

EEB STUDENTS MAKING A DIFFERENCE

This special edition of the EEB newsletter focuses on the recent accomplishments of EEB Students

GRADUATE STUDENTS

VANESSA BOUKILI, working with Dr. Robin Chazdon, was awarded a 3-yr NSF (National Science Foundation) pre-doctoral fellowship. The National Science Foundation's Graduate Research Fellowship Program (GRFP) recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based master's and doctoral degrees in the U.S. and abroad. Vanessa's work focuses on tropical forest succession.

JESSICA BUDKE was awarded three awards in 2009; the Stanley Greene Award from the International Association of Bryologists; a Graduate Student Research Award from the Botanical Society of America; and a Graduate Student Research Award from the American Microscopical Society. Jessica works with Drs. Bernard Goffinet and Cynthia Jones. Her research focuses on the development and morphological evolution of moss sporophytes and their associated gametophytic calyptra.

TOBIAS LANDBERG has accepted a post-doctoral position at Boston University where he will work with Karen Warkentin, a well-known evolutionary biologist. Tobias will oversee a large field experiment in Gamboa, Panama. On his return to Boston he will analyze the data from the experiment and write papers on the results. Tobias works with Dr. Kurt Schwenk.

CHRIS OWEN won a Graduate Student Research Grant from the Society of Systematic Biologists which provided funding for his research trip to Australia. In Australia, Chris worked with Max Moulds on a monograph of the Australian Cicada genus *Pauropsalta*. Chris works in Dr. Chris Simon's lab.

NIC TIPPERY, working with Dr. Don Les, was selected to attend the MORPH Homology mini-course at the University of Colorado in Boulder. This intensive mini-course provided the opportunity for a select group of doctoral students and distinguished investigators in plant evolutionary developmental biology to interact.

JON VELOTTA received a Sigma Xi Grant-in-Aid of Research grant. Jon was also awarded a Graduate Student Research Award from the Center for Environmental Sciences and Engineering. Jon is working in Dr. Eric Schultz's lab.

JUAN CARLOS VILLARREAL received a NSF Doctoral Dissertation Improvement Grant (DDIG). The National Science Foundation awards DDIGs in selected areas of the biological sciences. These grants provide partial support of doctoral dissertation research to improve the overall quality of research. Juan Carlos also received the Michael J. Hogan Graduate Summer Research Award. Juan Carlos works with Dr. Bernard Goffinet.

AMANDA WENDT was awarded a Fulbright Research Fellowship and a research grant from Bat Conservation International (BCI) — this is a second grant from BCI for Amanda. Amanda is currently completing research in Costa Rica; she works with Dr. Robin Chazdon.

ADAM WILSON, working with Dr. John Silander, received a 3-year NASA Graduate Fellowship. The NASA Graduate Student Researchers Project awards fellowships for graduate study leading to master's or doctoral degrees, related to NASA research and development, in the fields of science, mathematics and engineering. Adam's work focuses on global change ecology, the study of the interactions of species at the ecosystem scale within the changing biosphere.

EEB GRADS CONTINUED

LAURA CISNEROS received a Grant-In-Aid of Research from the American Society of Mammalogists for her dissertation-related research. In addition, she received a Graduate Student Research Award from the Center for Environmental Sciences and Engineering. Laura works with Dr. Michael Willig.

GEERT GOEMANS, working in the Simon lab, received the Ernst Mayr Travel award to conduct research at the British Museum.

BRIAN KLINGBEIL received a Grant-In-Aid of Research from the American Society of Mammalogists for his dissertation-related research. In addition, Brian received the 2009 Elizabeth Horner Award for the best graduate proposal received by the American Society of Mammalogists. He was also awarded a Graduate Student Research Award from the Center for Environmental Sciences and Engineering. Brian works with Dr. Michael Willig.

CORY MERROW, working in the Silander lab, received a Graduate Student Research Award from the Center for Environmental Sciences and Engineering.

