

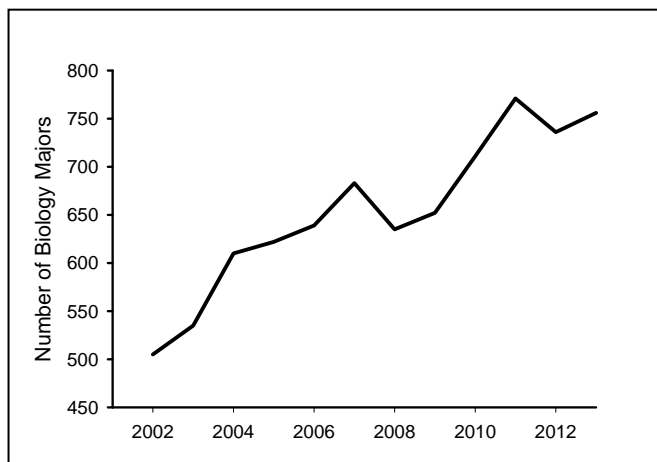
Welcome to **BIONEWS**



Welcome to the 2nd edition of Bionews, the annual newsletter of the biology department of University of Louisiana at Lafayette. This is our attempt to help alumni and friends of the department stay informed about the

activities of our faculty and students.

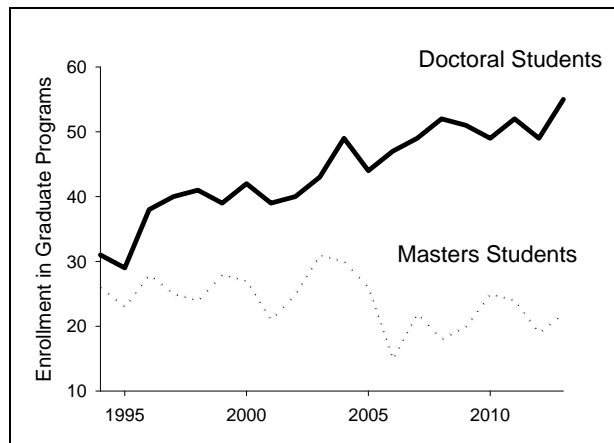
We thought you might be interested to know that the student body of the biology program has been growing rapidly. Since the



implementation of selective admissions at the University in 2002, enrollment in the undergraduate biology major has grown at rates well above national averages for biology programs. With 756 majors in fall 2013 (not including students in the pre-vet and med-tech transfer programs), biology is one of the largest majors at the University.

The department also has a Ph.D. program in Environmental and Evolutionary Biology (established in 1983), an M.S. program in Biology (with a recently-added non-thesis track). In fall 2013, we had 20 M.S. students in the program, which has had a relatively stable enrollment for several years. We are currently making changes in the M.S. program that should help it to grow by better

meeting the needs of students interested in professional school.



Enrollment in the Ph.D. program has grown fairly steadily throughout the program's history, reaching a high of 55 students in the fall of 2013. Our doctoral program is the only one at a public university in Louisiana focused on Environmental and Evolutionary biology, and is the second largest biology doctoral program in the state. We thank all the students, faculty, and alumni who have made the continued growth of our programs possible.

We hope you will find this newsletter informative. If you have any questions or comments on its contents, please direct them to me (Leberg@louisiana.edu). Thank you for your interest and support of biology at the University of Louisiana at Lafayette.

Sincerely,

Paul Leberg
Professor and Head

Faculty Spotlight:

Dr. Karen Müller Smith Assistant Professor Department of Biology

(This story was prepared by the UL Lafayette Office of Research and Sponsored Programs, and first appeared on their web site Text and photo by Abby Guillory and Megan Bergeron, respectively)



Karen Müller Smith, Ph.D., obtained her B.S. in Cytogenetics from the School of Allied Health at the University of Connecticut. She was especially interested in the use of chromosomal studies to diagnose cognitive disorders such as Down Syndrome and Fragile X Syndrome, and as a tool for gene discovery.

As a graduate student in the Genetics Program at Tufts University, Dr. Smith studied the genetics of Attention Deficit Hyperactivity Disorder (ADHD) in the laboratory of Dr. Bradford Navia. Her studies investigated the role of dopaminergic and noradrenergic system genes in ADHD, identifying an association between variants of the dopamine beta hydroxylase gene and ADHD. During this time, she developed an immense interest in the role of genes in the development of the central nervous system and in how developmental events can influence cognition and behavior.

