Lisa Chamberland

PhD Candidate
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Research Interests

My research explores the interplay between long-distance dispersal and vicariance in shaping the evolutionary history and biogeography of Deinopidae, the net-casting spiders.

Education

2015-2020 (expected) **PhD Student**, University of Vermont, Burlington, VT
Advisor: Dr. Ingi Agnarsson
Title: From Gondwana to GAARlandia: Evolutionary history and biogeography of the net-casting spider (Deinopidae)

2009-2013 **BA Biology and Anthropology**, University of Vermont, Burlington, VT`

Research Experience

2015-2020 (expected) **Dissertation Research**, University of Vermont
Advisor: Ingi Agnarsson Tested the role of geological events including breakup of Gondwana and the presence of the GAARlandia land bridge in the dispersal and diversification of Deinopidae.

2013-2015 **Laboratory Research Technician**, University of Vermont
Advisor: Ingi Agnarsson Performed molecular work (DNA extractions and barcoding, PCR) and data analyses for focal arachnid genera in the Caribbean to test dispersal hypotheses.

Publications

Chamberland L, McHugh A, Kechejian S*, Binford GJ, Bond JE, Coddington J, Dolman G, Hamilton CA, Harvey MS, Kuntner M, Agnarsson I. 2018. From Gondwana to GAARlandia: Evolutionary history and biogeography of ogre-faced spiders (*Deinopis*). *Journal of Biogeography* 45(11):2442-2457 DOI: 10.1111/jbi.13431

Chamberland L, Salgado-Roa FC, Basco A**, Cranz A**, Binford G, Agnarsson I. Phylogeography of the widespread Caribbean spiny orb weaver *Gasteracantha cancriformis*. *Peer J. 8:e8976* DOI: 10.7717/peerj.8976

*undergraduate student
**high school students

Awards and Grants

2019/20	Graduate Teaching Assistant of the Year (UVM Department of Biology) - $100
2020	American Arachnological Society Fund for Systematics Research - $250
2020	The John Wheeler Graduate Student Research and Development Award - $2000
2019	UVM Mini Travel Grant - $450
2018	American Arachnological Society Fund for Systematics Research - $1000
2016	Sigma Xi Grant in Research Award - $1000
2016	UVM Mini Travel Grant - $450

Teaching

2016-2019	**Guest Lecturer,** Field Zoology, University of Vermont
2015-2019	**Graduate Teaching Assistant**, Field Zoology lab, University of Vermont
2015-2020	**Graduate Teaching Assistant**, Intro to Biology lab, University of Vermont
2018	**Lecturer,** Field Zoology Filled in for as lecturer Professor Agnarsson while he was on leave from October 1 – December 15
2018	**Assistant Teacher**, 9th Grade Biology, Vermont Commons School *Professor: Peter Goff*
2016	**Graduate Teaching Assistant**, Ecology and Evolution lab, University of Vermont
2013-2014	**Upward Bound Teacher**, Spiders of Vermont course, University of Vermont *Upward Bound is a federally funded education program focused on providing opportunities to underrepresented high school students. I introduced students to methods in field collecting and identifying bugs and spiders in addition to DNA extractions. We also discussed concepts in biodiversity and phylogenetics.*

Presentations

2019	**Invited lecture**, Field Zoology, University of Vermont *Global biogeography of the net-casting spiders (Deinopidae)*
2019	**Invited lecture***,* Vermont Commons School (high school) *Introduction to biogeography and spiders of the Caribbean*
2019	**Invited lecture***,* Field Zoology, University of Vermont *Distribution, DNA barcoding, and phylogenetics of Caribbean Calliphoridae flies: Tools for forensic studies*
2019	**Oral presentation**, American Arachnological Society Meeting, Lexington, VA *Global biogeography and phylogeny of the net-casting spiders (Family: Deinopidae)*
2019	**Poster presentation**, American Arachnological Society Meeting, Lexington, VA Phylogeography of the widespread Caribbean spiny orb weaver *Gasteracantha cancriformis*
2019	**Biolunch**, UVM Department of Biology, Burlington, VT *Global biogeography and phylogeny of the net-casting spiders (Family: Deinopidae)*
2019	**Oral presentation**, 21st International Congress of Arachnology, Canterbury, NZ *From Gondwana to GAARlandia: Evolutionary history and biogeography of*

the ogre-faced spiders (Deinopis)

