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Biology News Newsletters

Winter 2010

Biology News, Winter 2010

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Bio Bigy Lews

Winter Edition - 2010

University of Northern Iowa

Greetings from the Department of Biology



Hello. I am happy to say that I am still at UNI representing the Department of Biology and that we are sending to you our second newsletter in as many years. Much has happened in the previous year since you received our last newsletter. For the first time, the Department of

Biology has more than 700 majors, with 725 students enrolled as Biology majors this fall. In addition, we have 48 students declaring a minor in Biology. The graduate program in Biology has also continued to grow with a total of 32 graduate students enrolled in M.A., M.S., Professional Science Masters – Biotechnology and the Professional Science Masters – Ecosystem Management. At this rate of growth, we will soon need to be thinking of adding additional space through a fourth floor on McCollum Science Hall!!

Since the last newsletter, I have heard from several alumni. On page two you will find some of the information that alumni have shared with us through our Focus on UNI Biology Alumni. The faculty, staff and students in the Department very much enjoy hearing from you and learning of your accomplishments. Please continue to let us know what you are doing so that we can share this information by way of our newsletter.

As has been the case for many years, UNI Biology students continue to achieve at very high levels. On page six you will find more information about the accomplishments of our students under *Focus on UNI Biology Students*. Now, more than ever, our students

dents are continuing on into professional and graduate programs, taking positions in industry and government. We have all the confidence that these students will find the same success in these positions and programs as they did during their tenure at UNI.

The previous newsletter focused on the faculty and staff, in an effort to reacquaint you with the folks that you might have interacted with when you were a student at UNI. The faculty and staff continue to be productive and to put student learning in the forefront. This group has continued to be productive throughout the past year and we have highlighted these accomplishments on page four with *Focus on Faculty and Staff*. In addition, we do have some changes in staffing taking place due to the retirements of Dr. Jean Gerrath, professor of Botany, Dr. Lanny Schwartz, professor of Ecology and Mrs. Sherry Nuss, our long-time Biology Student Advisor. You will find more about their careers and accomplishments on page eight.

Lastly, a newsletter is of course not complete unless we are asking for money. This is not the main purpose of this publication, but your donations can make a real difference in the lives of our students. On page nine you will find reasons why others have chosen to support students in our Department. Having been the recipient of scholarships due to the result of others generosity, I am continually looking to assist our own students in this way.

I hope that you enjoy reading about the alumni, students, staff, and faculty of the Department of Biology. I would look forward to having you come back to visit UNI and specifically the Department of Biology. We are proud of our Department and all that it has accomplished; most importantly the quality of education we have offered our students.



FOCUS ON UNI BIOLOGY ALUMNI

Alumni

◆ Jeff and Brenda Adamovicz are Iowa natives and Department of Biology graduates who met in class. Both graduated in 1984 with Bachelor of Arts degrees in Biotechnology. They were married in 1984 and will celebrated their 25th anniversary in June. They have two children Laura and Mason. Laura graduated from Saint Mary's University in Maryland and is currently in Veterinary school at Virginia Tech. Mason is currently in Thurmont High School in Thurmont, Maryland near Camp David. Mason is also interested in Biology and is currently planning to study Biological Engineering. Biology seems to run in the family!

Brenda worked in the pharmaceutical industry for a few years and held several other jobs including legal assistant, clerk for the provost marshal, seamstress and upholsterer and custom fabricator. She is currently interested in learning to fabricate custom prosthetics. Brenda is heavily involved in several volunteer organizations and enjoys working with public library programs. She recently donated a kidney to a neighbor and goes on frequent walks to "visit her kidney".

At UNI Jeff was in ROTC and entered the Army after graduation. During his Army career he obtained his Doctorate in Microbiology from the Uniformed Services University of Health Sciences in Bethesda Maryland. He is a member of the American Society for Microbiology, the American Biological Safety Association, an ad hoc reviewer for several scientific journals and a grant reviewer for the National Institutes of Health. He has authored or coauthored more than 20 peer-reviewed journal articles and 6 book chapters. He also holds a U.S. patent for an antibody-based therapy for the treatment of plague.