Dr. Smith performed her postdoctoral studies in the laboratory of Dr. Flora Vaccarino at the Yale University Child Study Center. There, she gained experience in neurobiology, childhood psychiatric disorders, and working with transgenic mice as a model organisms to study mammalian brain development.

Her research has elucidated how a family of cell-signaling receptors, Fibroblast Growth Factor Receptors 1 and 2, participate in axonal guidance, neural stem cell proliferation, and the development of excitatory neurons and glia of the mammalian cerebral cortex and cerebellum. Dr. Smith has also performed behavioral characterizations of mice lacking *Fgfr1*. She found that *Fgfr1* mutants have locomotor hyperactivity that is correlated to a loss of cortical GABAergic interneurons in mice lacking *Fgfr1*. This project has evolved into the study of neural glial interactions and the role of *Fgfr1* in the cellular plasticity of the postnatal cortex.

Dr. Smith has previously been funded by an institutional NIH training grant in the Neurobiology of Childhood Psychiatric Disorders, as well as a Alexander Brown Coxe Postdoctoral Fellowship award. Currently, her work is funded by both a K01 Mentored Research Scientist award from the National Institute of Mental Health from the National Institutes of Health and by a NARSAD Young Investigator Award, from Brain & Behavior Research Foundation.

Editor's Note: Dr. Smith is also actively involved in teaching and undergraduate research. With her hire we have been able to offer coursework in neurobiology to our undergraduates and graduate students. She is currently developing an advanced course in neurodevelopment as well as a course to help explain the implications of biotechnology and genetics to non-majors.

Faculty Research

In 2013, Biology faculty reported authorship on over 60 scholarly articles, reports, and book chapters. Here is a small sample of this outstanding work. Names of faculty, students, former students, and staff are in bold.

Adeyemi, J., and **P.L. Klerks**. 2013. Occurrence of copper acclimation in the least killifish, *Heterandria formosa* and the associated biochemical and physiological mechanisms. *Aquatic Toxicology* 130-131:51-57

Allaire, K.M., and **G.M. Watson**. 2013. Rho participates in chemoreceptor-induced changes in morphology to hair bundle mechanoreceptors of the sea anemone, *Nematostella vectensis*. *Journal of Comparative Biochemistry and Physiology Part A* 165:139-148

Baas, P., **M.W. Hester**, and S.B. Joye. 2013. Benthic primary production and nitrogen cycling in *Spartina alterniflora* marshes: Effect of restoration after acute dieback. *Biogeochemistry*. DOI: 10.1007/s10533-013-9897-2

Bracken-Grissom, H.D., M. Cannon, P. Cabezas, R.M. Feldmann, C.E. Schweitzer, S.T. Ahyong, **D.L. Felder**, R. Lemaitre and K.A. Crandall. 2013. A comprehensive and integrative reconstruction of evolutionary history for Anomura (Crustacea: Decapoda). *BMC Evolutionary Biology* 13:1-28

Brugler, M.R., D.M. Opresko, and **S.C. France**. 2013. The evolutionary history of the order Antipatharia (Cnidaria: Anthozoa: Hexacorallia) as inferred from mitochondrial and nuclear DNA: Implications for black coral taxonomy and systematics. *Zoological Journal of the Linnean Society* 169:312-361

Duke-Sylvester, S.M., R. Biek, and L.A. Real. 2013. Molecular evolutionary signatures reveal the role of host ecological dynamics in viral disease emergence and spread. *Philosophical Transactions of the Royal Society B* 368:20120194

Hampton, P.M., and **B.R. Moon**. 2013. Gape Size, its Morphological Basis, and the Validity of Indirect Gape Indices in Western Diamond-backed Rattlesnakes (*Crotalus atrox*). *Journal of Morphology* 274:194-202

Hasenstein, K.H., **S.P. John**, **P. Scherp**, **D. Povinelli**, and **S. Mopper**. 2013. Analysis of magnetic gradients to study gravitropism. *American Journal of Botany* 100:249-255