EEB ALUMNI NEWS

Late in 2008, **Dr. Robert Dunn**, (Ph.D. 2003) published a book of essays entitled, *“Every Living Thing: Man’s Obsessive Quest to Catalog Life, from Nonbacteria to New Monkeys.”*

An excerpt of a review of the book, with a forward by E.O. Wilson, by another EEB alum, **Dr. Andrew Latimer** (Ph.D. 2006) says, “This is a very entertaining story of how, since Linnaeus and Leuwenhoek, scientists have discovered vast new unknown realms of life: single-celled life, bacteria, archaea, insects of the tropical forest canopy, and more. What is stunning is how much of the world has been hidden “in plain sight” waiting for someone with the imagination just to stop and look, and the drive to keep looking. One remarkable fact: microscopes had been invented and were available for a century or so before cells and micro-organisms were even noticed. How many more major discoveries are out there still waiting to be made?”

Dr. Dunn is currently an Assistant Professor at North Carolina State University. Dr. Latimer is an Assistant Professor and Assistant Ecologist in AES at the University of California Davis.

Cathy Bevier (Ph.D. 1995) and **Carlos Navas** (Ph.D. 1995) are continuing to collaborate in their research on amphibians. Cathy is currently spending part of her sabbatical from Colby College in Dr. Navas’ lab studying the interaction of epibiotic bacteria and frog skin secretions. Dr. Navas received a \$1M grant from FAPESP (State of São Paulo Science Foundation) for investigations in physiological ecology and conservation over the next four years. He has 11 graduate students and one post-doc in his lab at the University of São Paulo and was promoted to full professor in August 2009.

EEB ALUMNI NEWS CON'T

Omora Ethnobotanical Park and Dr. Ricardo Rozzi (Ph.D. 2001) were the 2008 recipients of a prestigious international award given by the Resilience Alliance and the Foundation for Scientific Symbiosis.

The **Science and Practice of Ecology and Society Award** is an annual recognition given to the individual or organization that is the most effective in bringing trans-disciplinary science of the interactions of ecology and society into practice. Nominations are accepted from around the world. The award consists of 1,000 € and an article in the journal *Ecology and Society*, written by the sponsors of the application.

On Rozzi's behalf, the award money will be given to the Center for Environmental Philosophy in the University of North Texas' (UNT) Department of Philosophy and Religion Studies as a contribution to the UNT-Chile Sub-Antarctic Biocultural Conservation Program, which coordinates a field course on biocultural conservation each winter through UNT and UMAG at Omora Park and the Sub-Antarctic ecoregion. The series of courses, titled "Tracing Darwin's Path," addresses scientific, philosophical and indigenous ecological perspectives of the unique biocultural diversity at the southern end of the Americas.

For more information about the UNT-Chile Sub-Antarctic Biocultural Conservation Program and Omora Ethnobotanical Park, visit the Cape Horn Field Station website. For more information about "Ecology and Society" journal, visit the Ecology and Society website.

Dr. Rozzi is a Chilean native and an associate professor of philosophy and religion studies at the University of North Texas.

— Adapted with permission from the University of
North Texas News Service article written by Nancy Kolsti

Dr. Pati Vitt, (Ph.D. 1997) Curator of Dixon National Tallgrass Prairie Seed Bank at the Chicago Botanic Garden, along with three of her colleagues, published a paper in in the November issue of the journal *Biology Conservation* outlining a framework for assisted migration. Assisted migration is the practice of deliberately populating members of a species from their present habitat to a new region with the intent of establishing a permanent presence there, generally in response to the degradation of the natural habitat due to human action.

Assisted migration is a hotly debated topic among scientists. There are those like Dr. Vitt who believe it may be the only way to keep species alive; others, like Dr. Jason McLachlan, a biologist at the University of Notre Dame believe assisted migration is courting disaster.

No doubt this debate will intensify among scientists, natural resource managers, and policy makers as the complexities of climate change are more clearly understood.

EEB ALUMNI NEWS CON'T

Dr. Chris Martine (Ph.D. 2006) spent 21 days in May in Australia searching for eggplants — not the kind you eat, the ones that grow wild in Kakadu National Park. Joining Chris were SUNY colleague Professor Daniel Vogt, Betty Lavoie '10, a SUNY Plattsburgh biology major, and Bill Figley, retired wildlife biologist from New Jersey.

“For whatever reason,” says Martine, “the northern part of Australia has large numbers of eggplants that are unisexual. These are rare species with rare reproductive habits. In addition, some of these eggplants have really odd pollen,” continues Martine.

It was more than good luck that Vogt, an expert in bee energetics came into the picture. “The pollen of these plants is difficult for bees to handle in the ways they collect, eat, and feed developing young,” said Martine. “I thought, ‘Gosh, if only I knew someone who studied how bees perform...’ I met Dan when I first came to SUNY Plattsburgh. I knew we would work together.”