Currently, Jeff is the Principal Scientific Advisor for MRI's Frederick, Maryland office - a technical services consulting group supporting a variety of government and non-government clients. He is responsible for the scientific aspects of all assigned projects related to laboratory biosafety, threat assessment, research and disease surveillance projects in support of numerous threat reduction and biosecurity programs worldwide. The MRI-Frederick office also provides expert consulting and training services related to national and international laboratory operational issues, capacity building, homeland security and emergency management, national security policy and intelligence research and analysis.

Previously, he served as Chief of Bacteriology at the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID). In this capacity he served as the product manager for plague vaccine development, transitioning the vaccine product from discovery to advanced development in the Army acquisition program. His military service as an Army officer includes a variety of key leadership positions in the U.S. Army's Medical Service Corps. His most notable career assignments include; Company Commander Fitzsimons Army Hospital; Chief, Biological Group Five; U.N. Special

Commission Iraq (1995); Executive Officer 520th Theater Army Medical Laboratory, 44th Medical Brigade; Chief Bacteriology, USAMRIID; and special assignment to Defense Intelligence Agency in Iraq, Operation Iraqi Freedom (2003). He participated in country wide investigations to locate biological weapons.

Both Jeff and Brenda are proud to be from UNI and credit a lot of the success in their lives to the education they received and the friends and faculty they met while during their time at the University.

◆ Maggie (Voelz) Bender

Dear Dr. Seager -

I just received a copy of "Biology News", and seeing your photo in it made me want to contact you in appreciation.

I graduated in 1993 from UNI in Biology Education. Of course I needed your class on "Teaching Evolution", and am VERY glad this was required! As a HS Biology teacher since then, I have used your methods in my classes each year. I have had only ONE parent ask to meet about my Biological Evolution Unit, and I believe they felt satisfied with the conversation we had. THANK YOU for all of your information, methods and advice during that semester. As I remember, you also made the class interesting and fun. I'm happy to see you are "still at it"!

With sincere appreciation, Maggie (Voelz) Bender

◆ Cassandra Bohnet is an Education Assistant at the Rocky Mountain Bird Observatory in Brighton Colorado. Her main focus will be planning and implementing environmental education programs to the Denver Metro area. The Rocky Mountain Bird Observatory also works with landowners in Colorado and South Dakota to improve their practices for nesting birds. Cassandra also performed a summer internship as a Naturalist Intern at Lost Island Prairie Wetland Nature Center in Palo Alto County.

David Ceilly

Thank you for sending me the Biology Newsletter. I look forward to reading through it. I thoroughly enjoyed my time at UNI and visit Cedar Falls regularly.

I thought I would send you a quick update as a graduate from the UNI Biology Dept. (B.A. 1981). I earned my M.S. in aquatic ecology at the University of Florida and worked as a Limnologist at University of Iowa from 1985-1989 then married and moved back to Florida to Ft. Myers area where I have been since. My wife Lori (Weigel) Ceilley (also a UNI graduate Education 1983) and I have two children, Connor 15 and Savanah 11.

I am currently working as a Research Faculty member at Florida Gulf Coast University in the fields of wetland ecology, limnology, and fish and wildlife ecology and work on Everglades Restoration projects.

♦ Shannon Cornelius

It was nice to read the latest newsletter from the Dept. of Biology at UNI. Looks like you guys have been doing well!!!! I wanted to give my little story as a UNI alumni:

I graduated from UNI in May, 2000 with a B.A. in Science. I worked for Dr. Darrell Wiens in the undergraduate research program, and then as a research assistant for Dr. Wiens for two years after I graduated. For the last 8 years, I have been working as a research scientist at the University of Colorado (Denver), Dept. of Neuroscience. I am doing research with stem cell therapies for Down Syndrome and Parkinson's Disease. I just recently applied to grad school at the University of Florida to obtain my PhD in biokinesiology.

Thanks for your time and keep up the great work!

♦ Lori Covington

I am a UNI alumnus (B.S. Biology 2000; M.S. Environmental Science 2002). Since graduating with my master degree, I worked as a research associate at BD Pharmingen in San Diego, where I developed human and mouse immunoassays for flow cytometry and researched molecular marker development for magnetic resonance imaging (MRI) clinical applications. Recently, I accepted the position as Program Director/Assistant Professor of Radiologic Technology at San Diego Mesa College, which trains entry level radiologic technologists. I am currently developing advanced education programs for technologists in computed tomography (CT) and MRI.

