

# CURRICULUM VITAE

## - LISA L. WALSH -

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Department of Ecology & Evolutionary Biology and Museum of Zoology  
University of Michigan • 1105 North University • Ann Arbor, Michigan 48109  
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### **EDUCATION**

#### **Doctor of Philosophy in Biology, University of Michigan (2014–present)**

- Dissertation topic – Understanding the ecological and evolutionary factors driving the on-going range expansion of the Virginia opossum (*Didelphis virginiana*)

#### **Master of Science in Biology, University of Michigan (August 2014)**

- Thesis topic – Investigating the population genetics of an ongoing range expansion in the Virginia opossum (*Didelphis virginiana*)

#### **Bachelor of Arts in Biology and Environmental Science, Bowdoin College (May 2011)**

- Honor's Thesis topic – Distribution of *Symbiodinium* on a Florida Keys Reef
- Graduated Cum Laude

### **ACADEMIC APPOINTMENTS**

#### **University of Michigan – Ann Arbor, Michigan**

9/2016–present	<b>Graduate Student Instructional Consultant</b> , Center for Research on Learning and Teaching (CRLT)
10/2018–present	<b>Pedagogy Research Associate</b> , Ecology & Evolutionary Biology
8/2012–5/2018	<b>Graduate Student Instructor (GSI)</b> , Program in Biology (11 semesters)
8/2016–12/2017	<b>Graduate Curatorial Assistant</b> , Museum of Zoology, Mammal Division (3 semesters)
8/2013–12/2017	<b>Graduate Student Mentor</b> , Program in Biology (6 semesters)

#### **Bowdoin College – Brunswick, Maine**

1/2010–5/2011	<b>Environmental Science and Quantitative Skills Tutor</b> , Quantitative Reasoning Program (3 semesters)
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### **RELATED EXPERIENCE**

#### **University of Michigan Museum of Zoology, Mammal Division**

8/2016–12/2017	<b>Graduate Curatorial Assistant</b> – Led the curation of the mammal teaching collection and tissue collection; taxonomically organized wet collection; prepared rodent, canid, and marsupial specimens for museum collection
8/2016	<b>Field Technician</b> – Trapped and non-invasively sampled flying squirrels ( <i>Glaucomys</i> ) to assess hybridization in the Upper Peninsula of Michigan

#### **Ohio Wildlife Center, Columbus, Ohio**

8/2011–8/2012	<b>Wildlife Rehabilitation Volunteer</b> – Assessed behavioral changes in
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injured wildlife, maintained detailed records for each animal, cleaned cages and prepared food for a variety of diets; trained in administering subcutaneous and intramuscular injections for birds and mammals

**Save the Manatee Club, Crystal River, Florida**

5/2011–8/2011

**Science and Conservation Intern** - Designed and completed field observations of manatees and boater compliance in manatee zones; compiled and analyzed data for report to U.S. Fish and Wildlife

**RESEARCH INTERESTS**

- The ecological and evolutionary impacts humans have on mammal populations
- Natural history of mammalian species, especially American marsupials
- Bringing natural history courses into the 21<sup>st</sup> Century and broadening student recruitment

**HONORS & AWARDS**

- **Helen Olson Brower Memorial Fellowship in Environmental Studies** – University of Michigan (2018)
- **Outstanding Graduate Student Instructor** – University of Michigan Rackham Graduate School (2018)
- **Women in STEM Scholarship Finalist (Top 1.5%)** – ABC Humane Wildlife, Inc. (2017)
- **U-M Graduate Teacher Certificate** – University of Michigan (2017): Designed and implemented a pilot 3-week lab for 110 students to [introduce them to research](#) on museum specimens
- **Honor Society of Phi Kappa Phi** – University of Michigan Chapter (2014)
- **Doherty Coastal Studies Fellowship** – Bowdoin College (2010)

**GRANTS (Awarded \$23,160)**

**2018**

**American Society of Mammalogists, Grants-in-Aid of Research.** The historical context of the Virginia opossum's northward expansion. Awarded \$1,500.

