

BIOLOGUES

December 2009
Claudia L. Jolls, editor

Looking at Life in the East Dr. Jeff McKinnon, chair

Welcome back to Biologues! ECU Biology's newsletter has been on hiatus but is back—and with both an active faculty and a talented group of students, plenty of news has accumulated. As you will see, editor Claudia Jolls and her contributors have done a great job of making up for lost time.

I will be new to some readers, having arrived at ECU in August 2008. I am settling in now after an

eventful first year filled with hires, new initiatives and a financial crisis. I am happy to report that the department is emerging from a challenging fiscal situation positioned for rapid progress on several fronts.

If we haven't met, I hope we will soon. In the meantime, enjoy catching up on our department in the pages of Biologues. And please stop by Biology's website for the latest news: <http://www.ecu.edu/biology/>



Table of Contents

| | |
|------------------------------|-----|
| Looking East | 1 |
| Darwin's 200th..... | 1-2 |
| NC Biodiversity Center... .. | 2 |
| New Faces..... | 2 |
| In the News..... | 2-5 |
| Undergraduate Studies..... | 5 |
| Graduate Studies..... | 5 |
| Kalmus Retires..... | 6 |
| Under the Microscope..... | 7 |
| Where Are They Now?..... | 8 |
| Passages..... | 8 |
| Student Awards..... | 9 |
| Thanks to You..... | 9 |



Darwin Day

February 12, 2009

Darwin Day Biodiversity Celebration honored Charles Darwin's 200th birthday with a departmental open house, middle and high school teacher workshops, exhibits featuring Darwin's impact on biology and beyond, and t-shirts with an award-winning design by undergraduate Angela Chico. Dr. Jason Bond delivered a public lecture on "Spiders, Biodiversity and the Future of Life" and

named two spider species as part of a fund-raising effort in support of biodiversity research scholarships for students at ECU. Pam and Danny Tripp of Dunn, NC named *Aptostichus dantrippi*. Phil Evans and Cindy Putnam Evans honored their son, Nathaniel, with *A. nathanieli*. Thanks to generous support of many contributors, the final total exceeded \$9,000.



by Angela Chico

More Darwin Day: A juried art exhibition also was organized by Drs. Carol Goodwillie and John Stiller at Emerge Gallery, Uptown Greenville. The winning entry of more than 25 submissions was "Metamorphosis", by Abby Spangler-Perry, depicting frog egg development in acrylics and pastels on canvas. Thanks to the generosity of Drs. Goodwillie and Stiller, "Metamorphosis" (below) now graces the entry hall of Howell Science.



ECU Biology and THCAS form a new state-wide center for biodiversity

The North Carolina Center for Biodiversity

The Thomas Harriot College of Arts and Sciences and Department of Biology are pleased to announce the formation of the North Carolina Center for Biodiversity (NCCB) at East Carolina University. The NCCB will be to support and promote all aspects of biodiversity research

and education in North Carolina. The NCCB will also serve the community of eastern North Carolina by providing educational programs designed to engage citizens in the conservation of biodiversity and its relevance to human health and quality of life. With the leadership of

Drs. Jason Bond, David Chalcraft and Heather Vance-Chalcraft, more than 15 ECU Biology faculty are involved in research and outreach efforts. Follow our progress at <http://sites.google.com/site/ncbiodiversity/home>.

New Faces

12 new faculty have been appointed in ECU Biology

Tim Christensen, genetics and cell biology Assistant Professor (Cornell University, U. Utah)

Jason Gee, Teaching Assistant Professor, molecular microbiology (Louisiana State U. Health Sciences Center, Mississippi State U.)

Patrick Harris, Teaching Assistant Professor, fish ecology (U. South Carolina, ECU, Rhodes University, U. Cape Town)

Jeff McKinnon, Professor and Chair of Biology, evolution, sexual selection and speciation in fish (Harvard, U. Guelph, U.

