E&E Faculty garner high national honors

Larry Slobodkin, Professor Emeritus, received the 2005 Eminent Ecologist Award of the Ecological Society of America at a special ceremony at this year’s ESA national meetings. This award is given in recognition of an outstanding body or ecological work or of sustained contributions of extraordinary merit and is the highest honor bestowed by the Ecological Society of America. The text of the award presentation noted, “Larry Slobodkin is one of the premier ecologists of our time. He has made lasting contributions to the theoretical and empirical development of ecology. Beyond this, however, many of us have been greatly influenced by the wonderfully original and insightful perspectives that flow from his unfettered mind…Another extremely important contribution of lasting impact has been the Department of Ecology and Evolution at SUNY Stony Brook, whose creation Larry spearheaded. Overnight, he created one of the most exciting departments in the world.” Larry’s achievements, both in research and in the creation of E&E, were recognized at the University’s Annual Faculty Awards dinner in November.

Douglas Futuyma, Distinguished Professor, was recently elected as President-Elect of the prestigious and diverse American Institute of Biological Sciences (AIBS). Doug will take office on January 1, 2006 and ascend to the role of President of AIBS on January 1, 2007. Although it will involve substantial work, Doug is looking forward to the impact he can make on science education.

SBU Ecology & Evolution hosts the joint SSE, SSB, and ASN meetings in 2006

The Society for the Study of Evolution (SSE), the Society of Systematic Biologists (SSB), and the American Society of Naturalists (ASN) will hold their joint annual meeting at Stony Brook University from June 23 to June 27, 2006. The 2006 SSE/SSB/ASN meeting will be hosted by the Department of Ecology and Evolution. Since its founding, E&E at Stony Brook has played a major role in the development of all three societies and their journals, and we are very pleased to bring this meeting back to Stony Brook in 2006 for a second time.

Recently, this meeting has attracted about 1200 participants, mostly from the US and Canada. The 2006 Stony Brook meeting will attract more European biologists than usual because the European Society for the Study of Evolution will not meet that year. The meeting will be based in the new Wang Center and will also use rooms in the Student Activities Center, the Student Union and the Staller Center. The banquet will be held at the Huntington Hilton Hotel, and a variety of informal evening events on campus are planned. The University has made ample space available in Roth and Tabler quads to house and feed participants, who will be encouraged to arrive two days before formal sessions begin so they can visit local points of interest and New York City. The meeting co-organizers are Mike Bell (mabell@life.bio.sunysb.edu) and Massimo Pigliucci (massimo@life.bio.sunysb.edu).

The 2006 Evolution meeting will include a special event for Stony Brook E&E Alumni, so be sure to mark your calendars. We hope you can join us for this landmark meeting!
E&E Research Aids Long Island Clam Restoration

Many old timers on Long Island have fond memories of digging for clams on warm summer days, eating clams on the half shell with their friends, and looking out on the endless number of clammers on the local waters. For years, clamming had been an important part of Long Island’s culture and economy. In fact, Long Island’s Great South Bay was once the home of New York’s most successful fishery, that of the hard clam or Northern Quohog, *Mercenaria mercenaria*. During much of the 1970s, almost half of the nation’s harvest of hard clams came from Great South Bay. But all of that came to an end with the total collapse of the fishery during the 1980s, and to date depleted hard clam populations have not recovered.

Meanwhile The Nature Conservancy, traditionally concerned with conservation and restoration of terrestrial habitats, has gone salty. By focusing on restoring major ecosystem functioning species, like hard clams that prodigiously filter water, the Long Island Chapter of TNC hopes to restore and protect Long Island Bay ecosystems. To meet this goal, TNC has established hard clam spawner sanctuaries on bottomlands they have acquired in both the Peconic Estuary and Great South Bay. They have outplanted over a million adult clams in these sanctuaries in hopes of jump-starting growing populations of clams.

Mike Doall (pictured above) and the Padilla Lab have been working with TNC to determine if the hard clams are reproducing by monitoring their reproductive condition, when they spawn, and if viable larvae are being produced. Mike now has two years of data on the clams, and they are indeed spawning - which is great news for TNC. The Padilla lab has also found that clam larvae are in the water when we would expect them to be based on the clam spawning data. They are also testing molecular ID techniques to assess faster and more accurate identification of larvae in the plankton.

E&E Post-Doctoral Research: Invasions, Molecules, Metals, and Much Much More

The Ecology and Evolution Department is in the midst of a boom of excellent postdoctoral research. Recent and current post-docs are undertaking new projects in areas across the entire realm of ecological and evolutionary biology, from molecular evolution and ecological genetics, to community, ecosystem, and spatial ecology. Here is a sampling of the research of these up and coming investigators:

**Christina Richards**, a post-doc with Massimo Pigliucci is studying the genetic structure of invasive *Fallopia* plant species on Long Island and relating this genetic structure to the spread of this invasive into novel coastal habitats. Using genetic markers and reciprocal transplant studies, she is testing several hypotheses to discern how this invasive may have adapted to this diversity of environments at the genetic level.

