

2010
EDITION

Eastern Illinois University Department of Biological Sciences

BioBriefs

A Note from the Chair

In the midst of economic downturn, faculty and staff in Biological Sciences (BIO) remain committed to providing a first-class education to students at EIU.

There have been several notable achievements in BIO this year. Importantly, our BIO graduate program received the prestigious "First Choice" designation from the Graduate School, awarded to only a handful of graduate programs at EIU. Several BIO faculty were recognized for their excellence in teaching, research, and/or service, including 10 internal grants to improve instruction and 32 internal grants to fund research efforts. External funding for research efforts has also remained strong with new and current grants totaling ~\$1.4 million from sources including National Institutes of Health, National Science Foundation, and the Department of Energy. Notably, BIO faculty produced 48 peer-reviewed publications between September 1, 2008 and August 31, 2009, most including graduate and/or undergraduate student authors.

Student research activities were quite impressive as well. Graduate students presented oral and poster presentations at a wide range of regional and national conferences. Awards supporting these efforts included receipt of 12 William's Travel Awards from the Graduate School, 7 College of Science (COS) Graduate Student Investigator awards, a COS Women in Science and Mathematics Research Award, 5 EIU Graduate School Research Awards, a Duffy Travel Award to attend the Midwest Fish and Wildlife Conference, 2 Student Travel Grants from the Wildlife Society, and a

North Carolina Herpetological Society grant. Notably, EIU's nomination for the 2009 Distinguished Master's Thesis Award was a graduate student thesis from BIO (Laura Ladwig, from the lab of Dr. Scott Meiners). Also, the Biological Sciences Graduate Student Association was very active, bringing in 4 external speakers and establishing a \$10,000 endowment to support future BIO graduate students at EIU (*see page 5*).



DR. GARY BULLA

Undergraduate research increased substantially this year, with an all-time high of nearly 30 students engaged in faculty-mentored research projects each semester of the academic year. Students gave a large number of both oral and poster presentations at regional and national conferences. Undergraduate research awards included 6 Undergraduate Research Grants from the Honors college, 12 Biological Sciences Undergraduate Research awards, 6 COS Scholars in Undergraduate Research at Eastern awards, the COS undergraduate Women in Science and Mathematics Research Award, and two Young Botanist awards from the Botanical Society of America.

We have experienced several staff changes over the past year. First, Connie Huber retired as Office Manager in October after 31 years of service to EIU. Dr. Robert Colombo started his tenure track position as a fisheries biologist (*see page 5*), and Dr. Michael Menze will be joining BIO as a tenure-track physiologist. Marschelle McCoy was hired as Office Manager and Mary Mattingly transferred to the Department of Physics.

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A NOTE FROM THE CHAIR *continued from page 1*

Also, Dr. Marina Marjanovic resigned from EIU after accepting a position at the Beckman Institute of the University of Illinois. Finally, Dr. Richard Abbott replaced Amanda Poffinbarger as an instructor in BIO.

We greatly appreciate the generosity and support of our alumni and friends. It is through your contributions that we continue to sponsor undergraduate research projects, fund undergraduate travel expenses to present research at scientific conferences, purchase microscopes required for classroom instruction and sponsor our Darwin Days event, including bringing in nationally-known speakers to present lectures series at EIU. If you would like to bestow a gift to BIO on-line, visit us at <http://www.eiu.edu/~develop/gift.php>, Simply click locate "Online Giving," click on "Secure Site," then choose "College of Sciences" to target a specific gift to BIO.

We would enjoy re-connecting with you. Please visit our website www.eiu.edu/~biology, join our new Facebook page "EIU Biological Sciences" or e-mail us at biosci@eiu.edu. If you are in the area, please stop by.

Gary A. Bulla, Ph.D.

Professor and Interim Chair

1981 Zoology Alum named Global Ambassador of EIU



Photo by: Beverly Cruse, EIU Media Services

Dr. Vicente DiBella (right) receiving his Global Ambassador's plaque from EIU President Bill Perry

For more than 50 years, students from countries other than the United States have come to earn their degrees at EIU. In September 2009, select alumni among these international students were honored as Global Ambassadors of EIU. Among the honorees was an alumnus of the Zoology Department, Dr. Vicente DiBella, Jr., who came to EIU to study and play soccer. Vicente, the son of a physician and elementary school teacher, planned to study medicine in his native Brazil until one of his physical education teachers, Schellas Hyndman, was hired as the head coach of EIU's soccer team. Hyndman invited Vicente to join him at EIU and offered him a Talented Student Athletic scholarship; Vicente accepted and began his studies in zoology at EIU in 1979.

Vicente writes that, during his junior year of high school, he attended a soccer camp in Virginia and received eight invitations to enroll at different universities. He chose to attend EIU and "was very pleased to do so." Vicente and his teammates went to the NCAA Nationals at Stanford during Eastern's first year as a Division I team in 1980 and for many weeks, the team was ranked #1 in the U.S. in national polls. Upon graduating with his bachelor's in 1981, Vicente returned to São Paulo, Brazil, and was accepted to Escola Paulista de Medicina, the same medical school where his father studied. He completed his residency in obstetrics and gynecology and also obtained specialization in ultrasonography and colposcopy. In 2007, he ran the Chicago Marathon and has run in seven other marathons. Vicente is married to Zsuzsanna, also an obstetrician-gynecologist. They have two children, Guila and Luca, and reside in São Paulo, Brazil. Vicente writes, "We are a happy family who loves sports; and are very honored to represent EIU all over the world."

