

# Adam Lee Weaver

Associate Professor, Dept. of Biology  
Saint Michael's College  
One Winooski Park, Box 283  
Colchester, VT 05439

*voice:* (802) 654-2624  
*fax:* (802) 654-2236  
*email:* [AWEAVER2@SMCVT.EDU](mailto:AWEAVER2@SMCVT.EDU)

## PROFESSIONAL EXPERIENCE

2020-	Program Director, Health Science Program, St. Michael's College
2014-2018, 2023-	Chief Advisor of the Health Professions, St. Michael's College
2014-	Associate Professor, Dept. Biology, St. Michael's College
2010-2014	Assistant Professor, Department of Biology, St. Michael's College
2008-2009	Assistant Professor, Div. of Basic Pharm. Sciences, Xavier University College of Pharmacy
2007-2008	Assistant Professor, Department of Biology, Xavier University of Louisiana
2005-2007	Postdoctoral Fellow, University of Washington, Otolaryngology Department
2004	Instructor, Spelman College, Biology Department
2002-2004	Postdoctoral Fellow, Emory University, Biology Department
1998-2002	Graduate Research Assistant, Ohio University, Department of Biological Sciences
1995-1998	Graduate Teaching Assistant, Ohio University, Department of Biological Sciences
1994-1995	Graduate Teaching Assistant, UCLA, Department of Integrative Biology
1993-1994	Undergraduate Teaching Assistant, University of Delaware, Dept. of Biological Sciences

## EDUCATION

2012 & 2013	Grant Writing Workshops, NSF EPSCoR & NIH Vermont Genetics Network, UVM
2013	Teaching Workshop: "CrawFly Invertebrate Neurophysiology Course," Cornell Univ., Ithaca
2012	Research Methods Workshop: "Towards Mathematical Modeling of Neurological Disease from Cellular Perspectives," Fields Institute of Mathematics, Univ. Toronto
2002	Postdoctoral Teaching Practicum, Emory University
1997	Simulations in Computational Neuroscience Workshop, Pittsburgh Supercomputer Ctr.
1995-2002	Ph.D., Neuroscience Program, Ohio Univ., Advisor: Dr. Scott Hooper
1994-1995	Ph.D. Student, Integrative Biology Program, UCLA, Advisor: Dr. Charles Taylor
1990-1994	B.A., Biology and Psychology Majors, Univ. of Delaware, Advisor: Dr. Robert Simons

## TEACHING EXPERIENCE

Saint Michael's College	<ul style="list-style-type: none"><li>• Human Anatomy &amp; Physiology I &amp; II (Lecture and Laboratory)</li><li>• Neuroscience: Physiology/Behavior (Lecture and Laboratory)</li><li>• Introductory Cell Biology and Genetics (BI 153: General Biology; Lecture and Laboratory)</li><li>• Biological Communications (Lecture)</li><li>• The 5+ Senses: Our Window to the World (Biology Senior Capstone Seminar)</li><li>• Neuroscience Senior Capstone Seminar</li></ul> <p><u>Academic advisor</u> to 29 to 39 students per semester, 2010-present</p>
Xavier University	<ul style="list-style-type: none"><li>• Human Anatomy &amp; Physiology (Lecture: College of Pharmacy, College of Arts &amp; Sciences)</li><li>• Human Anatomy &amp; Physiology (Laboratory: College of Pharmacy)</li><li>- Redesigned course to incorporate both hands-on and computerized labs.</li><li>• General Biology (Lecture and Laboratory: College of Arts &amp; Sciences)</li></ul> <p><u>Academic advisor</u> to 30 to 50 Pharmacy students per semester, 2008-2009</p>
Spelman College	<ul style="list-style-type: none"><li>• General Biology II (co-instructor)</li><li>• Neurobiology (guest lectures)</li></ul>

## CURRENT SCHOLARSHIP PROJECTS

### Functional characteristics of co-transmission in efferent projections along spider mechanosensory neurons.

- In this collaborative project with Dr. Ruth Fabian-Fine, we will identify and quantitatively measure the impact of co-released neurotransmitters onto sensory neurons and spider leg muscles.