British Columbia)

Dave Kimmel, Assistant Professor, plankton ecology, biological oceanography, climate impacts (U. Maryland, Penn State)

Xiaoping Pan, Assistant Professor, biochemical toxicology (Texas Tech U., Nanjing University)

David Rudel, Assistant Professor, animal evolution and development (U. Wisconsin-Madison, U. Missouri-Columbia)

John D. Rummel, Professor and Director of the Institute for Coastal Science and Policy, astrobiology, ocean sciences, and microbial ecology (Stanford University, U. Colorado-Boulder)

Matt Schrenk, Assistant Professor, microbial ecology and geomicrobiology (U. Washington, U. Wisconsin-Madison)

Beth E. Thompson, Assistant Professor, plant developmental biology (U. Wisconsin-Madison, Rice University)

Nancy White, Associate Professor and Director of the UNC Coastal Studies Institute, Manteo (NC State University, UNC-Chapel Hill)

Baohong Zhang, Assistant Professor molecular genetics, toxicology, biotechnology (Texas Tech U., Beijing Agriculture U.)

Our new staff include:

Joyce Beatty joined ECU Biology in 2008 as our

Administrative Support Specialist. Joyce works as a Research Grant Administrator, coordinates travel and manages student payroll.

Tom Fink is manager of the Imaging Core Facility, including the electron and confocal microscopes (https://author.ecu.edu/cs-cas/biology/imagingcore_introduction.cfm).

Julie Marik (M.S. in Biology 2007, Tulane U.) returns to ECU as research specialist, greenhouse manager and lab coordinator.

Stuart Portbury (Royal Melbourne Institute of Technology, Australia) now serves as Cell Culture Facility lab manager.

In The News

Jason Bond, Associate Professor, arthropod systematics, was interviewed on “The Colbert Report” after naming two trapdoor spiders for musician Neil Young (*Myrmekiaphila neilyoungi*) and talk show host satirist Stephen Colbert (*Aptostichus stephencolberti*). Check it out at <http://core.edu.ecu/bond/bondja/news.html>

Mark Brinson, THCAS Distinguished Professor, wetland restoration and ecosystem ecology, received the Oliver Max Gardner Award from the University of North Carolina System. The award is presented to the faculty member “who...has made the greatest contribution to the welfare of the human race” for notable contributions that serve as national and international models.

Faculty members **Anne Bunnell, Mary Farwell** and **Patrick Enderle** directed PIRATES (Partnering with Industrial and Regional Assets for Teaching and Enrichment in Science) to bring new lab and field scientific experiences to high school students from eastern NC, a collaboration with ECU Biology, Thomas Harriot College of Arts and Sciences, the College of Education Rural Education Institute, with support from the Burroughs Wellcome Fund Student Science Enrichment Program.

Dave Chalcraft, Assistant Professor, population and community ecology, had his 2008 publication in *Ecology* on scale-dependent responses of plant biodiversity to nitrogen enrichment cited by the Faculty of 1000 as one of the most interesting papers in biology.

Robert Christian, systems and network theory and the ecology of coastal ecosystems, was named the Thomas Harriot

College of Arts and Sciences Distinguished Professor, joining Biology’s other Distinguished Professor, Dr. Mark Brinson. Dr. Christian also directs the Coastal Global Terrestrial Observing System (C-GTOS), a program through the UN to detect, assess and predict change associated with ecosystems along coasts. Dr. Christian traveled to Spain, Greece and rekindled the cooperative agreement between ECU and the University of Ferrara in Italy.

Lisa Clough, Associate Professor, marine benthic ecology, was awarded the Robert L. Jones Alumni Award for Outstanding Teaching. Beginning in fall 2009, Dr. Clough is on leave serving as integrated system science program director for NSF’s Office of Polar Programs.

John Conoley, information systems coordinator and Assistant Teaching Professor, continues to integrate the latest distance education technologies to provide quality education in environmental biology for non-majors.

Hal Daniel, Professor Emeritus, was interviewed by Discovery Channel’s “Animal Planet” for their “Bug Eating Man” program to discuss insects as high protein/low fat food sources.

Mary Farwell, Associate Professor, serves as Director of Undergraduate Research in the Department of Biology and has been appointed as Director of Undergraduate Research, Division of Research and Graduate Studies.

Alex Georgakilas, recently promoted to Associate Professor, continues his work on the role of complex DNA damage in breast cancer, including collaborations with international colleagues. He received an ECU Research/Creative Activity Grant for the role of BRCA1 in the processing of clustered DNA

damage in human breast cancer cells.

