Grad students in the PhD program thrive when they’re doing what they love...

1 Brock Geary takes a break from tagging brown pelicans to commune with a fledgling  
2 Susan Chiasson catches some juvenile blue crabs (Callinectes sapidus), one of which brought its own lunch  
3 Lydia Crawford mimics the Smoothback puffer (Lagocephalus inermis) she caught aboard the NOAA Research Vessel Oregon II  
4 Peter Tellez gives a tour of the bald cypress saplings in the Van Bael growth chamber  
5 EEB grad students study the anatomy of the red swamp crawfish (Procambarus clarkii)

More joyful research photos on page 2!
GRADUATE

GEORGE HENRY PENN AWARD  JESSICA HENKEL  PhD with Dr. Taylor’s lab - Dissertation entitled “Migration ecology of shorebirds on the northern Gulf of Mexico and effects of the Deepwater Horizon oil spill.”

GERALD E. GUNNING MEMORIAL AWARD  JENNY HAZLEHURST  PhD with Dr. Karubian’s lab - Dissertation entitled “Pollination Ecology and Multitrophic Impacts of Nectar Robbing in an Andean Plant-Pollinator Mutualism.”

TEACHING ASSISTANT AWARD
LOWER-LEVEL CLASSES  MAGGIE MACPHERSON  Excellence as Teaching Assistant for Diversity of Life.

TEACHING ASSISTANT AWARD
UPPER-LEVEL CLASSES  JENNIFER SUMMERS  Excellence in Teaching Assistant for Processes of Evolution.

UNDERGRADUATE

THE FRED R. CABLE MEMORIAL PRIZE  MYSIA DYE  Mydia was an undergraduate fellow, she held the highest GPA in the major and completed an exemplary honors thesis based on data collected in Panama.

THE NEWCOMB ZOOLOGY PRIZE  EMILY NORRIS  Emily designed and implemented an independent research project on gut microbial diversity in birds, which is at the new interface of research on animal behavior and microbial ecology.

UNDERGRADUATE (CONTINUED)

THE GERALD E. GUNNING MEMORIAL AWARD FOR TWO RECIPIENTS

SARA HAYS  With one of the top GPAs in her class, Sara demonstrated excellence in completing her honors thesis entitled “Population genetics of the diphyllobothriidean macroparasite Schistocephalus solidus infecting threespine stickleback.”

HANNA WILSON  Hannah was an undergraduate fellow with one of the highest GPAs in her major who conducted exceptional botanical and behavior research at Tulane and abroad.

THE SENIOR SCHOLAR AWARD FOR ECOLOGY & EVOLUTIONARY BIOLOGY

MYSLA DYE  Mydia held the highest GPA and wrote an honors thesis entitled “Variation in advertisement calls among color morphs of a polymorphic poison frog.”

THE SENIOR SCHOLAR AWARD FOR ENVIRONMENTAL BIOLOGY

ALEXANDRA GULACHENSKI  Alexandra held a high GPA and wrote an honors thesis entitled “Abandonment, Ecological Assembly and Public Health Risks in Counter-Urbanizing Cities.”

THE SENIOR SCHOLAR AWARD FOR ENVIRONMENTAL SCIENCE

MARGARET HARLAN  Margaret held a high GPA and wrote an honors thesis entitled “Defining Metrics of Channel Mobility and their Link to the Architecture of Channelized Stratigraphy: A Laboratory Study.”

Recipe for delight

In order to understand if urban din causes white-crowned sparrows to change their birdsongs, PhD student Jenny Phillips catches them at picturesque Golden Gate National Park.

PhD student Stephen Formel (left) collects cordgrass seeds, while Postdoc Brittany Bernik (above) preps soil in the EEB greenhouse - all part of Dr. Van Bael’s Gulf of Mexico Research Initiative (GOMRI) project.

PhD student Erik Enbody takes a break from his research in Papua New Guinea to study up on hornbill identification with the help of an expert.