BIO Faculty Lauded for Excellence in Research and Grant Activity



Dr. Meiners is pictured above (right) receiving the 2010 Edwin May Award for Outstanding Achievement in Research & Grants from Dr. Robert Chesnut, Director of EIU's Office of Research and Sponsored Programs. Photo by Bev Cruise, EIU Media Services

Dr. Scott Meiners was recently honored for his success in securing external support for research as the recipient of the 2010 Edwin May Award for Outstanding Achievement in Research & Grants. A plant ecologist, Dr. Meiners received his B.S. and M.S. degrees in Botany from Miami University (Ohio) before heading to Rutgers University, where he earned his Ph.D. in 1999. After a post-doc funded by the USDA, Scott joined the department in January 2001. He currently teaches Plant Ecology, General Botany, and Advanced Biostatistics.

Dr. Meiners' research interests primarily revolve around trying to understand the processes that control the regeneration of plant populations and communities. To pursue this broad interest, he has worked in deciduous forests, prairies and abandoned agricultural land.

This work has also led him to studying the effects of non-native plant invasions on plant communities. In conducting this work he has trained over a dozen graduate students as well as a large number of undergraduates within the department.

Most of Dr. Meiners' research now focuses on a 50+ year study of vegetation recovery on abandoned agricultural land. This project, the Buell-Small Succession Study (named for the ecologists who started the project) is located in New Jersey and is one of the longest continuous studies of its kind. Dr. Meiners took over the leadership of this collaborative effort in 2003 and continues to work with researchers from New York, New Jersey and California. This study has allowed Dr. Meiners and his colleagues to ask a wide variety of questions about how forest communities recover once agriculture has ceased. Recent work has focused on plant invasions, the effects of woody vines on trees and the influence of adjacent forests on recovery. Dr. Meiners is currently completing the final year of a 5-year grant from the National Science Foundation that supports this project.

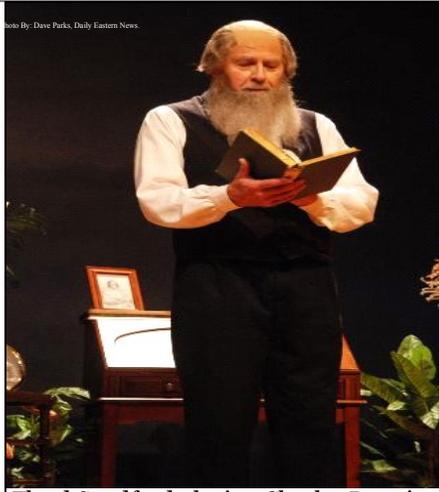
Outside of his duties to EIU, Dr. Meiners has worked extensively with the Douglas-Hart Foundation, a non-profit organization involved in environmental education. He is also an associate editor for the international journal, *Plant Ecology*.

Visit us on the Web!

<http://www.eiu.edu/~biology>



Darwin Day's Celebration at EIU



Floyd Sandford playing Charles Darwin in the play "Darwin Remembers."

For the seventh consecutive year, the Department of Biological Sciences hosted several events in mid-February 2010 to celebrate Darwin Day, the annual recognition of Charles Darwin's contributions to scientific understanding and society. <DarwinDay.org> is an educational, non-profit, organization aimed at improving student education and educator resources on the subject of evolution. The organization facilitates interaction between the public and scientific community, promotes participation and interest in science, and decreases the prevalence of misinformation about evolution, the keystone to all of biology. As measured by the number of events organized for each year's celebration, Darwin Day at EIU remains one of the largest such programs in the United States.

Much like Darwin's own life as a person interested in a wide variety of aspects within biology, the 2010 Darwin Day program featured something for everyone. The week started off with a segment from NOVA's award-winning Evolution film series – the featured episode, "Darwin's Dangerous Idea" presented a biographical account of Darwin's adult life during and following his 5-year voyage on H.M.S. Beagle. This film set the stage for the following evening's presentation of a 1-act play, "Darwin Remembers," written, produced, and featuring Floyd Sandford, Professor Emeritus of Biology at Coe College (Iowa). Prof. Sandford played the role of Charles Darwin near the end of his life, from the setting of his Victorian study at Down House. The play provided a vivid retrospective of Darwin's life, including his perceptions of the controversies that plagued him after the publication of the "Origin of Species."

Prof. Sandford returned the following day for guest lectures in a few classes, followed by a seminar that afternoon concerning the evolution of symbiotic relationships between marine sponges and crustaceans that inhabit them. Attendees at a meeting of EIU's Botany Club that evening also heard from Prof. Sandford, as he presented a history of Darwin's work with plants. The last event of the 2010 program was a seminar presented by Russell Doolittle, Professor of Biology at the University of California at San Diego. Prof. Doolittle's research concerns the proteins responsible for forming clots in mammalian blood, and his seminar provided an overview of the evolution of blood clotting. Both this lecture and the play presentation were video-recorded, and should be available through iTunes-U in the near future.