Carol Goodwillie, Associate Professor, plant mating system evolution, is co-p.i. on NC Quest “Big Ideas in Science” with Karen R. Dawkins, director of the Center for Science, Mathematics and Technology Education). The project will train select science teachers from Beaufort County Schools in content, strategies, assessment and leadership. Along with Dr. **Matt Schrenk**, the team helped teachers ask how mowing and fertilization of long-term treatment plots might affect soil bacteria communities at West Research Campus. Dr. Goodwillie also was honored with the Board of Governors Distinguished Professor for Teaching Award (2008).

Jinling Huang, Assistant Professor, continues his research in evolutionary genomics and bioinformatics, as co-principal investigator on a NSF-funded project “Horizontal gene transfer and inter-phyla relationships.”

Claudia Jolls, Associate Professor, plant evolutionary ecology and conservation, participated for a third year in the NSF-funded project “TechMath”, an initiative to help public school teachers develop curriculum focused on business-related science, technology, engineering and mathematics skills.

Liz Jones, Teaching Assistant Professor, human anatomy and physiology, received an ECU Faculty Teaching Award to develop a lab-based curriculum for teaching human anatomy.

David Knowles, Teaching Instructor, continues to be involved in teaching and conservation in Costa Rica.

More News

Trip Lamb, professor, systematics and phylogeny, and colleagues at the University of Missouri, U. Georgia, Piedmont College and UC-Berkeley discovered and named the first new genus of North American salamander described in five decades. The diminutive lungless, patch-nosed salamander *Urspelerpes brucei* was named in honor of Richard Bruce, professor emeritus at Western Carolina University, a noted authority stream salamander ecology and the evolution of miniaturization.

Joe Luczkovich, Associate Professor, food web ecology and bioacoustics, **Sue McRae**, Teaching Assistant Professor, behavioral ecology and social evolution in birds and **Kyle Summers**, Professor, evolutionary ecology, led students on a month-long trip to Panama for study of tropical terrestrial and marine ecology. The trip was based out of the Smithsonian Institute's Tropical Research Institute (STRI), Gamboa, Galeta and the San Blas Islands.

Jeff McKinnon, professor and chair, sexual selection and speciation, mainly in fish, is author on one of 15 papers published in the past decade considered to be "Evolutionary Gems" by the distinguished journal *Nature*. McKinnon's work demonstrates that some stickleback fish species have evolved to live in streams repeatedly from marine or anadromous ancestors. The paper is co-authored with David Kingsley, Dolph Schluter and two of McKinnon's former students. See Dr. McKinnon's work on mating in sailfin silversides at the *Natural History* magazine website.

Anthony Overton, recently tenured and promoted to Associate Professor, larval fish ecology and fisheries biology, worked with colleagues in

geology and education to develop "Reach Up", a summer camp at ECU for local African-American students to foster an interest in science using hands-on experiments in biology, chemistry and geology.

Enrique Reyes, Associate Professor, now tenured, has served on organizing committees for research on the Setiu Wetlands, Universiti Malaysia Terengganu. His research on forecasting ecological responses to climate change has taken him to Canada, Italy and Spain.

Roger Rulifson, Professor, Fisheries, received the Meritorious Service Award from the American Fisheries Society (AFS) in recognition of 30 years of service to the organization. Dr. Rulifson also was honored with the Outstanding Achievement Award by the Southern Division of AFS.

Jean-Luc Scemama, Associate Professor, post-duplication gene evolution, was tenured and promoted. He also now serves as president of the ECU Chapter of Sigma Xi, The Scientific Research Society. Dr. Scemama continues his long-standing work with the Summer Ventures in Science and Mathematics program.

Matt Schrenk, Assistant Professor, astrobiology, has organized a seminar series in astrobiology as part of his support from NASA, "Pressure Effects upon Microbial Growth and Physiology: Implications for Life Detection in Deep Surface Habitats."

Margit Schmidt, Teaching Assistant Professor, continues her collaboration in immunology and virology with colleagues in Switzerland.

John Stiller, Associate Professor, molecular evolution and comparative genomics, was one of 10 ECU faculty to receive the prestigious Scholar Teacher Award. This award recognizes excellence in the

classroom, outstanding scholarly accomplishments, integration of research and creative activity in the classroom and mentoring students and faculty. Dr. Stiller also was awarded the Harriot College Research Award.