Lai, Joelle C., **B.P. Thoma**, P.F. Clark, **D.L. Felder**, and P.K.L. Ng. 2013. Evolutionary relationships of eriphioid crabs (Crustacea, Brachyura, Eriphioidea) inferred from molecular genetics and larval morphology. *Zoologica Scripta* 1-32

Moore, J.A., and **C.A. Chlan**. 2013. Elucidation of nuclear and organellar genomes of *Gossypium hirsutum*: Furthering studies of species evolution and applications for crop improvement. *Biology* 2:1224-1241



Doctoral student, *Jocelyn Moore* studying cotton genetics

Oguma, A.Y., and **P.L. Klerks**. 2013. The role of native salinity regime on grass shrimp (*Palaemonetes pugio*) sensitivity to cadmium. *Ecotoxicology* 22:279-286

Olivier T.J., and **R.T. Bauer**. 2013. Impacts of river control structures on the juvenile migration of the amphidromous river shrimp *Macrobrachium ohione* (Smith): possible solutions for the restoration of upstream populations. *Freshwater Biology* 58:1603–1613.

Pante, E., E. Heestand-Saucier, and S.C. France. 2013. Molecular and morphological data support reclassification of the octocoral genus *Isidoides*. *Invertebrate Systematics* 27:365-378

Park M.R., Y.H. Wang, and K.H. Hasenstein. 2013. Profiling gene expression in germinating *Brassica* roots. *Plant Molecular Reporter* DOI 10.1007/s11105-013-0668-y

Peterson, T.S., J.A. Ferguson, V.G. Watral, **K.N. Mutoji, D.G. Ennis,** and M.L. Kent. 2013, *Paramecium caudatum* enhances transmission and infectivity of *Mycobacterium marinum* and *M. chelonae* in Zebrafish (*Danio rerio*). *Disease of Aquatic Organisms* 106:229-239

Proud, D.N., and B.E. Felgenhauer. 2013. Ultrastructure of the sexually dimorphic tarsal glands and tegumental glands in gonyleptoid harvestment (Opiliones, Laniatores). *Journal of Morphology* 274:1305-1215

Quinn, R.A., R.J. Cawthorn, R.L. Summerfield, R. Smolowitz, and **A.Y. Chistoserdov.** 2013. Bacterial communities associated with lesions of two forms of shell disease in the American lobster (*Homarus americanus*, Milne Edwards) from Atlantic Canada. *Canadian Journal of Microbiology* 59:380-390

Quinn, R.A., R. Smolowitz and **A.Y. Chistoserdov.** 2013. Culture independent analysis of bacterial communities in hemolymph of the American lobsters with epizootic shell disease. *Diseases of Aquatic Organisms* 103:141–148

Rodriguez Mora, M.J., M. Scranton, G. Taylor, and **A. Chistoserdov.** 2013. Bacterial community composition in a large marine anoxic basin: a Cariaco Basin time-series survey. *FEMS Microbiology Ecology* 84:625-639

Sauvage, T., P. Payri, S.G.A Draisma, W.F. Prud'homme van Reine, H. Verbruggen H., A. Sherwood, and **S. Fredericq.** 2013. Molecular diversity of the *Caulerpa racemosa-Caulerpa*

peltata complex (Caulerpaceae, Bryopsidales) in New Caledonia, with new Australasian records for *C. racemosa* var. *cylindracea*. *Phycologia* 52:6-13

Smolowitz, R., **R.A. Quinn,** R.J. Cawthorn, R.L. Summerfield, and **A.Y. Chistoserdov.** 2013. Pathology of two forms of shell disease of the American lobster *Homarus americanus* Milne Edwards in Atlantic Canada. *Journal of Fish Diseases* doi:10.1111/jfd.12136

Upadhyaya, H.D., **Y-H. Wang,** R. Sharma, and S. Sharma. 2013. Identification of genetic



markers linked to anthracnose resistance in sorghum using association analysis. *Theoretical Applied Genetics* 126:1649-1657

Undergraduate student, Jonathan Groomer recording data on sorghum growth as part of Dr. Wang's studies of the genetics of the plant.