WiSM
WOMEN IN SCIENCE
+ MATHEMATICS AT EIU



Got news???

Email us at:
biosci@eiu.edu



Dr. Robert Colombo

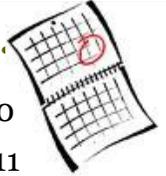


Dr. Rob Colombo joined the Biological Sciences faculty at the start of the 2009-2010 academic year, having earned his Ph.D. in Zoology from Southern Illinois University at Carbondale (SIU) in 2007. After completing his graduate work, he worked as an instructor in the SIU School of Medicine, where he taught Anatomy, Embryology, and Histology to 1st-year medical students.

Dr. Colombo is already making several positive impacts in the Department. His research focuses on how fish populations respond to anthropogenic influences. Specifically, he is interested in the responses of native fishes to harvest, invasive species and habitat alterations. Dr. Colombo focuses on commercially- or ecologically-important species in lotic (flowing) water systems, and has involved species that are either common (*e.g.*, catfish) or of conservation concern (*e.g.*, sturgeon). Dr. Colombo has received several grants from the Illinois Department of Natural Resources that have provided funding for his research efforts and those of his students.

Prior to his Ph.D. program, Dr. Colombo earned an M.S. in Zoology from SIU and a B.S. in Environmental Biology from State University of New York – College of Environmental Science and Forestry. At EIU, his teaching duties include Ecology, Fisheries Ecology & Management, and Ichthyology. He is also developing a course in field sampling techniques. Dr. Colombo is also the faculty advisor for the newly founded Fishing & Hunting Club and the Fish and Wildlife Ecology Club at EIU. He already is mentoring the research efforts of one graduate student and several undergraduates in his lab.

Mark your calendar...



Fall M3S Event	October 6, 2010 February 1, 2011
EIU Homecoming	October 23, 2010
WiSM Night	October 26, 2010 March 3, 2011
Darwin Days	February 2011
ScienceFest	April 8, 2011
Illinois State Academy of Science Annual Meeting Hosted by EIU	April 8 & 9, 2011

New BGSAA Scholar Award



This academic year, the Biological Sciences Graduate Student Association established an endowment that will provide a \$400 award to a graduate student in the Biological Sciences Department beginning next year. The \$10,000 required to establish this award would not have been possible without the support and donations from faculty, students, and alumni. As donations are added to the endowment, the scholarship award value will increase. If you would like to contribute a gift to the BSGSA Scholar Award, please use the following information:

Cash, or check made payable to:
BSGSA (in memo line indicate BSGSA Scholar Award)
Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920

Thank you for supporting the Biological Sciences graduate students at EIU!



Department of Biological Sciences

600 Lincoln Avenue

Charleston, IL 61920

#123100

Congratulations to our 2010 Scholarship Winners

Gayle Hutton Adkins Award

Stephanie Prosser

Altamont Lions Club/Ernie C. Ballard Award

Sarah Kreke

Burgner Memorial Scholarship

**Cori Christenholz, Lena Elmuti, Cody Gass, J'Nai Huckaba,
Charles Jaques & Melissa Smith**

Harold Cavins Scholarship

Alain Marcelin

Charles & Ferne Tingley Compton Botany Scholarship

Brittney Zourkas

C.S. & Allyn Cook Memorial Scholarship

Gerald Presley & Stephanie Prosser

Kenneth & Donelda Damann Award in Aquatic Ecology

Hannah Smith

Eunice W. Dougherty Scholarship

Gerald Presley

G.B. Dudley Award

Amanda Wildenberg

Leonard & Olga Durham Award in Environmental Biology

Bradley Daugherty

Embarras Valley Quail Unlimited Award

Rachael Nyland

Ann Frommel Memorial Scholarship

Amanda Wildenberg

Heath Sports Medicine Scholarship

Tamara Bowen & Alain Marcelin

Barrie & Shirley Hunt Environmental Biology Award

Joseph Wulffe

Rosemary Bevis Knezovich Scholarship

Teresa Cooper

Eugene Krehbiel Scholarship

Rachael Nyland

Hugh C. Rawls Award

Abigail Roeters

Walter Merrit Scruggs Scholarship

Samantha Flowers

Ernest Stover Scholarship

Anthony Porreca

H.F. Thut Award

Anthony Porreca

William B. Tym Scholarship

Cody Gass

Errett/Mazie Warner Award in Botany

Stephani Pescitelli, Gerald Presley & Hannah Smith

E. Warrner/L. Durham Award in EVB

Kathryn Alber, Stephani Pescitelli & Joseph Wulffe

E. Warner/P. Hinz PreMed Award

Alain Marcelin, Stephanie Prosser & Lara Seelhofer

E. & M. Warner Award in Zoology

Eric Hendricks, Wesley Lewis & Abigail Roeters

Robert Edwin Witters Scholarship

Gerald Presley