**Southwestern Association of Naturalists, McCarley Student Research Award.** Evaluating the Virginia opossum's historical northward expansion from Mesoamerica. Awarded \$1000.

**University of Michigan Museum of Zoology, Edwin C. Hinsdale Scholarship.**

Phylogeographic analyses of the Virginia opossum, a marsupial in a placental world. Awarded \$3,828.

**University of Michigan, Rackham Graduate Student Research Grant.** Genetic analyses of the Virginia opossum: how a marsupial marched north. Awarded \$3,000.

**American Society of Mammalogists, Student Travel Award.** Awarded \$400.

**University of Michigan, Rackham Conference Travel Grant.** Awarded \$800.

**2017**

**American Society of Mammalogists, Grants-in-Aid of Research.** Evaluating geographic and historical variation in the Virginia opossum diet using stable isotopes. Awarded \$1,151.

**University of Michigan Museum of Zoology, Edwin C. Hinsdale Scholarship.**

Phylogeographic analyses of the Virginia opossum, a marsupial on the move. Awarded \$3,500.

## 2016

**Phi Kappa Phi, University of Michigan Chapter.** Project Grant. Awarded \$3,5000.

**University of Michigan, Peter Olaus Okkelberg Award.** Evaluating diet across habitats and through time to determine anthropogenic influences on a range expansion. Awarded \$1,877.

**University of Michigan, Rackham Conference Travel Grant.** Awarded \$800.

**University of Michigan EEB Department Conference Travel Award.** Awarded \$250

## 2015

**University of Michigan, Department of Ecology and Evolutionary Biology Block Grant.** Investigating teat number for preliminary evidence of selection along a latitudinal gradient. Awarded \$1,877.

## 2013

**University of Michigan, Rackham Graduate Student Research Grant.** The genetic implications of a range expansion in the Virginia opossum (*Didelphis virginiana*). Awarded \$1,5000.

**University of Michigan, Department of Ecology and Evolutionary Biology Block Grant.** The genetic implications of a range expansion in the Virginia opossum (*Didelphis virginiana*). Awarded \$677.

## PUBLICATIONS

### *PEER-REVIEWED*

**Walsh, L.L.** and P.K. Tucker. 2018. Contemporary range expansion of the Virginia opossum (*Didelphis virginiana*) impacted by humans and snow cover. Canadian Journal of Zoology, 96(2): 107-115. <https://doi.org/10.1139/cjz-2017-0071>.

**Walsh, L.L.**, R. Seabloom, and C.W. Thompson. 2017. Range extension of the Virginia opossum (*Didelphis virginiana*) in North Dakota. The Prairie Naturalist, 49(2): 31-34.

### *IN PREPARATION*

Vernon, J., **L.L. Walsh**, J. Wolfe, and D. Goldberg. Authentic Research Projects in an Introductory Biology Laboratory Course: Effect on student's persistent, interest, and self efficacy in science. *In preparation*. CBE – Life Sciences Education.

**Walsh, L.L.**, C.W. Thompson, and C. Giffen. Engaging students with biodiversity through the use of research on museum specimens – a laboratory module. *In preparation*. Course Source.

**Walsh, L.L.** and P.K. Tucker. Limited use of anthropogenic food in a non-moulting marsupial. *In preparation*. Journal of Mammalogy.

**Walsh, L.L.**, and J. Vernon. How Graduate Student Instructor (GSI) characteristics impact undergraduate outcomes in Introductory Biology Lab. *In preparation*. The American Biology Teacher.

