# LAURA HILL, PH.D.

Senior Lecturer

University of Vermont Plant Biology Department, 111 Jeffords Hall, Burlington VT 05405 Ph: 802-656-1134; FAX: 802-656-0440; Email: <u>lhill@uvm.edu</u> | Website: <u>www.uvm.edu/~lhill</u>

# **EDUCATION**

08/2003 - 12/2008	Ph.D. Biology, emphasis Ecology and Evolution
	"Ecological and evolutionary factors affecting population persistence of a globally
	threatened wetland plant, Polemonium vanbruntiae (Polemoniaceae)," University of
	Vermont; Burlington, Vermont 05405; Advisor: Dr. Alison K. Brody
08/1998 - 05/2001	B.S. Environmental Biology, emphasis Humanities
	Undergraduate thesis: "Comparative sediment toxicity in 3 Maine estuaries,"
	Unity College; Unity, Maine 04988; Advisor: Dr. Emma Creaser

# POST-DOCTORAL RESEARCH

06/2008 - 08/2009 Effects of forest management activities on the population persistence of rare plant Appalachian Jacob's ladder (*Polemonium vanbruntiae*) in the Green Mountain National Forest. A Challenge Cost-Share Agreement (No. 08-CS-1109-2000-015) between the USDA Forest Service, Green Mountain and Finger Lakes National Forests and the University of Vermont Biology Department.

### **TEACHING APPOINTMENTS**

2015 – present	Senior Lecturer in Plant Biology, UVM
2009 - 2014	Lecturer in Plant Biology, UVM
2009	Lecturer (Adjunct), Principles of Biology, Plant Biology Department, UVM
2004, 2007, 2008	Graduate Teaching Fellow (GTF), Exploring Biology, Biology Department, UVM
2006, 2007	GTF, Ecology and Evolution, Biology Department, UVM
2006	GTF, The Human Body (online course), Biology Department, UVM
2002, 2003	GTF, Environmental Biology, Biology Department, UVM

# **INSTRUCTED COURSES**

2010 – present	<b>PBIO004/Introduction to Botany</b> , introductory botany course for non-science majors
	Topics covered include plants and people, overview of the plant body, cells and molecules, genetics
	and evolution, plant diversity, ecological interactions involving plants, and sustainable
	agriculture.
2009 – present	BCOR 011 Exploring Biology, first-semester, introductory biology for first-year
	biological science majors Topics covered in lecture include chemistry of life, cell
	structure/function/reproduction, molecular genetics, and plant and animal physiology.
2010 – present	BCOR012/Exploring Biology, second-semester, introductory biology for first-year
	biological science majors. Topics covered in lecture include the chromosomal basis of
	inheritance, life cycles, evolution, diversity of life, and ecology.
2016 – present	PBIO133/How Plants Can Save the World, advanced elective botany course for life
	science majors. One of humanity's challenges today is to build capacity to address global
	problems with sustainable solutions. The systems that sustain human wellbeing are at risk. These
	systems include, but are not limited to, health systems, food systems, social systems, environmental

	systems, and economic systems. This course argues that plants are at the crux of solving these complex problems. The overarching course question is the following: How can plants be used to design sustainable solutions to problems resulting from existing, unsustainable practices?
2011 - 2019	BCOR 101/Genetics, sophomore-level introductory genetics course for biological science majors
	Topics include patterns of inheritance, molecular structure and replication of genetic material, molecular properties of genes, genetic technologies, and genetic analysis of individuals and populations.
2010 - 2019	PBIO006/The Green World, introductory botany course for non-science majors
	Topics include how plants live, grow, and reproduce, how humans have used plants for food,
	medicine, clothing, and shelter, why plant biologists are concerned about invasive species and
	habitat fragmentation, how plants influence earth's climate, why different plant communities occur where they do.
2010 - 2016	BIOL001/Principles of Biology, summer session introductory biology for non-majors
	Topics covered include chemistry of life, cell structure and function, cellular metabolism, cellular reproduction, genes and inheritance, and gene expression.
2011, 2019	PBIO297/Advanced Undergraduate Research, upper-level undergraduates gain
	research experience with a faculty mentor
	Topics cover proposal and grant writing, experimental set-up and analysis, reading the peer-
	reviewed literature, and hands on research experience in the field and lab.
2009 - 2011	BIOL002/Principles of Biology, second-semester introductory biology for non-majors
	Topics covered include evolution, diversity of life, physiology and ecology.

### PEER-REVIEWED PUBLICATIONS

Hill, L.M. (In press). Contemplative Pedagogy in Times of Grief and Uncertainty: Teaching in a Global Pandemic. *Journal of Contemplative Inquiry*.