### Cellular mechanisms of phase maintenance in a model crustacean pyloric CPG.

- In this collaborative project with Dr. Gennady Cymbalyuk of GSU, we are characterizing the cellular mechanisms of network phase maintenance and cycle frequency control in a model central pattern generator.

### Comparative study of the heartbeat system of North American leeches.

- In this project, we quantitatively measured and compared an array of neuronal properties for neurons that drive blood flow in several species of leeches with differing circulatory anatomy.

### Biophysical model of the leech heartbeat system from neurons through blood flow.

- In this project, we created a reduced network mathematical model that provides testable predictions of network phase maintenance mechanisms and ideas for future entrainment experiments with the living system.

## MANUSCRIPTS IN PREPARATION (Student collaborators are underlined.)

G O'Brien\*, AL Weaver\*, W Barnett, DA Kozhanov, GS Cymbalyuk (2021) Cellular Mechanisms of Phase Maintenance in a Pyloric Motif of a Central Pattern Generator. *Frontiers in Computational Neuroscience*.

## REFEREED PUBLICATIONS (\*: Authors contributed equally [i.e., shared first-authorship])

- R Fabian-Fine, AM Aiken, JR Aug, JD Boucher, DC Butler, LJ Clancy, SA Clem, SC Crotty, AM Dalpe, EJ Donzello-Jewett, TM Galgay, BK Gillis, BW Heinrich, KR Hines, JE Kimmel, JM McGrath, MM Miles, JA Morey, IA Ortiz, KQ Pham, LC Quinn, CJ Radican, NT Speidel, BJ Thomas, AR Troisi, JL Weiss, KV Wentzheimer, AL Weaver (2023) Neurodegeneration in a novel invertebrate model system: Failed microtubule-mediated cell adhesion and unraveling of macroglia. *Journal of Comparative Neurology*.
- IR Davenport, AL Weaver, JP Wourms (2011) A Novel Set of Structures Within the Elasmobranch, Ovarian Follicle. *J Morphology*. May 2011; 272(5):557–565.
- AL Weaver, RC Roffman, BJ Norris, RL Calabrese (2010) A Role for Compromise: Synaptic Inhibition and Electrical Coupling Interact to Control Phasing in the Leech Heartbeat CPG. *Frontiers in Behavioral Neuroscience*. July 2010; 4(38):1-17.
- J Meitzen, AL Weaver, EA Brenowitz, DJ Perkel (2009) Plastic and stable electrophysiological properties of adult avian forebrain song-control neurons across changing breeding conditions. *J Neuroscience*. May 2009; 29(20):6558-67.
- SL Hooper, E Buchman, AL Weaver, JB Thuma, KH Hobbs (2009) Slow conductances could underlie intrinsic phase-maintaining properties of isolated lobster (*Panulirus interruptus*) pyloric neurons. *J Neuroscience*. Feb 2009; 29(6):1834-1845.
- BJ Norris\*, AL Weaver\*, A Wenning, PA Garcia, RL Calabrese (2007) A central pattern generator producing alternative outputs: Pattern, strength and dynamics of premotor synaptic input to leech heart motor neurons. *J Neurophysiology*. Nov 2007; 98:2992-3005.
- BJ Norris\*, AL Weaver\*, A Wenning, PA Garcia, RL Calabrese (2007) A central pattern generator producing alternative outputs: Phase relations of leech heart motor neurons with respect to premotor synaptic input. *J Neurophysiology*. Nov 2007; 98:2983-2991.
- BJ Norris\*, AL Weaver\*, LG Morris, A Wenning, PA Garcia, RL Calabrese (2006) A central pattern generator producing alternative outputs: temporal pattern of premotor activity. *J Neurophysiology*. 96(1):309-26.
- AL Weaver, SL Hooper (2003) Relating network synaptic connectivity and network activity in the lobster (*Panulirus interruptus*) pyloric network. *J Neurophysiology*. 90(4):2378-2386.
- JB Thuma, LG Morris, AL Weaver, SL Hooper (2003) Lobster (*Panulirus interruptus*) pyloric muscles express the motor patterns of three neural networks, only one of which innervates the muscles. *J Neuroscience*. 23(26):8911-8920.

**AL Weaver**, SL Hooper (2003) Follower Neurons in Lobster (*Panulirus interruptus*) Pyloric Network Regulate Pacemaker Period in Complementary Ways. *J Neurophysiology*. 89(3):1327-1338.