## PROFESSIONAL PRESENTATIONS AND MEETINGS

- Walsh, L.L.** and C.J. Giffen. 2018. Who succeeds in a biodiversity course? Page 75 in [Abstract Book](#)- 98<sup>th</sup> Annual Meeting of the American Society of Mammalogists. 25-29 June 2018. Manhattan, Kansas.
- Walsh, L.L.** and P.K. Tucker. 2018. Identifying geographic variation in the Virginia opossum's diet using stable isotopes. Page 42 in [Abstract Book](#)- 98<sup>th</sup> Annual Meeting of the American Society of Mammalogists. 25-29 June 2018. Manhattan, Kansas.
- Walsh, L.**, and P.K. Tucker. 2016. Midwest range expansion of the Virginia opossum impacted by agriculture and snow cover. Page 113 in Abstract Book- 96<sup>th</sup> Annual Meeting of the American Society of Mammalogists June, 2016. Minneapolis, Minnesota.
- Walsh, L.** August 2014. Investigating the population genetics of an ongoing range expansion in the Virginia opossum (*Didelphis virginiana*). [Master's Thesis Defense] University of Michigan, Ann Arbor, MI.
- Tripp, K. and **L. Walsh**. 2012. Summer Vessel Activity & Compliance in Important Manatee Habitat- Kings Bay, Florida. Page 45 in Abstracts- Florida Marine Mammal Health Conference IV, 24-27 April, 2012. Sarasota, Florida.
- Walsh, L.** May 2011. Distribution and diversity of free-living *Symbiodinium* in the Florida Keys. [Honors Dissertation presentation] Bowdoin College Biology Department Honors Presentations, Brunswick, ME.
- Walsh, L.** and D.J. Thornhill. October 2010. Evaluating the distribution of free-living *Symbiodinium* on a Florida Keys reef. [Poster presentation] National Ocean Policy Symposium, Brunswick, ME.

## **TEACHING EXPERIENCE**

### **University of Michigan-Ann Arbor**

#### *Graduate Student Instructor*

- Biology of Mammals (EEB 451) – 1 semester
- Introduction to Genetics (BIO 305) – 2 semesters
- Introduction to Biology Lab (BIO 173) – 4 semesters
- Introduction to Biology – Ecology and Evolution (BIO 171) – 3 semesters

### **Center of Science and Industry (COSI)**

#### *Experience Programs Teacher 2012*

- Educated guests by incorporating methods of theatre and scientific demonstrations for groups of all sizes and ages
- Developed and provided creative input for a variety of guest experience interpretations

### **Bowdoin College, Quantitative Reasoning Program**

#### *Environmental Science and Quantitative Skills Tutor 2010-2011*

- Led review sessions for undergraduates seeking guidance with lab reports and analysis

## **EDUCATIONAL DEVELOPMENT EXPERIENCE**

### **University of Michigan, Ecology & Evolutionary Biology**

#### *Pedagogy Research Associate, 2018 – Present*

- Collaborate with department's Undergraduate Affairs Committee to assess program
- Design and implement surveys for senior students to evaluate achievement of program's learning goals

- Work with department faculty to use survey data to improve courses and major
- As one of 9 departments chosen to design and evaluate assessments, communicate with external biology departments to help inform them of how to assess students

### **University of Michigan, Center for Research on Learning and Teaching**

*Graduate Student Instructional Consultant 2016 – Present*

- Promote excellence in graduate student teaching across the university through consultations
- Conduct midterm student feedbacks and in-class observations
- Evaluate teaching philosophies submitted by graduate students
- Co-lead workshop: *Exploring Power Dynamics and Intersecting Policies*

### **University of Michigan, Program in Biology**

*Graduate Student Mentor 2013 – 2017*

- Facilitate small group meetings to provide a support network for new GSIs
- Observe new GSIs teach and provide feedback on strengths and areas for improvement
- Design and implement seminars for first-time undergraduate teaching assistants

**COMMITMENT TO DIVERSITY AND INCLUSION:** As both a researcher and instructor, I strive to promote diversity, equity, and inclusion in biology and museum research. In the classroom, I work to break the stereotypes that pop culture has set for both how a scientist looks and acts. To better understand student retention in biology, I established multiple projects. I'm currently examining how graduate student instructors' characteristics impact their student outcomes. This project has collected data that counters a heavily-cited study that found student grades suffered when they had an international instructor. I also co-developed a laboratory module to introduce up to 1400 undergraduate students to museum research. In conjunction, I am piloting a survey study to understand demographic trends in students taking life history courses. I hope this will allow us to update the laboratory module to attract more underrepresented students to STEM and museum research.