- Natkin, L.W. and Hill, L.M. 2020. Faculty integration of sustainability learning outcomes into curriculum A case study of a faculty learning community and teaching practices. *New Directions in Teaching and Learning*. Vol. 2020 Issue: 161, pp. 123-138. <u>https://doi-org.ezproxy.uvm.edu/10.1002/tl.20377</u>
- Hill, L.M. and Wang, D. 2018. Integrating sustainability learning outcomes into a university curriculum A case study of institutional dynamics. *International Journal of Sustainability in Higher Education*. Vol. 19 Issue: 4, pp. 699-720, <u>https://doi.org/10.1108/IJSHE-06-2017-0087</u>
- Hill Bermingham L. and Brody, A.K. 2011. Pollen source affects female reproductive success and early offspring traits in the rare endemic plant *Polemonium vanbruntiae* (Polemoniaceae). *Plant Species Biology* 26, 244–253.
- Hill Bermingham, L. 2010. Habitat type and deer herbivory influence long-term population dynamics of a rare wetland plant. *Plant Ecology*, 210, 359 378.
- Hill, L.M., Brody, A.K., Tedesco, C.L. 2008. Mating strategies & pollen limitation in globally threatened perennial *Polemonium vanbruntiae*. Acta Oecologica, 33, 314-323.

#### **ADMINISTRATIVE EXPERIENCE**

2020 – present	Director, Contemplative Faculty Learning Community, UVM Center for Teaching and
	Learning
2017 - 2018	Co.Chair. Standard 8 Educational Effectiveness committee, and steering committee

2017 – 2018 Co-Chair, Standard 8 *Educational Effectiveness* committee, and steering committee member for UVM's New England Commission on Higher Education (NECHE) 2018 accreditation

2015 - 2019	College of Agriculture and Life Sciences (CALS) Unit Assessment Coordinator
2014 - 2018	Co-chair, Sustainability Curriculum Review Committee, a subcommittee of Curricular
	Affairs and the UVM Faculty Senate
2014 - 2015	Interim College of Agriculture and Life Sciences (CALS) Co-Director of the Integrated
	Biological Sciences (IBS) Program
2013 - 2014	Co-chair, Sustainability General Education Learning Outcomes, ad-hoc committee of the UVM Faculty Senate
INVITED SEMINARS.	WEBINARS AND WORKSHOPS
2020	Pivotal Pedagogy: How can Contemplative Pedagogy Benefit Faculty and Students in
	Challenging and Uncertain Times? Hosted by UVM's Center for Teaching and
	Learning, Burlington, VT.
2019	Sustainability across-the-curriculum: Learning from UVM. Hosted by University of
	Washington's Program on the Environment, Seattle, Washington.
2018	A learning-outcomes-based general education sustainability requirement, Curriculum
	for Sustainability webinar series: http://curriculumforsustainability.org/webinars/
2017	Integrating Sustainability Learning Outcomes into a University Curriculum - A Case
	Study of Institutional Dynamics workshop, Association for the Advancement of
	Sustainability in Higher Education (AASHE) conference, San Antonio, TX.
2012, 2015, 2017	Practices for Engaging Students: Just-in-Time Teaching and Peer Instruction. Peer
	Instruction Workshop Flipped Classroom series, Center for Teaching and Learning,
	UVM, Burlington, VT.
2017	<b>Panelist: Reappointment, Promotion, and Tenure Review</b> panel discussion, UVM, Burlington, VT.
2014 & 2016	Women in Science keynote address to area high school young women, their high
2017 & 2010	school mentors, and their parents. Sponsored by UVM's College of Agriculture and
	Life Sciences.
2015 - 2016	Innovative Education in Higher Education, Sustainability General Education
2019 2010	<b>Requirements</b> Campus Sustainability Leadership Certificate Program, UVM,
	Burlington, VT.
2015	Sustainability course design workshop, as part of the Sustainability Faculty Fellows
	retreat, UVM, Burlington, VT.
2015	Just In Time Teaching and Flipped Classroom techniques. Central Maine
	Community College faculty, Auburn, ME.
2012	Service teaching in plant biology: teaching science to non-science majors. Plant
	Biology Department Faculty Retreat, UVM, Burlington, VT.
2012	Introduction to Interactive Teaching: Just-in-Time-Teaching and Peer Instruction.
	Engaging Students in Large Enrollment Courses Workshop, Center for Teaching and
	Learning, UVM, Burlington, VT.
Awards, Honors,	Fellowships and Scholarships
2016	Environmental Protection Agency's (EPA) Environmental Merit Award
2014	Joseph E. Carrigan Award for Excellence in Teaching and Undergraduate Education

- 2009 Roberto Fabri Fialho Scholarship for dissertation research in the life sciences
  - 2008 Graduate Teaching Assistant of the Year nominee, University of Vermont
  - 2003 2008 Graduate Teaching Assistant Fellowship