Below: Dr. Ray Schmidt (PhD ’14), center, seine the Mukurumudzi River to catch Barbus cf paludinosus. Right: Dr. Hank Bart’s Kenya team (L to R) David Ouma & Gilbert Kosgei of the Nat’I Museums of Kenya, EEB major Wes Bollinger, Dr. Schmidt, Dr. Bart and driver Sylvester Karini.

Karubian’s Australia Team takes a photo break. They are (L to R) EEB major Darcy Gray, PhD students Sam Lantz & John Jones, and EEB major Trey Hendrix.

PhD student Michael Cyrana monitors his trawl line off the back of NOAA’s RV Oregon II. The fishes he catches will provide data for his research on deep sea fish taxonomy.

PHOTO BY LEANNE NORDEN
PHOTOS COURTESY OF DR. BART
PHOTO COURTESY OF SAMANTHA LANTZ
PHOTO BY LYDIA CRAWFORD
PHOTO BY MARTHA ALLEN
PHOTO BY ERIK ENBODY
PHOTO BY DR. VAN BAEL

2016 DEPARTMENT AWARDS
Dr. Steven P. Darwin retires after nearly 40 years at Tulane

It’s safe to say that in his 39 year career in the Ecology & Evolutionary Biology Department at Tulane, Dr. Steven P. Darwin has gotten a lot of comments about his famous name.

“I twice taught ‘Processes of Evolution,’” Dr. Darwin recalled recently, “which prompted more than one student to brag that they were getting the evolution story from Mr. Darwin himself.”

When Dr. Steven P. Darwin retired in the spring of 2016, however, he left a legacy that is far greater than just sharing a name with the father of evolution.

In 1977, Dr. Darwin was finishing a post-doctoral fellowship at Harvard University when he learned about a faculty position in Tulane’s Biology Department. When visiting that spring, he found a campus lush with bananas, ginger, aroides and other flamboyant tropics all of which were downright exotic to the native New Englander.

“I found New Orleans to be a beautiful city,” Dr. Darwin said. But that’s not why he took the job. “The main attractions were Tulane’s excellent research facilities and collections, in particular the University’s herbarium collections.”

Dr. Darwin accepted the position and soon after became director of the Tulane Herbarium. He oversaw a collection of more than one hundred thousand dried plant specimens, which were used for teaching purposes as well as plant identification for research projects. During his tenure several taxonomic discoveries were made using the resources of the herbarium.

The Tulane grounds crew, which takes great pride in maintaining the university’s beautiful landscape, and Dr. Darwin developed a friendship over the years due to their shared interest. “I served as an unofficial campus botanist, supplying the Superintendent of Grounds with species lists and advice on how best to increase campus plant diversity to support research and teaching.”

Over the course of his 39 years Dr. Darwin’s classes ran the gamut: from introductory biology courses of more than 200 freshmen to graduate-level seminars and labs to special-topic colloquia. One of his most popular courses was Plants and Human Affairs. The lecture portion of the class discussed the relationship that humanity has with plants, throughout history and today. The lab reinforced the lecture by having students roast coffee beans, make wine, dissect strawberries and more.

Upon his retirement, friends and colleagues from around Tulane thanked him by planting a tree planted on the grounds of Tulane’s campus in honor of Dr. Darwin’s career. They selected an overcup oak, which will be the first of its kind on the Uptown campus.

The Darwin Overcup Oak will be planted in the winter of 2016 to honor the legacy of Steven P. Darwin, who incidentally has no relation to the famous evolutionary theorist.

Student-favorite Dr. Bruce Fleury hangs up his red Converse

Senior Professor of the Practice Emeritus Bruce Fleury has long been a favorite among students, as evidenced by the fact that his classes filled up nearly as soon as registration opened. Sometimes that didn’t stop them from attending anyway.

“One time I got an evaluation back – guy wrote that he heard about how ‘awesome’ my class was in a bar in the French Quarter. He’d been sitting in all year long and wasn’t even enrolled at Tulane!”