Ed Stellwag, Associate Professor, vertebrate evo-devo and cis-regulatory network evolution, serves as Director of the ECU Biotechnology Education Program and Genomics Core Facility. Dr. Stellwag continues to direct NC Biotechnology Center summer workshops for high school teachers.

Kyle Summers, Professor, Evolution of color and behavior in poison frogs and evolutionary medicine, received a Harriot College Research Award for research on evolutionary medicine at Simon Fraser University, British Columbia. Dr. Summers also delivered an invited lecture in Italy on the evolution of cancer.

Lee Sutton, Teaching Assistant Professor and biology advisor, human anatomy and physiology, took second place at the 2006 Pepsi Americas' Sail Festival Class B race on his schooner, Jeanie B, named for his wife, Jean Brooks. They also participated in a Tall Ships race in CT in 2009. Their son, Charlie, age 2.5 yr, will be a big brother come February 2010.

Heather Vance-Chalcraft, Teaching Assistant Professor, predation and community ecology, received the East Carolina Alumni Association's Robert L. Jones Award for Outstanding Teaching (2008). She and **Claudia Jolls** are co-p.i.s with colleagues in the College of Education on an NSF-funded \$900,000 Noyce Scholarship grant to fund ECU graduates in science and mathematics education.

More News

Bhang Zhang, Assistant Professor, microRNA evolution, comparative genomics and molecular genetics, published his work on cotton microRNAs in *Gene*, cited as one of the Top 25 Hottest Articles for 2007-2008. Dr. Zhang also received an ECU Research/Creative Activity award for his work on microRNA mediation of neurotoxicity.

Yong Zhu, Associate Professor, molecular and developmental endocrinology, received the 2008 Thomas Harriot College Research Award to conduct international collaboration in Singapore.

Visitors

Dr. Victor Camacho-Ibar, visiting scientist in coastal ecology, Universidad Autonoma de Baja California, collaborated with Dr. **Robert Christian**, academic year 2008-2009.

Dr. Michele Pierotti, University of Bern, Switzerland, University of Hull, UK, University of Padova, Italy, postdoctoral associate, is working with Dr. **Jeff McKinnon** on aspects of sexual selection, genomic conflict and speciation in fishes.

Dr. Guiling Sun (Chinese Academy of Sciences) arrived in 2009 to work with Dr. **Jinling Huang** on evolutionary genomics.

Mr. Fuliang Xie (Nanjing Agricultural University) arrived in 2009 to work with Dr. **Baohong Zhang** on microRNAs.

Dr. Zefeng Yang, lecturer in bioinformatics and quantitative genetics (Yangzhou University, China) will collaborate with Dr. **Jinling Huang** on the expansion of the eukaryotic gene pool.

Undergraduate Studies Dr. Mary Farwell, Director Associate Professor cell biology

Biology declared majors currently exceed 330 (and 40 Biochemistry majors), with approximately 500 intended undergraduate majors. We have awarded approximately 120 undergraduate degrees annually since 2006. Biology is second only to English in the Harriot College of Arts and Science in student credit hours produced. ECU Biology faculty, instructors and graduate teaching assistants spend more time with ECU students than do the departments of Mathematics, Philosophy, Physics or Psychology.

More than 30 courses were significantly redesigned/upgraded and 12 new courses developed, including courses on scientifically and socially important topics such as global climate change. The Department has been revising teaching of non-majors courses for foundations credit and is planning a revision of the teaching of our majors introductory courses. We also are serving significantly increasing numbers of Nursing, Engineering and Exercise Science students, among others. We brought the new three-floor Flanagan South teaching wing online for Biology laboratories in microbiology, anatomy/physiology, gross anatomy, comparative anatomy, and histology, providing eight new laboratories, several offices and new equipment.

In addition, the Department has formalized requirements for the undergraduate honors thesis in support of ECU's initiative for expansion of The Honors College. Biology also has entered into a "2+2" agreement with the College of the Albemarle to allow their

students to complete a biology degree with two years at CoA and an additional two at ECU. Other collaborations include the "4+1" BS Biology/MBA degree option, Carteret Community Ecology-ECU Aquaculture Technology/BS Biology program and plans for a dual major in Biology/Biomedical Engineering.