2004 - 2006	Vermont NSF-EPSCoR Graduate Research Fellowship
2004	Graduate College Summer Research Fellowship
2001	Unity College, Humanities Award
2001	Unity College Dean's Award - Highest Honors
1999 - 2001	Unity College Merit I and Presidential Scholarship

# PROFESSIONAL DEVELOPMENT

2018	14th Annual Summer Session on Contemplative Learning in Higher Education, Smith
	College, Northampton, MA
2013	Critical Thinking Seminar, Honor's College University of Vermont, Burlington VT
2013	Rethinking Teaching Majors Biology Workshop, Scottsdale, AZ
2013	Excellence in Teaching: A Discussion with the Kroepsch-Maurice Award Recipients, Center for
	Teaching and Learning, Burlington VT
2011	Syllabus Clinic Center for Teaching and Learning, Burlington VT
2010 - 2011	Sustainability Faculty Fellow, University of Vermont
2009	Getting started with Blackboard, Center for Teaching and Learning, Burlington VT
2007	Introduction to EndNote, Center for Teaching and Learning, Burlington VT

# MENTORING ACTIVITIES

2001 – present	High school graduates in science careers & college programs, McNicholas H.S.
2017 - 2019	Catamount Commitment program. UVM College of Agriculture and Sciences.
2013 - 2015	Undergraduate research: "How predicted warming temperatures could affect the
	growth, fitness, and pollinator assemblage of the rare endemic Vermont plant
	Polemonium vanbruntiae" with Madeleine Hassett
2013	Vermont State Science Fair (VSSMF) advisor, Burlington High School
2011	Vermont Science Initiative (VSI), a professional education program for licensed
	teachers of grades K-8.
2006 - 2008	NSF Interdisciplinary Training in Mathematics & Biology Program
2005 - 2008	Undergraduate Research Apprenticeships
2005 - 2008	Federal workstudy program

# ACADEMIC SERVICE

2019 - present	Faculty Associate, UVM Center for Teaching and Learning
2018 – present	Assessment Committee member, UVM Plant Biology Department
2013 - present	Member, College of Agriculture and Life Sciences Self-Designed Major Committee
2015 - 2019	Member, Joseph E. Carrigan Award for Excellence in Teaching and Undergraduate
	Education awards committee
2013 - 2019	Co-organizer; Plant Biology Undergraduate events
2017	Member, College of Agriculture and Life Sciences Outstanding Alumni Award
	Selection Committee
2017	Member, College of Agriculture and Life Sciences New Achiever Alumni Award
	Selection Committee
2013 - 2014	Member, College of Agriculture and Life Sciences Curriculum Committee
2011 - 2012	Teaching First-Year Students: a Faculty Resource Group Writing in the Disciplines,
	UVM Burlington VT
2006 - 2007	Public Relations Committee, Graduate Student Senate, UVM

2007	Writing Across the Curriculum workgroup, Integrated Biological Sciences curriculum
2006	Co-Chair, Graduate Research Day Committee, UVM
2005 - 2006	Grad student representative, Transportation & Parking Services, UVM
2004 - 2005	Grad student representative, Financial & Physical Planning Committee, UVM

### COMMUNITY SERVICE

2020	Volunteer Coordinator, Old North End Mutual Aid (ONEMA) for COVID-19
2014 - 2018	Vice-Chair, Flynn Avenue Cooperative Homes Board of Directors
2016 - 2017	Yoga instructor, Community vinyasa yoga (classes at no cost), Flynn Avenue
	Cooperative Homes
2015 - 2017	Member, Flynn Avenue Cooperative Homes Finance & Administration committee
	member
2008 - 2011	Member, Huntington Conservation Commission, Huntington, Vermont
2008	Office volunteer, The Nature Conservancy, Montpelier, Vermont
2008	Green Up Day volunteer, Huntington, Vermont
2006 and 2011	Ronald McDonald House volunteer, Burlington, Vermont

### **PROFESSIONAL SOCIETY MEMBERSHIPS**

The Association for Contemplative Mind in Higher Education Society for Science & the Public National Association of Biology Teachers Union of Concerned Scientists Botanical Society of America New England Botanical Club Ecological Society of America National Geographic Society

### PEER-REVIEWED MANUSCRIPT REVIEWER SERVICES

International Journal of Sustainability in Higher Education Ecology Plant Ecology Plant Biology American Journal of Botany Biological Conservation Northeastern Naturalist Acta Oecologica American Midland Naturalist

### TEXTBOOK AND ONLINE RESOURCE REVIEWER SERVICES

Wiley Publishers Pearson Publishers McGraw-Hill Publishers WH Freeman Publishers