Sitting in his cozy Stern office with a “Please Disturb” sign on the door, it’s immediately apparent why Dr. Fleury’s students love him. Dressed in his trademark red Chuck Taylors and the biology-themed t-shirt du jour, he effortlessly spins hilarious yarns about his unconventional career path in a soft-spoken, dry-witted and down-to-earth manner.

As an undergraduate at University of Rochester, Dr. Fleury had already declared his psychology major by the time he fell in love with Biology. It was an intro-level class taken only as a pre-requisite for his major that hooked him. Too late to switch majors, he spent his last few semesters taking as many biology classes as he could just for fun.

After graduation, he briefly tried his hand at a biology masters, but was quickly burned out. “It was the early 70’s, what can I say?” Not knowing what to do next, he got a job at the library: “mostly so I could get paid to read.” But he really took to the job and within a few years he was Head of Engineering Library at University of Rochester. In 1979 he got his Masters in Library, Media & Information Studies at University of South Florida, where he met his wife, Mary Ellen. Looking for a place to settle down, they visited New Orleans. “After that visit, I was ready to move [to New Orleans] with or without a job.” It didn’t take much to convince his wife, who knew the town well, having gotten her undergraduate degree from Newcomb.

Dr. Fleury was hired on as Head of Science & Engineering Division at Tulane’s Howard-Tilton Memorial Library in 1983. His love of biology was rekindled as he assisted faculty members of the then Biology Department with their research. At the urging of new friends like Dr. Steve Darwin, Dr. Royal Suttkus and Dr. Arthur Welden, he enrolled in his master’s program. “Took me five years to get my second masters – they call that ‘gradual school.’”

Dr. Fleury decided to focus on biology full time joining the lab of Dr. Tom Sherry studying marsh birds in the swamps outside of Lafayette. He earned his PhD in 1996 at the age of 40.

As a TA, he volunteered to teach tons of labs, which after getting his doctorate led to a job as Visiting Instructor teaching intro-level biology. “I took the labs that no one else wanted. I made myself invaluable to the department.” It was Department Chair Dr. David Heins that made him a full time staff member when he created the Lab Instructor position. He joined the faculty as Professor of the Practice some years later and by the time he retired he had achieved Senior Professor of the Practice.

His classes ran the gamut: from the intro-level Diversity of Life to the advanced course Ornithology, to his personal favorite History of Life, a course he created. In each class he engaged students with his passion for science, his relentless charm – and a heavy dose of humor and rock-and-roll music. “Students learn best when you don’t talk down to them – when you show them you’re on their side.”

At his retirement celebration in April, he and his colleagues did the math: he taught an estimated 11,000 students. That’s quite a fan club.
Louisiana Ornithological Society Honors Two EEB Faculty Members

John James Audubon once wrote “The state of Louisiana has always been my favorite portion of the Union...” A sentiment made evident by the amount of time he spent in the woods and bayous of the Pelican State as he worked on his magnum opus, The Bird of America. Audubon’s intricate images inspired generations of birders and ornithologists for generations in Louisiana and across the United States.

Nearly 200 years since John James Audubon first set foot in Louisiana, the Louisiana Ornithological Society carries on the tradition of promoting interest in and appreciation of the birds of Louisiana. Each year they honor ornithologists around the state who contribute significantly to Louisiana birding and enhance or conserve Louisiana wildlife habitat. EEB congratulates Professor of the Practice Donata Henry for winning the President’s Award and Professor Thomas Sherry for winning the LOS’ top prize, the George H. Lowery Award.

Dr. Thomas Sherry

The George H. Lowery Award honors individuals who have had a major positive influence on ornithology in Louisiana. Dr. Thomas Sherry was selected to receive the premier LOS award for his work studying the populations, ecology and conservation of Neotropical-Nearctic migrating birds. Dr. Sherry has been involved in research related to the habitats of Louisiana migrants and nesters such as Swainson’s Warbler and the American Swallow-tailed Kite, the impact of coastal pollution and heavy metal contamination on Louisiana’s colonial nesting wading birds and the prey selection of tropical migrants such as the American Redstart. And as a professor at Tulane, Dr. Sherry has directed the research of several graduate students who continue their work on Louisiana birds and habitats.