Graduate Studies Dr. Terry West, Director Associate Professor coastal ecosystems ecology

Since 2007, the Department has graduated 26 Masters in Biology and five PhD students in Coastal Resources Management and the Interdisciplinary Doctoral Program in the Biological Sciences (IDPBS). We also now have an independent track in the IDdoctoral degree program.

The graduate students have organized a seminar series to highlight research by students pursuing master's and doctoral degrees, as well as by postdoctoral fellows. The cleverly named "R.I.P." Research in Progress event is in its second year with weekly presentations throughout the academic year, including visiting grads and postdocs from ECU, North Carolina State University and Virginia Commonwealth.

Dr. Gerhard W. Kalmus Retires *contributed by Hal Daniel, professor emeritus*

On April 28, 2007, the Department of Biology celebrated the retirement of Dr. Gerhard W. Kalmus at the Hilton Hotel, Greenville, NC. Approximately 200 ECU faculty, staff, students, and alumni paid tribute to Professor Kalmus' 30 years of service to the East Carolina community. Professor, Director of Undergraduate Studies, Director of Biology Graduate Programs, Secretary and President of the North Carolina Academy of Science are only a few of the titles accorded to this "easy rider" of motorcycles.

The festivities began with a cocktail party where the guests were able to renew acquaintances and sign a journal later presented to Dr. Kalmus. After dinner, interim chair Dr. Tom McConnell presented Dr. Kalmus with a framed caricature drawn by Dr. Ron Newton and a rocking chair engraved with the ECU and Biology logos. Dr. McConnell narrated the life history of the Kalmus family and their journey from a war ravaged Germany to Carmel, California via South America. We discovered many fascinating aspects of Dr. Kalmus' past, including his taste for fine cuisine and cooking expertise inherited from working in his father's restaurant in Carmel. Dr. Kalmus served in Vietnam as a medic and then returned to California where he received his undergraduate degree from UC Berkeley then MS and PhD from Rutgers University in New Jersey.

Testimonies from present and past students, and colleagues whose lives were influenced by Dr. Kalmus, included undergraduate James Smith, graduate student Jennifer Weber and alumnus Col. James McLane, all who spoke of the support and encouragement they received from

Dr. Kalmus. Dr. Lynus Dohm, from the Brody School of Medicine shared stories about their friendship and camaraderie over the past thirty years. Dr. Claudia Jolls read a poem written by a former student especially for this occasion. Dr. McConnell asked if anyone would like to say something to Dr. Kalmus and many hands were raised. One former student said Dr. Kalmus not only helped her while she was at ECU but is now helping her daughter, a nursing student. Several spoke about Dr. Kalmus being the one person who offered a shoulder to cry on or swift kick, as required. Two said they would not be doctors today if it had not been for Dr. Kalmus's encouragement and belief in them when they did not believe in themselves.

Dr. Kalmus was the last to speak. He thanked everyone for coming and reminisced about his early days at ECU: the one phone for faculty use, the intercom system that would blare out a message while he was trying to teach, typewriters and mimeograph machines. He thanked Karin for all her help and support over the many years of their marriage, reminding us that the old adage "behind every man is a good woman" is true. Dr. Kalmus once said that he and Karin were not blessed with children, but he was wrong. While they may not have biological children, there are countless students whom they have helped to achieve their goals and reach higher than they thought possible. These students recognize how fortunate they were to have had a professor of Dr. Kalmus' caliber, witnessed by the number attending the dinner, one from as far away as Hawaii. This is a legacy worth having.



***Born to Be Wild Faculty:
Drs. Gerhard Kalmus and Jean-Luc Scemama
hit the road***



***caricature of Dr. Gerhard Kalmus
on the occasion of his retirement
by Dr. Ron Newton***

Under the Microscope

contributed by

Hal Daniel, professor emeritus

Baohong Zhang, Ph.D. and Tim Christensen, Ph.D. joined the ECU Department of Biology as Assistant Professors in 2008.

