegans</i> models using optogenetic tools in the mitochondria. Advisors: Keith Nehrke, Ph.D. and Andrew Wojtovich, Ph.D.
2013	High School Summer Research Assistant Center for Gene Therapy and Neuroscience, Nationwide Children's Hospital, Columbus OH Objective: Reprogramming ALS patient fibroblasts to neuronal progenitor cells, then to astrocytes. Advisors: Brian Kaspar, Ph.D. and Kathrin Meyer, Ph.D.

AWARDS & HONORS

2018	Honors in Research University of Rochester Thesis and defense on sensing oxidant microdomains using fluorescent proteins.
2016 & 2017	Dean's Award University of Rochester Undergraduate Research Exposition - Research Award
2016 & 2018	Dean's List University of Rochester

PUBLICATIONS

- Trewin AJ, Bahr LL, Anmol, **Wei AY**, Foster TH and Wojtovich AP. Antioxidants and Redox Signaling (ARS). 2019.
- Alderfer L, **Wei AY**, Hanjaya-Putra D. "Lymphatic Tissue Engineering and Regeneration". 2018. Journal of Biological Engineering (JBE). Review Article. 12:32.
- Trewin AJ, Berry BJ, **Wei AY**, Bahr LL, Foster TH and Wojtovich AP. "Light-induced Production of Oxidants by Fluorescent Proteins." 2018. Free Radical Biology and Medicine (FRBM). Review Article. In Press.
- Wojtovich AP, **Wei AY**, Sherman TA, Foster TH, Nehrke K. "Chromophore-Assisted Light Inactivation of Mitochondrial Electron Transport Chain Complex II in *Caenorhabditis elegans*." Scientific Reports. 2016. 6:29695.

FELLOWSHIPS

2017	American Heart Association, Founders Affiliate Undergraduate Student Summer Fellowship Program \$5,000
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LABORATORY SKILLS

Live Worm (<i>C. elegans</i>) imaging	Cloning Techniques	Electrophysiology
Stem Cell Culture	Cellular Fluorescent Staining and Imaging	Histology
Viral Transduction	DNA/RNA/Protein Isolation	PCR
Immunofluorescence Staining	FACS	

TECHNICAL SKILLS

Tools	LaTex, Image J, Prism, AutoCAD, Python, Unix
Microsoft	Word, Excel, Powerpoint, Endnote
Photo Processors	Photoshop CS6, Capture One, SlideBook 6
Machine Fabrication	Techno Router, Band Saw, Drill Press, Scroll Saw, Belt & Disc Sander Manual Lathe, Manual Mill

PRESENTATIONS

2018	September	Translational Research in Mitochondria, Aging and Disease (TriMAD) Symposium Pennsylvania State University of State College, PA Poster (Data Contribution)
	April	National Conference on Undergraduate Research (NCUR) University of Memphis, TN Talk
2017	July	Mitochondria Research Interest Group University of Rochester, NY Talk
	April	Undergraduate Research Exposition University of Rochester, NY Talk
	April	National Conference on Undergraduate Research (NCUR) University of Memphis, TN Talk
2016	October	Undergraduate Research and Visitation Day University Of Rochester, NY Poster
	April	Undergraduate Research Exposition University of Rochester, NY Talk
	April	National Conference on Undergraduate Research (NCUR) University of North Carolina - Asheville, NC Talk
	March	Western New York Worm Group Seminar Series University of Rochester, NY Talk
2015	October	Undergraduate Research and Visitation Day University Of Rochester, NY Poster
	October	Western New York Worm Group Seminar Series - Undergraduate Research Day University of Rochester, NY Talk
	July	URMC Summer Scholars Program University of Rochester, NY Poster
2014	May	Southern California Academy of Sciences (SCAS) California State University - Channel Islands, CA Talk
	February	American Junior Academy of Sciences (AJAS) University of Chicago, IL Talk, Poster
2013	May	Southern California Academy of Sciences (SCAS) California State University - Long Beach, CA Talk

VOLUNTEER WORK

2019	March	AWIS Networking Workshop University of Notre Dame <i>Summary: Volunteer photographer</i>
		ND Pi-Day 5K/10K Race AWIS University of Notre Dame

Summary: Volunteer photographer

- February **Stem Cell Outreach** | University of Notre Dame
Summary: Making stem cell research more accessible to young kids.
- St. Joseph Valley Regional Mathcounts Competition** | University of Notre Dame
Helping to run the event for middle school mathletes
- 2017 November **Undergraduate Research Fair: Neuroscience** | University of Rochester
Summary: Question and answer panel guiding undergraduates interested in beginning research.
- September **Undergraduate Research: Speaker** | University of Rochester
Summary: Speaker - how I began conducting undergraduate research.
- August **National Science Foundation Summer Outreach** | Rochester YMCA
Summary: STEM outreach initiative aimed for local third graders.
- 2016 December **Hospital Volunteer | English Tutor** | Atlantis Project | Székesfehérvár, Hungary
 Szent György Egyetemi Oktató Kórház (St. George's University Teaching Hospital)
Summary: Volunteering at the hospital during my free time | Helping locals with their English.
- 2014 - 2018 **Fencing Club** | University of Rochester
Summary: Opening club to community members | Coordinating charity tournaments with RIT.
- 2012 - 2013 **Calculus Tutor** | Walnut High School
Summary: Helping high school juniors and seniors understand AP Calculus AB and BC.
- 2009 - 2013 **Math Tutor** | Premier Academy
Summary: Helping kids from primary through junior high school understand math.