Pictured here, Dr. Sherry receives the George H. Lowery Award from LOS President Marty Floyd and Carol Lynn Lowery Loker at the group’s Spring Meeting.

Dr. Donata Henry

The LOS President’s Award is presented to those who take special measures to conserve wildlife in Louisiana and to promote birding. Dr. Henry established the Monitoring Avian Productivity and Survival (MAPS) station in the Pearl River WMA, which engages local residents and students in bird banding to study populations and conservation. She not only has conducted research related to the impact of intense forest management and storm disturbances on Swainson’s Warbler and other breeding birds, but she also encourages interest in, and conservation of, birds through her hands-on classes at Tulane. Unfortunately, Dr. Henry was unable to attend the ceremony. But she had good reason: she had already scheduled a birding field trip that day for her Natural History of Louisiana class.

Pictured here, Dr. Henry holds a Pileated Woodpecker at her Honey Island Swamp banding station.

Long-time EEB Staff Members Retire

Davi Battistella

Jeanette “Davi” Battistella joined Tulane in 1983 working in the main accounting office. In 1992 she took the job of Office Manager in EEB and ever since has proven to be essential to the department’s day to day operation. From bookkeeping to class scheduling, Davi did it all. When a question came up, Davi had the answer - if not, she knew exactly who to call. She’s tenacious, deeply loyal to the department and a perfectionist. She was the first one to arrive to the office every morning and was often also the last to leave. She claimed it was to avoid the traffic on her long commute to her home in Bush, La., but people who know her well understand that she simply hated to leave a project half-finished.

Davi won’t be bored after Tulane. She’ll be busy taking care of all her cats, dogs, pigs, chickens and goats at her home in Bush, La.

For 40 years, Anne Bradburn, M.S., worked assiduously to build up Tulane's herbarium collections and make them available to all students, faculty, and botanists worldwide. She is an expert on Gulf Coast plants, as well as the flora of the Yucatan Peninsula of Mexico, where she and Professor Emerita Victoria Bricker documented that region’s ethnobotany and indigenous plant names. In the United States, Anne and her husband, the late Donald Bradburn, M.D., helped lead efforts to establish the Gulf Islands National Seashore in 1971.

Anne will be remembered by the EEB faculty and staff, as well as the dozens of undergraduate students who worked under her supervision as herbarium technicians and who came to consider her a friend, mentor, and guide.

Dr. Heins Inducted into the Linnean Society of London

Professor and Department Chair David Heins was inducted as a fellow of the prestigious Linnean Society of London at a ceremony held at Harvard University in May of 2016. This is the first time such an event has ever been held outside of the United Kingdom.

Founded in 1788, the society was named for the “father of taxonomy” Carolus Linnaeus. It has inducted some of the most prominent biologists over the years, including Charles Darwin. In 1858, papers by Darwin and his contemporary Alfred Wallace were presented at the Linnean Society outlining the theory of Natural Selection for one of the first times in public. To this day the Linnean Society’s membership is made up of scientists from around the world who are champions in the field of natural history.

Dr. Heins was selected for his decades of work studying the fishes of North America, including the life histories of darters and minnows in the Northern Gulf Coastal Plain and of pupfishes in the Southwestern United States.

He has also worked extensively in the lakes of South-Central Alaska studying the threespine stickleback, Gasterosteus aculeatus. In addition to studying the life-history evolution of the stickleback, Dr. Heins has also conducted research regarding the host-parasite relationship between the fishes and the cestode parasite Schistocephalus solidus.

Congratulations to Dr. Heins for being selected as a fellow of the Linnean Society of London for his years of work in the field of natural history!
From the Alpine to the Bayou, Dr. Emily Farrer joins EEB faculty

Dr. Emily Farrer is a plant person—a plant person who has never lived below the Mason-Dixon Line. After she accepted the job of Assistant Professor in EEB and moved into her new house in New Orleans this summer, one of the first things she and her partner in crime, Nico, did was to plant a tropical garden.