Baohong, a molecular geneticist, was born in Shandong, China and grew up in a farming family before being formally educated at the Beijing Agricultural University from 1987-91 studying plant genetics and breeding. He then took employment at the Chinese Academy of Agricultural Sciences where he worked for a decade. In 2003, Baohong matriculated at Texas Tech University where he received his Ph.D. in environmental toxicology in 2003. His doctoral research, funded by the Department of Defense, investigated the lethal, environmental and genetic effects of RDX, a substance similar to TNT. Baohong explained that his research focus at ECU will have two major thrusts: 1) agricultural biotechnology, where he looks to improve crop resistance to environmental stress by examining the role of microRNA, in plant response to stress, and 2) studying chemically induced diseases such as cancer and the effects of nanoparticles on human health. Dr. Zhang has developed a new course, Plant Biotechnology, dedicated to gaining knowledge of “the fundamental issues related to plant transformation and its application to agriculture and environmental practices.”

Dr. Zhang and his spouse (new biology faculty) Dr. Xiaoping Pan enjoy American television, chatting with friends and colleagues, cooking, hiking, playing table tennis and basketball. Baohong related that he will always enjoy his lifetime passion, farming and gardening. Interestingly, he told me that “growing up on a farm helped me make my decision to come to ECU”. He hopes to instill his agricultural ideas and ethics to our community, colleagues and students for purposes of improving the agricultural activities here in eastern North Carolina. He also wants to set up an exchange program between ECU and Chinese university students having similar interests. With his hard work and scholarly background of close to 200 scientific articles, books and book chapters in addition to his caring, friendly and open attitude about life in general, I have no doubt that he will do so. He is a valuable asset to our department, university and community.

Tim Christensen, also a molecular geneticist, told me he was born to “Mormon Hippies” and was raised and educated in Provo, Utah. His father was a school teacher and his mother, a psychotherapist, both parents inspiring Tim in his academic and nature pursuits. Tim graduated from the University of Utah in 1996 with a BS in Molecular Biology and Chemistry. I loved it when Tim told me he “had always been a biologist, I just didn’t know it”. He had an eclectic undergraduate education enjoying courses in art history, metallurgy and anthropology. He said he was unsure of his academic future until he “got influenced” by both a friend and mentor who enlightened him that graduate school was “the right ticket”. Tim was shocked, “You mean I can get paid to go to grad school?” Tim was accepted in graduate programs at Wisconsin, Harvard, MIT before choosing Cornell. He and his wife, Jennifer, high school sweethearts, had no problem choosing Cornell and “family friendly” Ithaca, NY.

At Cornell, Tim focused on studying the linkage between DNA replication and chromatin organization using fruit flies (*Drosophila*) as a model. He explained that “every single human cell has DNA in it” and “every one of those cells has to copy that DNA”. He studies the proteins that copy DNA and how they “package it so it makes sense... If the protein packages the DNA incorrectly, you get an incorrect expression of the gene which often equals cancer”. When I asked him, “Why *Drosophila*?” he cogently responded that almost every cancer related gene was first identified in *Drosophila*. I have no doubt about Tim’s ability to teach.

Tim enjoys life. He collects insects and fossils, “messes around” woodworking and carpentry, studies genealogy (he’s the 39th great grandson of Charlemagne), playing tennis and nature hiking with anyone who will go. I enjoyed hearing Tim’s comment that “the same reason we went to Cornell is the same reason we came to ECU-family is first!” Tim and Jen home school their children, 13 year-old Sam and 8 year-old Emma. Dr. Christensen’s resume offers “I share science with my family and engage in a multitude of scientific investigations with my children. I am a contributing parent in local 4H programs...education is one of my core values that I enthusiastically share with others”. Tim will be another valuable addition to our department, the university and community.

We are grateful to the search committees who were responsible for the appointments of these two first class colleagues.

Where Are They Now?

Dr. Charles E. Bland, professor and chair 1981-1991, retired in 2006. Chuck and Katherine McGinnis are living and thriving in Beaufort, NC, active involved in local history, gardening and travel.

Dr. Jason Brown (Ph.D. 2009, Summers Lab) is an National Science Foundation Fellow at Duke University.

Tim Charles, electron microscopy technician and spouse Margaret McGinnis have built a log home in Madison County, NC and spend their days supplying local markets and restaurants in Asheville with seasonal produce.