Upadhyaya, H.D., **Y-H Wang,** C.L.L. Gowda, and S. Sharma 2013. Association mapping of maturity and plant height using SNP markers with the sorghum mini core collection. *Theoretical Applied Genetics* 126:2003-2015

Vogt, S.K., A.G. Billock, and **P.L. Klerks.** 2013. Acute copper toxicity and acclimation to copper using the behavioral endpoint of shoaling, in the least killifish (*Heterandria formosa*). *Water Air Soil Pollution* 224:1627-163

Walter, S.T., M.R. Carloss, T.J. Hess, **N.R.G. Athrey,** and **P.L. Leberg.** 2013. Brown pelican movement patterns and population structure. *Condor* 115:788-799

Wang, Y-H., A. Acharya, A.M. Burrel, R.R. Klein, P.E. Klein, and **K.H. Hasenstein.** 2013. Mapping and candidate genes associated with saccharification yield in sorghum. *Genome* 56:659-665

New Faculty Research Funding

In 2013, Biology faculty were principal or co-principal investigators on over two and half million dollars of new funding for research and student training. Some of the larger awards are presented below.

Caryl Chlan, Board of Regents Support Fund Enhancement Grant. High Throughput Rapid Analysis of Plant Tissues for Agricultural Applications. \$65,000

Niel Crews, Lee Sawyer, P. Derosa, and **Karl Hasenstein**, NASA (EPSCOR) Genetic Assessment of the Space Environment using MEMS Technologies. \$1,450,000

Lynn Harrison and **Don Ennis**, NASA Space Life and Physical Sciences Division, The Effect of Microgravity on Mycobacteria. \$104,000

Mark Hester and **Jonathan Willis**, Louisiana Coastal Protection and Restoration Authority. Comparison of Vegetation Communities within Barrier Island Restoration Projects of Varying Ages through the Development of a Vegetation Sampling Protocol for the Barrier Island Comprehensive Monitoring (BICM) Program. \$288,600

Paul Klerks and **Paul Leberg**, Louisiana Board of Regents. Recruitment of superior graduate students in environmental and evolutionary biology for 2013. \$224,000

Susan Mopper, Coypu Foundation, Research and Propagation of Native Plants for Conservation, Pollinator Preservation, and Sustainable Agriculture. \$51,899 (for more information on this project, please see La Louisiane, p. 3, Fall 2013)

Jenneke Visser, **Scott M. Duke-Sylvester**, Whitney Broussard, and **Mark Hester**, The Water Institute of the Gulf/Louisiana CPRA. 2017 Coastal Master Plan Model Development and Application. \$122,854

Jenneke Visser and **Scott Duke Sylvester**, The Water Institute of the Gulf. 2017 Master Plan Model Development and Application. Louisiana Coastal Protection and Restoration Authority. \$279,478

Yi-Hong Wang, USDA National Institute of Food and Agriculture. Building capacity for research, outreach and teaching in food, agriculture and natural resources at the University of Louisiana at Lafayette. \$116,226

Your Gifts Make A Difference!

Donations to the Biology Department's University of Louisiana at Lafayette Foundation fund allow us to make investments in new research directions and student education programs that are difficult to fund through our modest operating budget.

Gifts can be made online by visiting:
<http://ullafayette.kintera.org/sciences>

At the bottom of the page, enter "BIOLOGY DEPARTMENT" in the "GIFT DETAILS" box.

Contributions to our foundation fund can also be made by spending a check, made out to **Biology Department Fund ULL Foundation** to the foundation. Their address is:

UL Lafayette Foundation
P.O. Box 44290
Lafayette, LA 70504-4290

Thank you for any gift you provide supporting the department's activities.

DEPARTMENT ROUNDUP:

NEWS AND NUGGETS FROM INSIDE THE BIOLOGY DEPARTMENT

Dr. Ray Bauer, an emeritus faculty member



in the department won The Crustacean Society's Excellence in Research Award for 2012. This award was formally presented at the society's 2013 annual meeting in Costa Rica. Congratulations Ray!

Board of Regent Professorships awarded to five faculty in recognition of their outstanding contributions

This year, faculty awarded these three-year professorships included:

Mark Hester—Fritz Lang/BORSF Professorship in Environmental

James Albert—Lafayette Parish Medical Society Endowed Professorship in Pre-Medicine

Caryl Chlan—Ramon E. Billeaud/BORSF Memorial Professorship in Plant Science

Alan DeRamus—South Louisiana Mid-Winter Fair Association Professorship

Brad Moon—South Louisiana Mid-Winter Fair Association Professorship

Glen Watson received the Dr. Leon Lahaye Endowed Faculty Development award.