**Matt Forister**, a post-doc with Doug Futuyma, is interested in specialization and speciation in phytophagous insects. With the Futuyma lab, he has been investigating the quantitative genetics of traits involved in host use in the Colorado potato beetle. He has also begun a project to compare phylogeographic patterns in salt marsh plants and their associated beetle faunas.

**Oliver Bossdorf**, a post-doc with Massimo Pigliucci, is studying the evolutionary ecology of touch response in plants. In addition, he is involved in several conceptual and empirical studies on plant invasions and the nature of plant-plant interactions.

**Thomas Merritt**, a post-doc with Walt Eanes, is interested in the evolution of proteins across populations and gene families. His research examines the evolution of proteins under constraints caused by three dimensional structure, pathway interactions, biochemical function, or genomic structure. He recently accepted a faculty position at Long Island University - C.W. Post and will continue his research at Stony Brook.

**Josh Mackie**, a post-doc with Jeff Levinton, is examining gene flow in the sediment-dwelling oligochaete *Limnodrilus hoffmeisteri*, and evolutionary patterns in response to heavy metal pollution. Along with the Levinton Lab, he has also recently conducted experiments identifying guilds of oligochaetes with different habitat preferences and dispersal characteristics, with the aim of developing the understanding of species-level variation in this group. **Sarah Smith**, a post-doc with John Wiens, is working on part of a large squamate phylogeny project lovingly called “deep scaly”. In addition to this project, which aims to use DNA sequence and morphological data to
recover relationships among all families of squamates, she is using a phylogenetic approach to examine the evolution of patterns of species richness in hylid treefrogs.

Jon Flowers, a post-doc with Walt Eanes, is working on the evolution of codon bias in Drosophila. Codon bias appears to evolve rapidly in this genus, most likely due to changes in effective population size. He is currently evaluating whether selection is working on silent site variation in D. melanogaster. His findings suggest that selection is relaxed in D. melanogaster compared with D. simulans and that signatures of selection are particularly apparent in metabolic genes and other genes with high levels of expression.

Ken Kozak, a post-doc with John Wiens, is interested in the evolution of montane endemism. He is combining data on the evolutionary history, community structure, and climatic tolerances of southern Appalachian woodland salamanders to understand how montane-endemic species originate and how their geographic ranges are maintained.

Lianrong Zhai, a post-doc with Catherine Graham, is interested in species distribution modeling and statistical methods using GIS and remotely sensed data and statistical methods, data-mining applications for pattern reorganization, and predicting and evaluating population and community distributional patterns at both regional and landscape scales.

Beth Leger, a post-doc with Manuel Lerdau is interested in the population biology of plants. Her research program focuses on the contemporary evolution of ecologically important traits in native and invasive plants, determining what factors contribute to invasion in specific case studies, and applied research into the biology of rare species, effectiveness of restoration methods, and control of invasive species in natural areas.

Recent Awards

- Martha Nolan was honored on October 26th, in an awards ceremony hosted by SBU President Shirley Kenny for receiving "The President's Award for Excellence in Classified Service".
- Chris Noto received a grant from the Geological Society of America for $2000 for his dissertation research.
- Dan Menoe received a NSF Graduate Research Fellowship and also won the Seibert Award for the best student talk in the category of Evolution & Systematics at the Annual Joint Meeting of Ichthyologists & Herpetologists in July.
- Windsor Aguirre received a NSF Doctoral Dissertation Improvement Grant for his research on “The pattern and process of evolutionary diversification: lessons from an Alaskan threespine stickleback radiation.”
- Jim Rohlf was awarded Honorable Mention in the category of Non-Interactive Media in the 2005 NSF Science and Engineering Visualization Challenge. To view an excerpt from this work, visit http://www.sciencemag.org/sciext/vis2005/show/slide8.dtl.
- Jonathan Hickman received a Fellowship in Ecological Restoration from the Garden Club of America in Spring 2005.
- Paul Bourdeau was awarded the Constance R. Boone award for best student presentation at the American Society of Malacology meeting at Asilomar California in June.
- Paul Bourdeau and Shu-Dan Yeh received $500 Robert Sokal travel awards.
- Shu-Dan Yeh received a scholarship to attend the 2005 Summer Institute in Statistical Genetics at North Carolina State University.
- Catherine Graham was awarded the 16th Annual Hispanic Heritage Month Faculty Award in recognition for outstanding, extraordinary contributions, service, outreach, and commitment to the Latino community at Stony Brook University.
- Mike Doall was awarded a contract from the Nature Conservancy to monitor the condition of hard clams and bay scallops in spawning sanctuaries located in the Great South Bay and Peconic Estuary.
- Dianna Padilla was awarded a contract from the Nature Conservancy to monitor the plankton for bivalve larvae in the Great South Bay and Peconic Estuary.
- Ramona Walls received a Tinker Fellowship for $1125, to conduct preliminary field work in Mexico.
- Bengt Allen received a NSF Doctoral Dissertation Improvement Grant for his research on "Costs of sexual selection in a fiddler crab"
- Jeff Levinton received a grant in May from the Hudson River Foundation to study long-term trends of toxic substances in Hudson River estuary species.
- Pablo Menéndez was awarded a $1150 Tinker Fellowship for his work in Ecuador collecting diet data on Amphibian species and he also collaborated in the course "Applications of GIS tools in Ecology and Evolution" taught by Catherine Graham in Quito, Ecuador.
- Jorge Velásquez was awarded a $1150 Tinker Fellowship to undertake field work in Colombia.
- Rodrigo Cogni received a $1265 Tinker Field Research Grant from the Latin America and Caribbean Studies Center for dissertation research in Brazil.
Recent Awards (cont. from p.3)