### **SERVICE & LEADERSHIP**

- **University of Michigan Ecology & Evolutionary Biology Department, Graduate Student President** (2018–Present)
- **American Society of Mammalogists, Public Education Committee** (2018–Present)
- **American Society of Mammalogists, Human Diversity Committee** (2018–Present)
- **University of Michigan Ecology & Evolutionary Biology Department, Graduate Student Mental Health Point Person** (2018–Present)
- **University of Michigan Ecology & Evolutionary Biology Department, Biology Education Researcher Search Committee** (2018)
- **University of Michigan Ecology & Evolutionary Biology Department, Early Career Scientist Symposium Committee** (2017–2018)
- **University of Michigan English Language Institute, Experienced Graduate Student Instructor Consultant** (2017)
- **University of Michigan Ecology & Evolutionary Biology Department, Undergraduate Affairs Committee Graduate Student Representative** (2016–2017)
- **University of Michigan Phi Kappa Phi Chapter, Student Vice President** (2016–2017)

- **University of Michigan Center for Research on Learning & Teaching, Practice Teaching Facilitator** (2016)
- **University of Michigan REBUILD, Graduate Student Instructor consultant** (2015–2016)
- **Ohio Wildlife Center, Wildlife Rehabilitation Volunteer** (2011–2012)
- **Save the Manatee Club, Science and Conservation Intern** (2011)

### ***PROFESSIONAL SOCIETY MEMBERSHIPS***

**Current** - American Society of Mammalogists (2016–present), Great Plains Natural Science Society (2017–present), Southwestern Association of Naturalists (2018), Society for the Advancement of Biology Education Research (SABER, 2018), Society for the Study of Evolution (SSE, 2018)

### **PUBLIC OUTREACH**

#### ***2018***

- **TVOntario** – “Creatures vs. climate: The Virginia opossum” ([interview](#))
- **826Michigan** – Collaborate with a local Michigan nonprofit to introduce 3<sup>rd</sup> grade students in Ypsilanti and Ann Arbor to scientific inquiry and writing via mammal museum specimens
- **The Wildlife Society** – “Farms and vanishing snow bring opossums north (interview and [press release](#) for Walsh & Tucker 2018 and Walsh *et al.* 2017)
- **Michigan News** – “Climate change, urbanization driving opossum’s northward march” ([press release](#) for Walsh & Tucker 2018 and Walsh *et al.* 2017)
- **Futurity** – “Opossums don’t like snow but have invaded N. Dakota” ([press release](#) for Walsh & Tucker 2018 and Walsh *et al.* 2017)

#### ***2017***

- **University of Michigan Ecology and Evolutionary Biology**– “Museum mammal specimens ‘sign up’ for Intro Bio” ([press release](#) for introductory biology lab module centered around museum specimens)
- **University of Michigan Museum of Natural History** – ID Day (event for public to interact and share their collections with curatorial staff)
- **Grand Forks Herald** – “Grand Forks opossum slain; body to go to University of Michigan for research” ([interview](#) on opossum range expansion into North Dakota)
- **University of Michigan Museum of Zoology** – Integrated Digitized Biocollections Conference (led museum tour for visiting researchers)
- **Center of Science and Industry (COSI)** – Consultant for program director designing public engagement for newly acquired education opossum

#### ***2015–2016***

- **University of Michigan Museum of Natural History** – ID Day (event for public to interact and share their collections with curatorial staff)

#### ***2014***

- **Michigan Sea Grant** – National Ocean Sciences Bowl Volunteer