During the three week research trip, the team compiled a large number of samples which are now being analyzed in the lab in Plattsburgh. In addition, the team collected bees which will enable Vogt to study the pollen. Lavoie, who has already honed her expertise in DNA by using the college’s DNA sequencer, will analyze the DNA of the samples.

While in the outback, Martine believes they discovered an unidentified species of wild eggplant. “If we can prove it is made up of entirely different DNA from the species already identified, it will be a significant discovery. Lavoie’s field work and subsequent research will take her genetics work a step further says Martine. He believes Betty’s outstanding undergraduate work speaks to the quality of the faculty at SUNY Plattsburgh. “I’m amazed at how much individual effort the faculty put into their students. They’re willing to mentor and help them grow into good students and scholars.”

Martine helped students establish the first-ever student chapter of the Botanical Society of America on the SUNY Plattsburgh campus. Now an official club on campus, two of Martine’s students have won Young Botanist Awards since starting the chapter.

— Adapted from an article in the Summer 2009 SUNY Plattsburgh Magazine written by Gerianne Wright

EEB UNDERGRADUATES

EEB undergraduates are working just as hard as their senior colleagues. They, too, are winning awards and making significant contributions in their respective areas.

27th Biology Undergraduate Symposium Award Winners:

Laurel Dwyer, Dr. Carl Schlichting advisor, won the Outstanding Senior in EEB Award for her presentation entitled, “*Predator-induced plasticity in spotted salamanders.*”

LeRoy Robinson, Dr. Elizabeth Jockusch advisor, won the Connecticut Museum of Natural History Award for his presentation entitled, “*Speciation and gene flow in the batrachoseps.*”

2009 Environmental Leadership Awards:

These awards are given for proven dedication and outstanding contributions to a more environmentally aware and sustainable campus.

Winner: **Emily Galanto**, Environmental Science major

Finalist: **Heather Heenehan**, Environmental Science major

EEB ALUMNI NEWS CON'T

PHIPPS CONSERVATORY WELCOMES PRESIDENT OBAMA

The Phipps Conservatory hosted President and Mrs. Obama for the opening evening of the September 24-25, 2009 Pittsburgh Summit. The Obamas welcomed leaders, their spouses, and officials at the Conservatory where a working dinner followed. At the Summit, President Obama and leaders representing 85 percent of the world's economy assessed progress made since the Washington and London G-20 Summits and discussed further steps to achieve a sound and sustainable recovery from the global financial and economic crisis.

Richard V. Piacentini, an EEB alum who earned his M.S. 1984, is the Executive Director of Phipps Conservatory and Botanical Gardens, one of the oldest conservatories in North America, a position he has held since 1994. During his tenure, Phipps launched the most ambitious expansion project in its 117 year history. The \$36.6 million expansion featured environmentally friendly designs, including the first LEED certified visitor center in a public garden, state-of-the-art energy-efficient Production Greenhouses; and an innovative 12,000-square-foot Tropical Forest Conservatory, the most energy efficient conservatory in the world. Under his leadership, Phipps is currently engaged in developing the Center for Sustainable Landscapes as a "Living Building", which will exceed LEED Platinum and operate at net-zero energy and net-zero water.

Recently, Richard received the APGA's (American Public Gardens Association) Professional Citation; a Shades of Green Leadership Award from the Green Building Alliance; a Carnegie Science Award for his work on the environment; a Diamond CEO Award from the Pittsburgh Business Times; a Tourism and Travel Advocate of the Year award from Visit Pittsburgh; an Environmental Hero award from the Group Against Smog and Pollution; a KDKA Leading Pittsburgh Award; a Fred E. Obley Award for Business Leadership and Excellence; and an ASID Pennsylvania West Leadership Award for his leadership, dedication and commitment towards the development of a sustainable community.

Richard is a board member of the World Water Center in Washington, D.C. and chairs the Green Buildings and Landscapes Committee of the APGA. He travels extensively and speaks on gardens and sustainable design and operations. He is the author of *The Plant Collections Directory for Canada and the United States*.

Originally from New York, Richard received his master's degree in botany from the University of Connecticut and an MBA in business administration from Virginia Commonwealth University.



President and Mrs. Obama with the Piacentini Family