NJ Hoover, **AL Weaver**, PI Harness, SL Hooper (2002) Combinatorial and cross-fiber averaging transform muscle electrical responses with a large random component into deterministic contractions. *J Neuroscience*. 22(5):1895-1904.

SL Hooper, **AL Weaver** (2000) Motor neuron activity is often insufficient to predict motor response. *Current Opinions in Neurobiology*. 10(6):676-682.

## SCHOLARSHIPS AND AWARDS

2022	VBRN Internal Grant Award, \$2,000 (Shared with Dr. Ruth Fabian-Fine)
2021	VBRN Internal Grant Award, \$2,000
2013	VPAA Junior Faculty Summer Research Stipend Award: "Development of a Novel Model System for the Study of Neurological Disorders," Faculty Development Committee, \$4,000
2013	VPAA Expense Defrayment Grant: "CrawFly Invertebrate Neurophysiology Course," Faculty Development Committee, \$1,180
2012-2013	Project Grant Award: "Development of a Novel Model System for the Study of Neurological Disorders," Vermont Genetics Network (NIH), \$70,000 and two student grants (\$4,500 each; Awardees: Alison Lajoie & Marci Wood)
2012	SMC Academic Enrichment Funds: "ECHO Anatomy Trip", \$428 for 42 student admissions
2011-2012	Project Grant Award: "Development of a Novel Model System for the Study of Neurological Disorders," Vermont Genetics Network (NIH), \$65,030 and two student grants (\$4,500 each; Awardees: Kristen Cowens & Danielle Shepard)
2010	VPAA Student/Faculty Summer Research Fellowship, SMC, \$1,978 for supplies & two student grants (\$3,700 each; Awardees: Amanda Willette & Kristen Cowens)
2008-2009	Teaching Lab Equipment & Materials Grant, Xavier Univ. College of Pharmacy, \$43,100
2008	Louisiana Cancer Research Consortium Grant, Xavier Univ., \$14,950 ( <u>declined</u> )
2007-2008	MIE-STEM Faculty Mini-Grants, Xavier Univ. of Louisiana Center For Undergraduate Research, \$10,000 & student stipend
2005-2006	NIH National Research Service Award Training Grant, Univ. Washington School of Med.
2002-2004	Fellowship in Research and Science Teaching, Emory Univ. School of Medicine

## INVITED TALKS (Student collaborators are underlined.)

- R Fabian-Fine, AM Aiken, JR Aug, JD Boucher, SA Clem, AM Dalpe, TM Galgay, CJ Radican, JL Weiss, **AL Weaver**. "Shedding Light on Neurodegenerative Diseases for Non-Scientists – Underlying Causes, Prevention, and the Latest Research Findings." St. Michael's College Solutions for Social Impact, 2022.
- "Life-Sustaining Rhythm: Neuronal Analysis and Mathematical Models of the Leech Heartbeat System." – Science Seminar Series, Middlebury College, 2014.
- "Wonder: Living with craniofacial differences." – Panel Discussion, Education Department, Saint Michaels College, 2013.
- "Effective Undergraduate Mentoring." – Panel Discussion on Professional Development Towards Promotion and Tenure, VGN Workshop, Norwich University, 2012.
- "Why the High? Marijuana: Pharmacology & Physiology." – Legalization of Marijuana Panel Discussion, Honors Program, Saint Michaels College, 2011.
- "Categorization of Neuron Cell Types in Two Leech Species." – Kristen B. Cowens, Danielle K. Shepard, & **Adam L. Weaver**, Alumni Board of Directors, Saint Michaels College, 2011.
- "Loveable Local Leeches!!" – Amanda Willette, Kristen Cowens, & **Adam Weaver**, Outreach Talk, The Schoolhouse, South Burlington, VT, 2010.

“Advice for Students: My Career Path and Research” – Workshop Presentation, *Beta Beta Beta* National Biological Honor Society, Dept. of Biology, Saint Michaels College, 2010.

“Blackboard: Unleashing Its Power in the Classroom – Tests & Surveys” – Workshop Presentation, Center for the Advancement of Teaching, Xavier University of Louisiana, 2009.

