**Brigette Zacharczenko**

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**Education**

**The University of Connecticut** (2010 – 2017)

PhD (defense: April 18th, graduation May 6th 2017)

Department: Ecology and Evolutionary Biology

Advisor: David Wagner

GPA: 3.98

Relevant Courses and Seminars

Evolution General Entomology

Phylogenetics Fundamentals of Teaching and Learning

Molecular Systematics Principles and Methods of Systematics

Scientific Illustration Intro to Natural History Collections

Research

* Molecular phylogeny of Acronictinae worldwide.
* Evolution of morphological and behavioral defenses of *Acronicta* larvae.
* Evolution and morphology of courtship structures in Noctuidae.

**McGill University, Macdonald Campus** (2006 – 2010)

BSc Agricultural and Environmental Sciences

Major: Applied Zoology

GPA: 3.64 (Distinction)

Relevant Courses

Insect Biology Comparative Zoology Principles of Ecology

Insect Ecology Evolution and Systematics Desert Ecology field course

Systematic Entomology Phylogeny and Zoogeography Science and Museums

Research

* Ecological research project: differences in beetle diversity and species richness between the canopy and understory of forests in Quebec.
* Geographic variation in dorsal colour patterns in Fowler's toads.

**Burnt Hills Ballston Lake High School** (2002 – 2006)

GPA: 96

**Work Experience**

Talcott Mountain Science Academy – Educator (September 2017 – present)

Avon, CT

Ecology, Energy, Anatomy & Physiology, Marine Sciences, Environment

The Children’s Museum – Science Camp Educator (June – August 2017)

West Hartford, CT

Reptiles, mammals, outdoors, inventions, and other topics

The University of Connecticut – Teaching Assistant (2010 – 2017)

Storrs, CT

Spring 2017: BIOL1108 Principles of Biology (TA)

Spring 2016: BIOL1108 Principles of Biology (TA)

Fall 2015: EEB5347 Graduate Systematics (TA)

Spring 2015: BIOL1108 Principles of Biology (TA)

Fall 2014: EEB4250 General Entomology (TA)

Spring 2014: BIOL1108 Principles of Biology (TA)

Fall 2013: BIOL1108 Principles of Biology (TA)

Spring 2013: EEB2245 Evolutionary Biology (TA)

Fall 2012: EEB4250 General Entomology (TA)

Summer 2012: EEB4252 Field Entomology (Instructor)

Spring 2012: BIOL1102 Foundations of Biology (TA)  
Fall 2011: BIOL1102 Foundations of Biology (TA)

Spring 2011: EEB5894 Developing Online Databases (TA)  
Spring 2011: BIOL1102 Foundations of Biology (TA)

Fall 2010: BIOL1102 Foundations of Biology (TA)

Kaatskill Life Magazine – Writer (2003 – 2017)

Delhi, NY

Popular articles in a quarterly magazine. “Learning about Kaatskill Kritters”.

**Papers**

Rota, J., **Zacharczenko, B.V.**, Wahlberg, N., Zahiri, R., Schmidt, B.C., Wagner, D.L. 2015.

Phylogenetic Relationships of Acronictinae with Discussion of the Abdominal Courtship Brush in Noctuidae (Lepidoptera). Systematic Entomology 41:2, 416-429.

Rabbani, M., **Zacharczenko, B.**, Green, D.M. 2015. Adaptive color pattern variation in a cryptic

amphibian, *Anaxyrus fowleri*. Journal of Herpetology. 49:4, 649-654.

Schmidt, C., Wagner, D., **Zacharczenko, B.**, Zahiri, R., Anweiler, G. 2014. Polyphyly of

Lichen-cryptic Dagger Moths: synonymy of *Agriopodes* Hampson and description of a new basal acronictine genus, *Chloronycta*, gen. n. (Lepidoptera, Noctuidae). ZooKeys 421, 115-137

**Zacharczenko, B.**, Wagner, D.L., Hatfield, M.J. 2014. A new cryptic *Sympistis* from eastern

North America revealed by novel larval phenotype and host plant association (Lepidoptera, Noctuidae, Oncocnemidinae). ZooKeys 379, 93-107.