2018 **Invited lecture**, Vermont Commons School (high school)
Biogeography of the net-casting spiders (Deinopidae)

2018 **Oral presentation**, UVM Student Research Conference, Burlington, VT
From Gondwana to GAARlandia: Evolutionary history and biogeography of the ogre-faced spiders (Deinopis)

2017 **Biolunch**, UVM Department of Biology, Burlington, VT
Historical biogeography and trait evolution within the net-casting spiders
(Deinopidae)

2016 **Biolunch**, UVM Department of Biology, Burlington, VT
Phylogeography of Gasteracantha and evidence for a new North American species

2016 **Oral presentation**, UVM Student Research Conference, Burlington, VT
Phylogeography and morphological variation in Caribbean Gasteracantha cancriformis and evidence for a new North American species

2016 **Poster** presentation, 20th International Congress of Arachnology, Golden, CO
Global biogeography of ogre-faced spider mirrors geologic history

2015 **Biolunch**, UVM Department of Biology, Burlington, VT
Global biogeography of ogre-faced spider mirrors geologic history

Outreach and mentorship

2014-2020 **Mentor**, Agnarsson Lab, University of Vermont, Burlington, VT
As a lab technician and then a graduate student, I trained graduate, undergraduate, and high school students on identifying and taxonomy of spiders and arachnids as well as molecular methods, phylogentic/omic and biogeographic data analyses, and identifying and photographing specimens

2018-2020 Tess Ruddy**, Vermont Commons School
A global biogeographic history and phylogenetic revision of the net-casting spiders (Family: Deinopidae)

2019 Lily Canavan & Baylee Duarte*
Dispersal patterns and diversification of the genus Eriophora in the Caribbean through molecular phylogenetics
Cooper Peterson & Jack Walinski*
Exploring the diversity and dispersal history of Caribbean Cyclosa

2018 Alli Nemrow*
Exploring the diversity and dispersal history of Caribbean Cyclosa

2016-2018 Patrick Weinmerk*, lab technician
Exploring the diversity and dispersal history of Caribbean Cyclosa

2016-2017 Sarah Kechejian & Annie Howard*
From Gondwana to GAARlandia: Evolutionary history and biogeography of the ogre-faced spiders (Deinopis)

2015 Austin Dziki*
Spintharus flavidus in the Caribbean—a 30 million year biogeographical history and radiation of a 'widespread species'
Stephanie LeQuier*

Phylogeography of a good Caribbean disperser: Argiope argentata (Araneae, Araneidae) and a new 'cryptic' species from Cuba

2014-2015 Alma Basco** and Amanda Crastz**, from Puerto Rico
Phylogeography of the widespread Caribbean spiny orb weaver Gasteracantha cancriformis

2014-2018 Volunteer EMT, Essex Rescue, Essex, VT
I served as a volunteer EMT and then an Advanced EMT for Essex Rescue. Our range covered Essex, Jericho, and Underhill. I treated patients including, but not limited to setting IVs and administered medications.

*undergraduate students
**high school students

Journal Referee

2019/2020 *Systematic Biology*

Membership

2016-2020 American Arachnological Society
2016, 2018-2019 International Society of Arachnology

Skills

Computing

- *Phylogenetics* - Bayesian (MrBayes, BEAST), Maximum likelihood (RAxML), *phytools*
- *Biogeography* - *BioGeoBEARS*, RASP, LaGrange
- *Sequence analysis* - Mesquite
- *R and (R)Markdown* – Data analysis/visualization and word processing
- *HTML* – Website development
- *Microsoft Office* – Data preparation, organization, and word processing

Laboratory

- DNA extraction for standard Sanger sequencing and Next Generation sequencing
  (Anchored Hybrid Enrichment), PCR, gel electrophoresis
- Taxonomy, arachnid identification, Visionary Digital BK lab system