## PROFESSIONAL AFFILIATIONS

National Assoc. of Advisors for Health Prof. (2014)

*Sigma Xi*, The Scientific Research Society (2010)

Society for Neuroscience (VT Chapter; 2010)

Society for Neuroscience (1996)

Northeast Assoc. of Advisors for Health Professions (2014)

Faculty for Undergraduate Neuroscience (2009)

*Beta Beta Beta* National Biological Honor Society (2007)

*Psi Chi* National Psychology Honor Society (1994)

## MENTORED UNDERGRADUATE RESEARCHERS

2018-20	Melissa Lezama (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Performed a phase analysis of synaptic parameter variation in a reduced model of the leech heartbeat system. This project formed the basis for her senior honors thesis in Neuroscience. <i>Research support</i>: Trustee Grant (2019)</li> </ul>
2015-16	Justine Ransdell (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Quantitatively measured neuronal and synaptic parameters of homologous leech neurons in two leech species. Labeled synaptic receptors. <i>Research support</i>: Trustee Grant (2016)</li> </ul>
2015-16	Jennifer Toner (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Quantitatively measured neuronal and synaptic parameters of homologous leech neurons in two leech species. Labeled synaptic receptors. <i>Research support</i>: Trustee Grant (2016)</li> </ul>
2014-15	Bryanna Evoy (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Performed a parameter search of physiological parameters on the activity patterns and phasing of a computer model of the nervous system to build a database of network responses. <i>Presentation</i>: 2016 – East Coast Nerve Net (ECNN; talk)</li> </ul>
2012-13	Marci Wood (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Quantitatively measured neuronal and synaptic parameters of homologous leech neurons in two leech species as part of specific aim 1 of the 2012-13 VGN grant. <i>Presentations</i>: 2013 – ECNN (talk), VGN Student Career Day (poster) <i>Research support</i>: Vermont Genetics Network (2012)</li> </ul>
2012-13	Alison Lajoie (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Quantitatively measured neuronal and synaptic parameters of homologous leech neurons in two leech species as part of specific aim 1 of the 2012-13 VGN grant. <i>Presentations</i>: 2013 – ECNN (talk), VGN Student Career Day (poster) <i>Research support</i>: Vermont Genetics Network (2012)</li> </ul>
2011-12	Danielle Shepard (SMC)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Quantitatively measured neuronal and synaptic parameters of homologous leech neurons in two leech species as part of specific aim 1 of the 2011-12 VGN grant. <i>Presentations</i>: 2012 – ECNN (poster), VGN Student Career Day (poster) <i>Research support</i>: Vermont Genetics Network (2011)</li> </ul>
2010-13	Kristen Cowens (SMC)	<ul style="list-style-type: none"> <li>• <i>Project 1</i>: Measured neuronal and synaptic parameters of homologous leech heartbeat neurons. This project formed the basis for her <i>senior honors thesis</i> in Biology. <i>Presentations</i>: 2012 – ECNN (poster), VGN Student Career Day (poster), 2010 – Outreach Talk, The Schoolhouse of VT</li> <li>• <i>Project 2</i>: Tested the effects of different physiological parameters on the activity patterns and phasing of a computer model of the nervous system to carry out specific aim two from the 2011-12 VGN grant. <i>Presentation</i>: 2012 – Comput. Neuroscience Conf. (poster)</li> <li>• <i>Project 3</i>: Performed video analysis of blood flow in leeches. <i>Research support</i>: SMC VPAA (2010) and Vermont Genetics Network (2011-12)</li> </ul>
2010-11	Amanda Willette (SMC)	<ul style="list-style-type: none"> <li>• <i>Project 1</i>: Measured the outputs of homologous leech neurons and muscles.</li> <li>• <i>Project 2</i>: Performed video analysis of blood flow in juvenile leeches. <i>Presentations</i>: 2010 – Outreach Talk, The Schoolhouse of VT <i>Research support</i>: SMC VPAA</li> </ul>
2007-09	Bria Miller (Xavier University)	<ul style="list-style-type: none"> <li>• <i>Project</i>: Investigated the role of synaptic coupling on phase relationships in a complete model of the heartbeat CPG in the medicinal leech, <i>Hirudo medicinalis</i>.</li> </ul>

**REFEREED PUBLISHED ABSTRACTS AND POSTER PRESENTATIONS** (\*: Authors contrib. equally)

Student collaborators are underlined.