**Presentations**

Northeast Natural History Conferences (NENHC) 2017

Cromwell, CT, USA, April 22

“What’s Really on the Menu? An Evaluation of Host-Plant Literature and Diet Breadth of Caterpillars”

Dissertation Defense at UConn 2017

Storrs, CT, USA, April 18

“The systematics of Acronictinae (Lepidoptera, Noctuidae), the evolution of larval defenses in *Acronicta*, and tracking the gain/loss of complex courtship structures in Noctuidae.”

Connecticut Entomological Society 2016

Storrs, CT, USA, September 16

“Dissertation preview: The systematics of Acronictinae (Lepidoptera, Noctuidae), the evolution of larval defenses in *Acronicta*, and tracking the gain/loss of complex courtship structures in Noctuidae.”

Entomological Society of America (ESA) 2015

Minneapolis, MN, USA, November 14-18

“Larval Host Phylodiversity of *Acronicta* (Lepidoptera: Noctuidae: Acronictinae”

The Lepidopterists’ Society (LepSoc) 2015

Purdue University, West Lafeyette, Indiana, USA, July 28 – August 2

“Who can you trust? The trouble with larval host records for *Acronicta* (and all Lepidoptera)”

Entomological Society of America (ESA) 2014

Portland, OR, USA, November 16-19

“Phylogeny of the Dagger Moths (Lepidoptera: Noctuidae: Acronictinae: *Acronicta)* and the Evolution of Caterpillar Defenses”

Entomological Society of America (ESA) 2013

Austin, TX, USA, November 9-14

“How not to be eaten: Defensive strategies of *Acronicta* caterpillars”

Connecticut Entomological Society, Student Symposium 2012

Storrs, CT, USA

CARCNET 2010 20th Annual Meeting at Acadia University

Wolfville, Nova Scotia, Canada, September 17-20

Canadian Amphibian and Reptile Conservation Network

“Geographic variation in dorsal colour patterns in Fowler's toads” with David M. Green

**Books**

Zacharczenko, N. and **Zacharczenko, B**. 2014. Dr. Zach’s Amazing Catskill Critters. Mr. Nick Productions, Ballston Lake NY

**Grants and Awards**

November 2015 Student Competition for the Presidents Prize, Second Place, Entomological Society of America

August 2015 The Harry K. Clench Memorial Award for presentation of The First Place Student Paper, The Lepidopterist’s Society

June 2015 Introductory Biology Teaching Excellence Award, UConn

June 2015 EEB Excellence in Student Teaching Award, UConn

January 2015 University of Connecticut Demi Award

April 2014 2014 Invertebrate Research Award from the Ecology and Evolutionary Department

April 2013 James A. Slater Endowment Fund to the Department of Ecology and Evolutionary Biology and the Connecticut State Museum of Natural History

April 2012 Lawrence R. Penner Endowment Fund to the Department of Ecology and Evolutionary Biology and the Connecticut State Museum of Natural History

**Invited Talks, Guest Lectures, and Departmental Presentations**

6 November 2017 University of Saint Joseph, Women LEAD in STEAM lecture series.

26 July 2017 Norfolk Land Trust, National Moth Week.

22 July 2017 Friends of Taconic State Park, National Moth Week.

23 July 2016 Friends of Taconic State Park. Invited speaker for National Moth Week.

27 October 2015 BIOL1108 Principles of Biology. Guest lecture on Ecdysozoa.

23 July 2015 Friends of Taconic State Park. Invited speaker for National Moth Week.

22 July 2015 Norfolk Land Trust. Invited speaker for National Moth Week.

1 April 2015 BIOL1108 Principles of Biology. Guest lecture on Ecdysozoa.

7 March 2015 EEB Grad Student Symposium “All about that brush – courtship structures in Lepidoptera”

29 October 2014 BIOL1108 Principles of Biology. Guest lecture on Ecdysozoa.

22 October 2014 BIOL2289 Intro to Undergraduate Research. Guest lecture on my research and opportunities for undergraduates.