“So far,” she explained eagerly, “we’ve planted citrus trees, a banana tree, papayas and a bunch of herbs and vegetables.” Pretty different than the gardens in Michigan, where she grew up and went to university for both her BS and PhD.

Living in Southeastern Louisiana’s subtropical climate not only provides new garden options for Dr. Farrer, but it also provides the opportunity to begin new research centered on Gulf Coast wetlands.

Her research, generally speaking, aims to understand how global change affects ecological systems. And unfortunately that global change has an effect on nearly all types of ecosystems—including quite notably the

Dr. Renata Durães Ribeiro Teaches through Student Engagement

Dr. Renata Durães Ribeiro has been teaching EEB courses at Tulane since 2011 as an Adjunct and Postdoc. This fall she made it official by accepting a job as Professor of the Practice. Teaching isn’t just a job for Dr. Durães Ribeiro, it’s a way of life. It informs her approach to instruction in the classroom and even how she conducts research in the field.

Dr. Durães Ribeiro was born and raised in Belo Horizonte, State of Minas Gerais, Brazil in the intersection between the Atlantic rainforest and the savanna-like Cerrado. Growing up close to so much biodiversity definitely inspired her career choices. “It’s easier to study things in your backyard,” she explained.

As an undergrad and then master’s student at Universidade Federal de Minas Gerais, she got exposure to the field studying the ecology and behavior of forest birds. She entered a PhD program at University of Missouri-St. Louis, where she worked in the Ecuadorian Amazon to study lekking manakin sexual selection.

After receiving her PhD, Dr. Durães Ribeiro’s love for teaching began to leech into her research. A project in Ecuador incorporated educating the local community about effects of habitat changes on forest birds and plants and empowering them to participate in research. In her new back yard of New Orleans, she worked to understand the effects of lead-contaminated soil on mockingbirds’ ability to learn songs and on how aggressive they are. A team of citizen scientists and Tulane undergraduates helped in the data collection and in spreading the word that lead contamination could have broad ecological implications.

Dr. Durães Ribeiro contends that, in addition to raising awareness and stimulating conservation efforts, educating a local community about a research project is beneficial to the researcher’s understanding of the subject matter. “The best way to learn more about something is by teaching it.”

This philosophy is one she employs heavily in the classroom—not as much for her own benefit necessarily (but it doesn’t hurt), but rather as a tool to support her students’ learning.

“I try to create an atmosphere where students have the opportunity and motivation to teach themselves and their peers. They not only solidify their grasp of the material, but also have the chance to identify gaps in their understanding.”

She’s getting ample opportunities to do so. In her first semester as Professor of the Practice Dr. Durães Ribeiro is teaching two sections of the intro-level Diversity of Life, as well as Vertebrate Biology. And moving forward she’ll also teach Tropical Biology and Biostatistics.

Dr. Henry Receives Community Engagement Professorship

Dr. Donata Henry was named the Levy Professor for Integrated Discovery and Community Engagement by Tulane’s School of Science and Engineering this fall. Established by the generosity of Edward (A&S ’78) and Jami Levy, the program is designed to further the opportunities for science and engineering students to engage with the local community. Dr. Henry shares her passion for biology through teaching and public service. She has created several public service courses in EEB and she is the creator and driving force behind Girls in STEM at Tulane (GiST). This program exposes middle school girls to the wonders of STEM through hands-on field and lab learning sessions led by SSE students and faculty. A well deserved honor. Congrats Donata!
Donating directly to EEB helps fund the programs that are vital to the educational experiences for our undergraduate and graduate students.

The EEB General Endowed Fund was established with an initial generous gift from Katherine S. Griffin (BA, 1925) to support EEB’s academic programs. You can help grow the fund by making an unrestricted gift to EEB. Simply make the check out to Tulane University and write “EEB General Endowed Fund, #050195” in the memo line.

Donate online! For details, visit http://tulane.edu/sse/eebio/giving

You are also welcome to make a restricted gift, which will be used in the specific way of your choosing. Please contact Dr. David Heins, Department Chair, to discuss restricted gifts at (504) 865-5191.