- BM Evoy, **AL Weaver** (2016) Phase Analysis in a Reduced Model of the Leech Heartbeat System. Program No. 810.17. 2016 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2016. Online.
- AL Weaver** (2014) The effects of interactions between intrinsic properties and network parameters on bilateral phasing in a reduced leech heartbeat system. *Computational Neuroscience Conference Abstr.* 23:13.
- AL Weaver**, KB Cowens (2012) Compromise revisited: inhibitory synapse & electrical coupling effects on bilateral phasing in the leech heartbeat system. *Computational Neuroscience Conference Abstr.* 21:161.
- RC Seaman, **AL Weaver**, RL Calabrese (2009) Finding the right balance: Synaptic strength in the leech heartbeat CPG. *Soc. Neuroscience Abstr.* 35: Online (269.2).
- AL Weaver**, J Meitzen, EA Brenowitz, DJ Perkel (2007) Breeding conditions alter intrinsic electrophysiological properties of song control neurons in Gambel's white crowned sparrows. *Soc. Neuroscience Abstr.* 33: Online (751.5).
- BJ Norris, **AL Weaver**, A Wenning, PA Garcia, RL Calabrese (2006) Control of motor neuron activity by a CPG: a case for unpacking. *Soc. Neuroscience Abstr.* 32: Online (350.5).
- AL Weaver**, RL Calabrese (2005) A role for compromise: Inhibitory and electrical synapse effects on phasing in the leech heartbeat CPG. *Computational Neuroscience Conference Abstr.* 14:45.
- D Perkins-Balding\*, **AL Weaver**\* (2004) Approach, design, and evaluation of an introductory biology course taught by FIRST fellows at Spelman College. *IRACDA Conference Abstr.*
- AL Weaver**, RL Calabrese (2003) Effects of chemical and electrical synapses on phase relationships in a complete model of the heartbeat CPG in the medicinal leech. *Soc. Neuroscience Abstr.* 29: Online (605.10).
- AL Weaver**, KH Hobbs, SL Hooper (2001) Synaptic coupling greatly increases the range of "non-integer" ( $n:m$ ) entrainment. *International Congress of Neuroethology Conference.* 6:250.
- AL Weaver**, SL Hooper (2000) Within the normal pyloric frequency range, removal of LP and VD neuron input has very little effect on pyloric activity. *Soc. Neuroscience Abstr.* 26:454.
- E Buchman, JB Thuma, **AL Weaver**, SL Hooper (2000) Model conductances that reproduce the PY neuron delay shifts observed in response to changes in stimulus paradigm. *Soc. Neuroscience Abstr.* 26:2000.
- AL Weaver**, SL Hooper (1999) Integer (1:1, 2:1) and non-integer (2:3, 3:4) entrainment of the pyloric pacemaker by rhythmic current injection into the follower LP and VD neurons. *Soc. Neuroscience Abstr.* 25:1642.
- N Hoover, N Weathington, **AL Weaver**, SL Hooper (1999) EJP amplitude shows large random variation in several intrinsic pyloric muscle in *Panulirus*. *Soc. Neuroscience Abstr.* 25:1642.
- AL Weaver**, JB Thuma, SL Hooper (1998) What role do the LP and VD neurons play in pyloric network phase maintenance? *Soc. Neuroscience Abstr.* 24:1891.
- AL Weaver**, RA DiCaprio, SL Hooper (1996) Existing stomatogastric neuron models predict some, but not all, responses to rhythmic input. *Soc. Neuroscience Abstr.* 22:131.

**RESEARCH PRESENTATIONS** (With published abstracts; \*: Authors contributed equally)

Talks are 15-20 minute formal conference presentations. Student collaborators are underlined.