Scott France received the Ray Authement College of Sciences 2013 Outstanding Professor Award

Pegge Alciatore, Penny Antley, Bruce Felgenhauer, Patricia Mire-Watson, Kyle Patton, and Sherry Kravesky all won awards from the University as Outstanding Advisors.



Dr. Terry Clement Retires

A long time member of the Department of Renewable Resources, Dr. Clement joined the Biology faculty in 2012. With over 36 years of outstanding service to the University as an educator,

researcher, and department head, Dr. Clement's retirement is well deserved.

Dr. Scott France and his lab were honored as part of a team receiving a *Partners in Conservation Award* from the US Secretary of the Interior for their work on deep-sea communities in a major study of mid-Atlantic canyons. More information on the study can be found at <http://oceanexplorer.noaa.gov/explorations/13midatlantic/welcome.html>.



Esprit Heestand-Saucier is a Biology doctoral student working with **Dr. France** on the mid-Atlantic canyons study. Esprit (front right) and other team members work with a remotely operated vehicle (ROV) to survey a World War I era shipwreck. *Image courtesy of Deepwater Canyons 2013 - Pathways to the Abyss, NOAA-OER/BOEM/USGS.* Esprit's research is featured at

<http://oceanexplorer.noaa.gov/explorations/12midatlantic/logs/sept30/sept30.html>.

76 Undergraduates Earn Biology Degrees in 2013

Alexander, Dwan Marie
Andrus, Sarah Michelle
Angelle, Cydni Alex
Arabie, Philecia
Ardoin, Taylor
Bahlinger, Meagan Diane
Barrilleaux, Cameron
Boudreaux, Hannah Elizabeth
Boutte, Blaine Phillip
Brown, Kristin Ella
Cederholm, Richard Philip
Chargois, Christine Ann
Clark, Christopher James
Comeaux, Precious Erlene
Cormier, Christopher Joseph
Curtis, Courtney Anne
Daigle, Olivia Anne
Dekerlegand, Alaina Ann
Delahoussaye, Brittany
Duplichen, Jr., Chris
Dupuis, Lauren
Fisher, Stacy
Fusilier, Everette James
Galasso, Collins
Guidry, Cadence
Hebert, Lindsey
Huval, Forest Brady
Johnson, Eden
Joshi, Rita
Juneau, Wesley Malcolm
Keyser, Blaire
Kim, Michael
Kline, Ariel Rae
Knott, Hannah
Labbe, Logan Kane
Lamott, Ebony
Landry, Jessica N.
Lavine, Tija J

Le, Hau T.
LeBlanc, Tessi Marie
LeDoux, Kirstie Caitlyn
Malespin, Marc
McCombie, Ryan Carter
Medine, Amber
Michel, Corey Lee
Nguyen, David
Nguyen, Ngoc Tuyet
Obaid, Yasser Kassim
Oyana, Santiago Masugu
Paille, Aaron
Pierre, Maritza
Poche, Renee Ashley
Powers, Danielle
Prather, Caroline Kristine
Quebodeaux, Quinn Allen
Richard, Rachelle Renee
Richardson, Nigel Thomas
Ritter, Logan Post
Robin, Dillon Howard
Royer, Amanda
Sajjadi, Auzita
Sellers, Jacob Demary
Senga, Didier
Stevens, Karli
Stratton, John Mark
Taylor, Kirtrell
Thibodaux, Hunter Patrick
Tinsler, Sarah D
Trahan, Jeffrey John
Villien, Jacques Maurice
Wartelle, John Andrew
Weinberg, Adam Dean
Welch, Gabrielle Ann Niciole
Wiltz, Patrice Isabella
Yount, Aimee Katherine
Zeik, Alison

Congratulations and best wishes to all of our 2013 graduates!

BIOLOGY SENIOR IS THE FIRST UL STUDENT TO STUDY ABROAD WITH THE SCHOOL FOR FIELD STUDIES



Last fall, Chelsea Begnaud studied in the Turks and Caicos Islands for three months through the School for Field Studies study abroad program. She is the first student from the University to take part in the program.