Hal Daniel, professor emeritus, is writing poetry at Otter Creek Farm and has returned to his culinary roots at Fourth St. Wine Bar in Uptown Greenville.

Debbie Daniel, former manager of the Central Environmental Lab, is now project manager for the Ecosystem Enhancement Program, NC Department of Environment and Natural Resources. She lives in Hendersonville, NC

Ulla Dittmar (nee Ulla Godwin), Hybridoma Lab manager, is an instructor in the Biotechnology Program at Pitt Community College.



Dr. Brent Hendrixson (Ph.D. 2006, Bond Lab) is now assistant professor biology at Milsaps College, Jackson, MS.

Professor emeritus Gerhard Kalmus has been drafted back out from his April 2007 retirement and is now teaching histology.

David Kunz (M.S. 2009, Brinson Lab) is now a consulting botanist with the Division of Land Use Regulation, New Jersey Department of Environmental Protection.

Kurt Labutti (M.S. 2008, Stellwag Lab) is a senior bioinformatics analyst with the Broad Institute in Boston.

Dr. Pierre Le Pabic (Ph.D. 2009, Stellwag Lab) has a postdoctoral position in developmental biology at the University of California-Irvine.

Dr. Pengda Liu (Ph.D. 2008, Stiller Lab) is a postdoctoral research associate at Duke University Medical Center

Dr. Thomas J. McConnell, professor, immunology, served as interim chair of Biology (2007-2009) and has been appointed as interim chair of ECU Mathematics.

Dr. Cindy Putnam-Evans, professor, biochemistry, was appointed to the position of Associate Dean for Research at the Thomas Harriot College of Arts and Sciences.

Dr. Paul Marek (Ph.D. 2009, Bond Lab) rediscovered the world's leggiest millipede, *Illacme plenipes* (at right), hidden in the forest of San Benito Co., CA, reported in

Nature with Dr. Jason Bond. Dr. Marek completed his dissertation on mimicry in the *Brachoria* millipedes. Bond and Marek also recently report Muellerian mimicry in seven species of millipedes in the mountains of Virginia, Kentucky and Tennessee in Proceedings of the National Academy of Sciences USA (at left). Dr. Marek is now a National Institutes of Health PERT postdoctoral research associate at the University of Arizona.

Jennifer Ness (M.S. 2008, Goodwillie Lab) now works for a biotechnology research company in Charleston, SC.

Dr. Ron Newton, professor and chair, plant physiology, stepped down as chair of Biology, served as acting Associate Dean of The Graduate School and now is Assistant Vice Chancellor for Administration and Finance.

Dr. Donald Stanley, professor emeritus, estuarine ecology and limnology, retired in 2007. Since that time, Dr. Stanley is happily building the "Stanley Mansion", a solo gig that he figures will be ten years in the making. He admits, however, that he does miss teaching

Jennifer Weber (M.S. 2007, Goodwillie Lab) is in the Doctoral Program in plant evolutionary biology at the University of California-Irvine.



Passages In Memoriam

Dr. Irvin E. Lawrence, Jr., 83, died May 29, 2009. Dr. Lawrence served his country in the US Army Air Corps during WW II was Professor Emeritus of the Department of Anatomy and Cell Biology at the East Carolina School of Medicine and. Dr. Lawrence is remembered for his kindness and patient approach to education.

Dr. Christine Wilton Helms, 102, passed away on Wednesday, September 23, 2009. Dr. Helms came to Greenville and joined the faculty of East Carolina Teachers College in 1940 after completion of her doctoral degree from the University of Wisconsin. She retired from East Carolina University as professor emerita in Biology in 1971. She and her late husband, Dr. R. Marshall Helms, traveled extensively, pursued wildlife photography and gardening.