- AK Lajoie\*, MA Wood\*, **AL Weaver** (2013) Further Electrophysiological Characterization of Neurons in the Ribbon Leech – *Nephelopsis obscura*. **1)** Vermont Genetics Network (VGN) Annual Retreat (**poster**), **2)** VGN Student Career Day (**poster**), and **3)** East Coast Nerve Net (ECNN) Conf. (**talk**)
- AL Weaver**, KB Cowens (2012) Compromise revisited: inhibitory synapse and electrical coupling effects on bilateral phasing in the leech heartbeat system. **1)** VGN Annual Retreat. (**poster**) and **2)** Computational Neuroscience (CNS) Conference (**poster**)
- KB Cowens\*, DK Shepard\*, **AL Weaver** (2012) Neuronal Characterization in Two Novel Leech Species – *Nephelopsis obscura* & *Haemopsis sanguisuga*. **1)** VGN Student Career Day Conf. (**poster**) and **2)** East Coast Nerve Net (ECNN) Conf. (**poster**)

- AL Weaver**, RL Calabrese (2005) A role for compromise: synaptic inhibition and electrical coupling on phase relationships in a complete model of the heartbeat CPG in the medicinal leech. CNS Conf. (*poster*)
- D Perkins-Balding\*, **AL Weaver**\* (2004) Approach, design, and evaluation of an introductory biology course taught by FIRST fellows at Spelman College. Institutional Research and Academic Career Development Award (IRACDA) Conf. (*poster*)
- AL Weaver**, RL Calabrese (2004) Effects of synaptic inhibition and electrical coupling on phase relationships in a complete model of the medicinal leech heartbeat CPG. South-East Nerve Net (SENN) Conf. (*talk*)
- AL Weaver**, RL Calabrese (2003) Effects of chemical and electrical synapses on phasing in a complete model of the heartbeat CPG in the medicinal leech. SENN Conf. (*talk*)
- LG Morris, **AL Weaver**, BJ Norris, RL Calabrese (2003) Phases of premotor and switch heart interneurons in the leech. SENN Conf. (*talk*)
- AL Weaver**, KH Hobbs, SL Hooper (2001) Synaptic coupling greatly increases the range of "non-integer" ( $n:m$ ) entrainment. International Congress of Neuroethology (ICN) Conf. (*poster*)
- AL Weaver**, SL Hooper (2000) Within the normal pyloric frequency range, removal of LP and VD neuron input has very little effect on pyloric activity. 1) Stomatogastric Satellite Conf. (*talk*) and 2) ECNN Conf. (*talk*)
- AL Weaver**, SL Hooper (1999) Integer ( $1:1$ ,  $2:1$ ) and non-integer ( $2:3$ ,  $3:4$ ) entrainment of the pyloric pacemaker by rhythmic current injection into the follower LP and VD neurons. ECNN Conf. (*talk*)
- N Hoover, N Weathington, **A Weaver**, SL Hooper (1999) EJP amplitude shows large random variation in several intrinsic pyloric muscles in *Panulirus*. ECNN Conf. (*talk*)
- AL Weaver** (1994) Distributed problem solving. Southern California Artificial Life Conf. (*talk*)
- AL Weaver**, RF Simons (1994) The effect of visual imagery on human startle response. University of Delaware Undergraduate Research Symposium. (*poster*)

## POST-DOCTORAL RESEARCH SUMMARY

University of Washington in the lab of Dr. David Perkel (experimental research)

- Explored activity-dependent synaptic plasticity in a forebrain circuit involved in acquisition of learned vocal motor patterns in the songbird zebra finch (*Taeniopygia guttata*).
- Characterized the physiological properties and intrinsic conductances in a premotor nucleus involved in song production.

Emory University in the lab of Dr. Ronald Calabrese (computer modeling research)

- Created a full network model of the central pattern generator underlying contractions in the medicinal leech (*Hirudo medicinalis*) heart.
- Produced a database exploring the activity patterns of a medicinal leech elemental oscillator network model across ionic conductance parameter space.

## GRADUATE RESEARCH SUMMARY

Ohio University in the lab of Dr. Scott Hooper (experimental and computer modeling research)

- Characterized the synaptic mechanisms of pyloric network phase maintenance and cycle frequency control in the spiny lobster (*Panulirus interruptus*).
  - Investigated requirements for network entrainment in pyloric network and model pyloric neurons.
- Dissertation: "The functional roles of the Lateral Pyloric and Ventricular Dilator neurons in the pyloric network of the lobster, *Panulirus interruptus*."