As part of her studies, she observed the lifestyles of island inhabitants, including fisherman, sustainable developers, storeowners, farmers, conservation officers, and teachers. As a student in the SFS Marine Resources Program, she took courses Tropical Marine Ecology, Principles of Resource Management, Environmental Policy and Socioeconomic Values, and Directed Research. During the program, she had opportunities to apply her training including conducting a seafood survey,

an Environmental Impact Assessment on potential development, and assessments of conch populations and coral bleaching. For her directed research, she studied the ecology of lemon sharks. Chelsea spent over 100 hours capturing, tagging, and releasing juvenile sharks, and assisted with sea turtle tagging. After returning to UL, Chelsea served as a campus representative for SFS, encouraging other students to pursue opportunities with the program.

Undergraduate Organization News

THE BIOLOGY SOCIETY

Faculty Advisor: Kyle Patton

This year, the Biology Society held Easter and Halloween bake sale fundraisers. Their annual social was held at Planet Ice, a local ice skating rink. Society members took part in a night hike led by senior Microbiology major and Acadiana Nature Station



naturalist Stephen Saltamachia in the new Acadiana Park hiking trails. Departmental speakers included Dr. Brent Thoma, Dr. Karen Smith, and Garrie Landry. Outside speaker Ron Boustany, a biologist for the USDA's Natural Resources Conservation Service, presented research on coastal restoration in Louisiana.

PRE-PROFESSIONAL SOCIETY

Faculty Advisor: Dr. Bruce Felgenhauer

This year we had a wide variety of health care professionals speak at the society meetings including: Dr. Mark Mitchell DO (Head of Shumacher Group's ER Dept.), Michelle Miller (Physical Therapist with the Muscular Distrophy Association), Hospice of Acadiana, Kathy Bobbs (CEO of Women's and Childrens Lafayette Regional Medical Center) , Dr. F. Scott Kennedy (Dean of Admissions – LSU Shreveport Medical School), Dr. Boudreaux (Physicians Assistant), Dr. Sam McClugage (Dean of Admissions, LSU Medical School, New Orleans), Dr. Jim Weir (Dean of Admissions, William Carey Medical School (Osteopathic Medicine) – Hattiesburg, MS, and Dr. Cherie (Dean of Dental School Admissions, New Orleans).

The PPS was also quite active in community service. Members raised over \$6,000 for the American Heart Association and over \$2500 for St. Jude Cancer Hospital in Memphis. Many other service activities were performed by our members including monthly Clean-Up days in Girard Park, Pre-View Day and "Up til Dawn" fund raiser for St. Jude and many weekends working as volunteers for Habitat for Humanity. Enrollment in the Society is at its highest level and continues to grow each year.



The PPS raised over \$6000 in their popoy sale for the American Heart Association

Graduate Student Awards and Accomplishments

Continuing biology graduate students published 28 peer-reviewed papers, presented 12 off-campus seminars, and gave 64 conference presentations in 2013. Below are some examples of awards and grants made to graduate students in the program.

Camacho, Olga. Grants-in-Aid of Research, \$1500 and Hoshaw Travel Award, Phycological Society of America. \$540.

Edge, Andrea. Graduate Student Research Assistance (GSRA) from the Louisiana Space Consortium. \$5000.

Fontenot, Chris. Ted Beaulieu Sr. Louisiana Scholarship, Coastal Conservation Association. \$5000.

Oguma, Andrew. Society of Environmental Toxicology and Chemistry (SETAC). \$556.

Sauvage, Thomas. Grants-in-Aid of Research, \$1,140 and Hoshaw Travel Award, Phycological Soc. of America. \$420.

Sauvage, Thomas. Link Foundation/ Smithsonian Institution. \$6,500

Sauvage, Thomas. H. Dickson Hoese and Richard Moore Award for Best Graduate Student Publication for 2013.

GRADUATE STUDENT RESEARCH

(From modified from *La Louisiane*, Fall 2013)



Next summer, **Anita Pant** will spend every day in the fields of the Ecology Center, keeping track of birds and insects as they come and go, visiting the blooms of native plants. Pant, who is

from Nepal, is pursuing a doctorate in environmental and evolutionary biology at UL Lafayette in the lab of **Dr. Susan Mopper**. Her detailed research may reveal which plants are most attractive to pollinators. There are hundreds of bee and butterfly species associated with flowering plants and pollination. Moths, flies, beetles and bugs, as well as hummingbirds and some bats, are known to pollinate flowers. Pant will monitor the visitation rates, abundance and diversity of the pollinators associated with her study plants. The main goal of her research is to identify the optimal mixtures of plant species that will attract the highest number of—and most diverse—pollinators.