24 July 2014 Friends of Taconic State Park. Invited speaker for National Moth Week.

4 April 2014 BIOL1108 Principles of Biology. Guest lecture on Ecdysozoa.

8 March 2014 EEB Grad Student Symposium. “How Not to be Eaten: Defensive Strategies of *Acronicta* Caterpillars”

9 March 2013 EEB Grad Student Symposium. “Name that species! The guts and glory of taxonomy”

6 November 2012 BIOL1109 Modern Topics in Biology. Guest lecture on my research.

3 March 2012 EEB Grad Student Symposium. Caterpillar Mysteries: Systematics, evolutionary rates, and mimicry of the subfamily Acronictinae (Noctuidae)

**Training and skills**

* Enthusiasm for teaching and making personal connections with students.
* Hands-on teaching style including laboratories and field work.
* Specimen collection curation. Including work in UConn’s Biological Collections facility, and the entomology teaching collection.
* Scientific illustration.
* Specimen work including pinning, spreading, genitalic dissections, and slide preparation.
* Molecular systematics methods including Maximum Likelihood and Bayesian Inference.
* R coding for phylogenetic and statistical analyses.
* Writing popular nature articles for the general public.
* Field collecting of insects, reptiles, and amphibians.

**Workshops**

13 – 15 June 2013 ComSciCon (Communicating Science Conference), Cambridge, MA

14 – 21 August 2011 The Lepidoptera Course, SouthWest Research Station, Portal, AZ

**Outreach and Volunteering**

26 July 2017 Norfolk Land Trust, National Moth Week

22 July 2017 Friends of Taconic State Park, National Moth Week

19 July 2017 Natural Resources Academy, Biodiversity in the Night

19 May 2017 Barrows STEM Academy BioBlitz

16 May 2017 Roxbury Land Trust, Washington Montessori School trip

23 July 2016 Friends of Taconic State Park, National Moth Week

22 July 2016 Sheep Hill Williamstown, National Moth Week

3-4 June 2016 Two Rivers Magnet School BioBlitz

18 May 2016 Barrows STEM Academy BioBlitz

24, 25 July 2015 UConn BioBlitz, Blacklighting, caterpillar walk, and pinning demo

23 July 2015 Friends of Taconic State Park, National Moth Week

22 July 2015 Norfolk Land Trust, National Moth Week

16 July 2015 Natural Resources Academy, Biodiversity in the Night

26 June 2015 Hartford Biodiversity Camp Caterpillar Event

20 May 2015 Barrows STEM Academy BioBlitz

28 March 2015 Science Olympiad, Organization of Entomology event

2 August 2014 VINS (Vermont Institute of Natural Science), Incredible Insect Festival

10 July 2014 BioQuest Biodiversity Camp

13 May 2014 Franklin Elementary, Biodiversity outreach

29 March 2014 Science Olympiad, Organization and judging of Entomology event

2011 – present CaterpillarBlog.com

May 2011 Plainsville Early Childhood Learning Center, Biodiversity outreach

2006 – 2009 Lyman Entomological Museum, McGill University, Insect husbandry

June – Aug. 2007 New York State Museum, Specimen sorting

**Memberships**

* North American Butterfly Association (2014 – present)
* Society for the Preservation of Natural History Collections (SPNHC) (2013 – present)
* Entomological Society of America (ESA) (2011 – present)
* The Lepidopterist's Society (LepSoc) (2011 – present)
* Connecticut Entomological Society (2011 – present)
* Young Entomologist’s Society (Y.E.S.) (2002 – 2006)

**Leadership**

* Executive Council Member At-Large, The Lepidopterists’ Society (2016 – present)
* Board member, The Caterpillar Lab Inc. (2015 – present)
* Governing committee member, Connecticut Entomological Society (2015 – present)
* President, Connecticut Entomological Society (2013 – 2015, 2017 – present)
* Treasurer, EEB Graduate Student Association (2011 – 2015)