## UNIVERSITY AND ACADEMIC SERVICE

2021	Essex High School STEM Internship Program, Mentor
2019-2021	Faculty Welfare Committee, SMC
2019-2020	Negotiated Physician Assistant Program 5-Year Articulation Agreement, Le Moyne College
2019	Physician Assistant Program Evaluation, SMC

2019	Dean of the Faculty Search Committee, SMC
2019-2020	Panopto (Tegrity Alternative) Pilot Committee Member, SMC
2018-2020	Communications in the Biological Sciences, Biology Dept. Assessment Coordinator, SMC
2018/8	Interviewed for <i>Northern Woodlands</i> ' weekly ecology series, "The Outside Story" on "Leeches: They don't all suck blood."
2017-2018	Trustee Grant Reviewer, SMC
2017-2018	Peer Reviewer, <i>PLOS One</i>
2017	"Enhanced Vision: Artful Science" Art Exhibit, Contributor [Two Works], SMC
2016-2017	Echo360 (Tegrity Alternative) Pilot Committee Member, SMC
2016	Fifth-Year Secondary Reviewer (for Profs. Facey & Tomasulo), SMC
2016	Course Consultant for "Greek & Latin Roots of Medical Terminology", SMC
2016	Biomedical Sciences New Program External Reviewer, SUNY Plattsburgh
2015-	Neuroscience Program Steering Committee, SMC
2015-2016	Mathematics Department (Statistics) Faculty Search Committee [Two Rounds], SMC
2015	Biology Department Faculty Search Committee, SMC
2014-2015	Biology Department Self-Study Coordinator (with Prof. Lubkowitz), SMC
2014-2015	Strategic Planning Curriculum Ad Hoc Committee, SMC
2014-2015	Neuroscience Program Co-Creator (with Prof. Melissa Tomasulo), SMC
2014-2015	Peer Reviewer, <i>Journal of Neurophysiology</i>
2014-2015	Faculty Development Committee, SMC
2014	Guest Lecturer on "Use of MATLAB to Model Differential Equations in my Research," <i>Computer Science: Engineering</i> , Prof. John Trono, SMC
2013-2014	Learning Management System (Canvas & Desire2Learn) Assessment Ad Hoc Committee, Core Member, SMC
2013	Guest Lecturer on Muscles, <i>General Physics</i> , Prof. Pat Bunt, SMC
2012-2014	Library & Educational Technology Committee, SMC
2012	Davis Grant: Writing Assessment Ad Hoc Committee, SMC
2012	Biology Department Faculty Search Committee, SMC
2012	ECHO trip to "OUR BODY: The Universe Within", Coordinated anatomy class trip with Prof. Doug Facey
2012-2013	East Coast Nerve Net (ECNN) Conference Organizing Committee
2012-2013	Summer Advising Sessions, Biology Dept., SMC
2010-2012	Multicultural Programming Committee, SMC
2010-2015	<i>Beta Beta Beta</i> National Biological Honor Society (Advisor), SMC <i>Omicron Omicron</i> Chapter
2010	<i>Beta Beta Beta</i> Chapter Presentation on Finding a Career Path and Pursuing Research, SMC
2010-	Fall Academic Majors/Minors Fair, Academic Preview Day and Spring Accepted Student Open House, Biology Dept., SMC
2009	Center for the Advancement of Teaching Workshop Presentation: "Blackboard: Unleashing Its Power in the Classroom—Assessments (Tests & Surveys)," Xavier Univ.
2008-2009	Facilities and Resources Subcommittee, Xavier Univ., Coll. of Pharmacy
2008-2009	Self-Study Committee, Xavier Univ., Coll. of Pharmacy
2008-2009	East Coast Student Club (Advisor), Xavier Univ.
2007-2009	Center for the Advancement of Teaching Advisory Committee, Xavier Univ.
2005-2007	Minority Student Bioscience Experience, Univ. Washington

**COMMUNITY SERVICE** (Student collaborators are underlined.)

“Leech Lab Research” – **Adam Weaver**, Educational Lab Visit, Brewster Pierce Memorial School, Huntington, VT, 2012.

“Loveable Local Leeches!!” – Amanda Willette, Kristen Cowens, & **Adam Weaver**, Outreach Talk, The Schoolhouse, South Burlington, VT, 2010.

Judge for Student Presentations, Society for Neuroscience (Vermont Chapter), 2010.