Some of the native plants she will maintain are rattlesnake master, blue mountain mint and rosinweed. The Ecology Center recently received a \$51,899 grant from the Coypu Foundation to support Pant's work. It will help pay for a stipend, tuition, and research supplies for her, as well as supplies and equipment for the Ecology Center to research and develop its PureNative™ brand of seeds and plants. The Coypu Foundation, created by the estate of the late John S. McIlhenney, supports environmental and ecological projects.

10 Graduate Degrees Conferred

Master of Science in Biology,
Non-Thesis

Butler, Megan; Advisor: **Dr. Caryl Chlan**

Davis, Danielle; Advisor: **Dr. Bruce Felgenhauer**

Smoak, Patrick; Advisor: **Dr. Paul Klerks**

Master of Science in Biology,
Thesis

Kumar, Manoj; *Thesis*: Comparison of Actin Expression Along the Length of Root in Angiosperms and Gymnosperms; Advisor: **Dr. Thomas Pesacreta**

Doctor of Philosophy in
Environmental and Evolutionary
Biology

Carvalho, Tiago; *Dissertation*: Systematics and Evolution of the Toothless Knifefishes, Rhamphichthyoidea (Gymnotiformes): Diversification in South American Freshwaters; Advisor: **Dr. James Albert**

Cifuentes (Granados), Camila; *Dissertation*: Evolution and Ecology of the Microalgal Symbiont of Reef Corals: *Symbiodinium* spp.; Advisor: **Dr. Joseph Neigel**

Maxime, Emmanuel; *Dissertation*: Morphology and the Documentation of Biodiversity in Mega-diverse Tropical

Aquatic Ecosystems: *Gymnotus* (Teleostei: Gymnotiformes); Advisor: **Dr. James Albert**

Olivier, Tyler; *Dissertation*: Amphidromous Life History of the Caridean Shrimp *Macrobrachium ohione* (Decapoda:Palaemonidae) from the Mississippi River System; Advisor: **Dr. Raymond Bauer**

Thoma, Jana; *Dissertation*: Molecular and Morphological Diversity of Deep-Sea Octocorals; Advisor: **Dr. Scott France**

Yednock, Bree; *Dissertation*: An Investigation of Population Genetic Structure and Natural Selection in the Blue Crab, *Callinectes sapidus*, Using Nuclear Gene Sequences; Advisor: **Dr. Joseph Neigel**

The Graduate Student Symposium 2013

The 14th Annual Biology Graduate Student Symposium was held on Friday, October 4, 2013. The Keynote Speaker was Dr. Les Watling from the University of Hawai'i at Mānoa. His keynote address was entitled "Deep-Sea Fisheries: What's the Problem?"

There were nine student talks. **Taylor Sloey (Hester Lab)** won the "Ecology Center Award for Best Presentation," (\$250) for her talk "Limitations of hydrologic regime on *Schoenoplectus* spp. survival and establishment: Implications for marsh restoration."



Taylor, with the help of an assistant, freezing plant tissues

Susan John (Hasenstein Lab) won the "Singh Award for Best Presentation" for her present "Desiccation Tolerance of the Resurrection fern *Polypodium polypodioides*." Associated with the award was a year membership to Society for Conservation Biologists

(valued at \$90). This award was presented in honor of the late **Navasha Singh**, a former doctoral student in biology.

A reception following the symposium was held at the Ira Nelson Horticulture Center. Funds were provided by the Student Government Association Lyceum Fund, Graduate School Organization, Ira Nelson Horticulture Center, and Ecology Center. Twenty-six local businesses donated raffle items. Thanks to **Esprit Heestand-Saucier, Ivan Moberly, Jessica Schulz, and Mirka Zapletal** for all their hard work planning the event, and Drs. **Susan Mopper, Yi-Hong Wang**, and Les Watling for serving as judges.

Alumni Updates

We love to hear from our graduates. If you have information you would like to share involving your professional or personal life, please send it Sondra Meyers (sdm7944@louisiana.edu). Please be sure to include information on your year of graduation and degree; participation by alumni of both our undergraduate and graduate programs is encouraged.