- **Toni Lyn Morelli** was awarded an $8000 grant from Conservation International/Margot Marsh Biodiversity Fund for her research on Examining Viability by Estimating MHC Variability in Milne-Edward’s Sifaka Populations, Ranomafana National Park, Southeastern Madagascar.

Alumni News

- **Isabel Ashton** (PhD 2005) has started a post-doc at UC Irvine with Katy Suding. Isabel will be studying plant-microbe interactions in alpine tundra.
- **Nina Theis** (nee Brown, PhD 2003) has finished her Mercer Fellowship at Harvard and will be starting a post-doc in September with Lyn Adler of Univ. Massachusetts at Amherst. Nina will continue her work on plant-insect interactions.
- **Heather Throop** (PhD 2002) has accepted a faculty position in the Biology Dept. at New Mexico State University. Heather has deferred her start-date because she also received $500K from the USDA, and she will stay in Tucson at Univ. Arizona to work on that project.
- **Alison Wallace** (PhD 1997) has received promotion and tenure and is an Associate Professor at Minnesota State University in Moorhead.
- **Jennifer Powers** (post-doc 2001-2004) has accepted a faculty position at the University of Minnesota. Her appointment will be joint between the Departments of Plant Sciences and Ecology, Evolution and Behavior.
- **Kate Howe** (post-doc 2002-2004) has accepted a position with The Nature Conservancy in Indianapolis, Indiana.
- **Norris Muth** (Ph.D. candidate with Massimo Pigliucci) has accepted a post-doc position in Richard Niesenbaum’s lab at Muhlenberg College in Allentown, PA. Norris will be working on plant-insect interactions.
- **Patrick Stephens** (Ph.D. 2005) was offered postdoctoral fellowships from both the National Evolutionary Synthesis Center (NESCENT) and the National Center for Ecological Analysis and Synthesis (NCEAS) earlier this year. He accepted the latter fellowship and is now working NCEAS in Santa Barbara, California.

Send your Alumni News to John True (jrtrue@life.bio.sunysb.edu)

Vol. 2, Issue 1  P.4 Alumni News

High School Students Mentored by John True Win 2nd Place Nationally in Siemens-Westinghouse Competition.

Benjamin Pollack and Abhinav Khanna (pictured above with Siemens Foundation officials), seniors at John F. Kennedy Plainview Old-Bethpage High School in Plainview, NY, won second place in the team competition of the prestigious 2005 Siemens Westinghouse research competition. Ben and Abhinav performed research on sexual selection and assortative mating in two species of *Drosophila* under the advisement of John True and two of his graduate students, Roman Yukilevich and Shu-Dan Yeh. The team presented their research at the National Finals of the competition at New York University and shared a prize of $50,000 in scholarship money.

Updates on E&E Fundraising

**George Williams Fund.** Thanks to several generous contributions during the summer, the George Williams Fund for Graduate Student Research surpassed the threshold for an endowment fund. The first grants from this fund will be awarded this coming February at the annual E&E graduate program retreat. If anyone is interested in attending, please check out our website to get the details early next year and drop us a line to let us know. Additional donations to the Williams Fund are, of course, always welcome. Details are at [http://life.bio.sunysb.edu/ee/endowments.html](http://life.bio.sunysb.edu/ee/endowments.html).

**New OTS Fund.** Because of State budget reductions in recent years, it has been difficult to maintain SBU’s membership in OTS, let alone pay for student travel and course fees. This has led to a drop in the number of students that we can sponsor to the still-awesome OTS Tropical Ecology and other field courses. To start to fix this problem, we have started a new endowment fund solely to support graduate student travel and tuition to OTS courses. As with all endowment funds, once it reaches the minimum level for an endowment fund ($10,000), income from the fund will be available every year thereafter to pay for student OTS needs. We strongly urge each of you, especially you old OTS alums, to donate as generously as you can to enable a new generation of students to take advantage of this great learning experience.

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