Departmental Student Awards 2008-2009

Graduate Awards

Patia Connell (Edward P. Ryan \$500)
Jon Davenport (Gerhard W. Kalmus Award \$500)
James Edwards (Edward P. Ryan \$500)
Karly Hudson (James S. McDaniel \$1000)
Deborah Mauney (Martha N. Jones \$1000)
Michael Reubens (James S. McDaniel \$2000)
Lynn Swafford (Graduate Teaching Award \$500)
Justin Yeager (Gerhard W. Kalmus Award \$500)

Undergraduate Awards

Justin Bordeaux (University Book Exchange \$500)
Kathryn Ellis (Michael L. Bunting \$1000)
Diana Gliga (Mary Caughey Helms \$2000)
Jayme Hostetter (UBE \$500)
Amanda Pugh (Charles E. Bland \$1000)
(Gerhard W. Kalmus \$500)
Sean Russell (Detlev M. Bunger \$1000)

Thanks to Our Donors

Akvaplan-niva AS , Norway
Vance Calvin Alphin
Deborah Downes Ambert
Jennifer H. Augustine
Judson Scott Bailey
Boeing Company
Erma Jean Bowen
H. David Bradshaw
Neal Angelo Brickhouse
Mark M. Brinson
H. Marshall Brown
Michael L. Bunting
Brandon Douglas Burch
Jay Willard Chapin
Harvey B. Chinlund, Jr.
Robert R. Christian
Kenneth Ray Congleton
Penny Gail Copeland
David William Cotton
Renee Lee Crandol
Virginia M. Crews
Laddie Moore Crisp
Horace David Crosson
Peter Harwell Crumley
Ronnie Clifton Daughtry
Patrick Joseph Devlin
Frederic A. Drummond, Jr.
Ronald David Elks
Jesse L. Finney
Dana S. Fraser
Catherine Gardner
Leonard Howard Gibson
Robin A. Gibson-Brown
Glenn Thomas Godwin
Carol Goodwillie
Catherine Kurtz Gowen
Terry Alan Grant

Richard Deberry Green
Paul W. Hager
Donna D. Halstead
Pamela Jean Hares
Walter William Hodder
John Christopher Hoffman
Thomas Edward Holsten
Abbie Maria L. Howell
Alfred Oliver Inman
Christie W. James
Maria Pulido Jeffries
Susan Jennings
Johnson & Johnson
Johnnie Earl Jones
Rhonda Marcelle Keyes
Gary Dewey King
Barbara Lane-Harris Kremer
Jon Michael Lago
Scott Dale Lippard
Paulette LaFayee Lofton
Jennifer Michelle Lucas
Patrick Tate Maddox
Regina D. Martin
Susan Renee Maxon
Nicole Walter McGinn
Stephanie Ann McInerney
Jeffrey S. McKinnon
Matthew Joseph Meiners
Merck Company Foundation
Steven Raymond Mitchell
Melisa Mizelle
Harry B. Moore
Myron Edward Neville
Robert Winfield Newsom
Ronald James Newton
Helen Oluwatosin Onabanjo
Walton Prentiss O'Neal
Santford Vance Overton

Charles Roy Owens
Christopher Louis Ozimek
Mark Dell Pabst
Pasteur Mereux Connaught
Anthony Matthew Pavell
Allison Anne Peel
Thomas T. Powell
Connie R. Price
Progress Energy
Cindy Putnam-Evans
Virginia A. Read
Ione J. Ryan
Stuart Wayne Sealy
Willis Cleveland Sellars
Charles Leon Shepard
Tobin Hugh Shepherd
Carol Lynnette Shurlow
Sandra Humphrey Silence
Alvin Maurice Simmons
Robert Michael Skurla
Suzanne Robin Stearn
Eric Dean Steelman
Patricia Marie Tolley
Danny Paul Tripp
Robert Reece Twilley
University Book Exchange Inc.
Anthony L. Vaden
Heather Vance-Chalcraft
Thomas Martin Vicars
Donna Walters Vodopich
Carole Whitley Wagner
Bobby J. Ward
Sean Hunter White
Helen Lucinda Williams
Christopher Scott Williams
Jennifer Renee Winchester
M. Bennett Wynne

We Couldn't Do It Without You

Opportunities for contributions are available at the University Advancement Website
<http://www.ecu.edu/devt/>

or our secure online giving form

<https://onestop.ecu.edu/onlinegiving/>

Choose "College of Arts and Sciences" "0015000-Department of Biology"

For endowment of graduate research assistantships and sponsorship of biology classrooms,
kindly contact Dr. Jeff McKinnon at mckinnonj@ecu.edu or (252) 328-6204