I am very fond of my UNI experience and highly recommend the educational programs affiliated with the biology department. The professors are outstanding and the academic opportunities are excellent.

Thank you for sending me the newsletter! It is exciting to read about the current activities and professors. Keep up the wonderful work!

♦ Melissa Eilers

My name is Melissa (McBride) Eilers. I graduated from UNI in 1997 with a BA in Biology. It was great to get the newsletter. I used to work for Jean and Cherin both. It was nice to see what they have been up to. I currently live in Cottage Grove, Minnesota with my husband and daughter. I am a QA Auditor for WuXi Apptec. We are a contract research organization which specializes in testing medical devices.

- ♦ Michele Fuhrer is a Wildlife Habitat Specialist for the Natural Resource Conservation Service, where she currently writes plans for landowners concerned about the lack of or condition of habitat. She meets with landowners, tours their acreage, makes suggestions based on their goals, and assists the landowners with application materials for federal cost share dollars. Michele is also on contract with the National Fish and Wildlife Service, Glacial Ridge National Wildlife Refuge, Minnesota, to write a Habitat Management Plan. She also performed a summer internship at the Neal Smith National Wildlife Refuge.
- ◆ Erin Harpenau is currently the Land Conservation Liaison at Iowa State University in the ISU Extension and Leopold Center for Sustainable Agriculture. She is responsible for working with farmers in the emerging cellulosic ethanol market in

Northwest Iowa to support conservation practices. Erin also performed a summer internship with the Dickinson County Conservation Board where she was responsible for IOWATER monitoring and natural history education programming.

- ◆ Rebecca Groshens serves on a Multiple Species
 Inventory and Monitoring Crew with the Iowa Department of
 Natural Resources at Mount Ayer, IA. She also performed a
 summer internship as a Conservation and Land Management
 Intern with the US Bureau of Land Management and Chicago
 Botanical Garden, where she undertook a botanical survey and
 cartography work in Kemmerer, Wyoming using Geographic
 Information Systems.
- ♦ Kimberly Kreiling is a Natural Resource Technician with the Morton Arboretum at Chicago, Illinois. She performed a summer internship as a research technician at the University of South Dakota, where she participated in the inventory and ecological studies of Hines Emerald Dragonfly, an endangered insect in Door County Wisconsin and the Chicago Area.
- ◆ Isaiah Messerly is a Biologist Crew Leader for the National Park Service at Ashland, Wisconsin, where he leads a crew into backcountry of National Parks to implement integrated pest management plans on invasive species for the Great Lakes Inventory and Monitoring Network.
- ◆ Megan Reehl is the co-leader associated with the Center for Ecological Living and Learning, which is a semester-abroad program in Central America focusing on sustainability through community for college students interested in being a part of the change toward environmental, community, and global sustainability. Megan also performed a summer internship as Assistant Director of Camp Newfound, and Sustainability Coordinator for Camps Owatonna and Newfound in southern Maine.

Let us hear from you. . .

Let us know what you have been up to.

Let us know what you have been up to.
You can email us at david.saunders@
uni.edu or return this form to:

Department of Biology University of Northern Iowa Cedar Falls, IA 50614-0421

First Name	_Last Name (maiden)
Address	
City	State
Email:	
Please share any news about you or yo	our family to be included in the next Biology Newsletter.

Faculty and Staff News

Pete Berendzen received one of the "20 Best On-Campus Internships" from the Office of Career Services.

The award is for \$4050 for an internship position for a student to work in his research lab. Pete hired Katie Berge to work on collecting population genetic data on the fishes he collected in Ethiopia.

Ed Brown was invited to give a joint biology/environmental science seminar at Drake University by Biology Professor, David Senchina (a UNI graduate). The title of Ed's talk was "Bioremediation, A case study of the Exxon Valdez oil spill".

Jim Demastes

- was the recipient of a UNI Apple Polisher Award for making a difference in student lives.
- received a Graduate College Summer Fellowship to complete a manuscript on cospeciation.
- **Kavita Dhanwada** received a
 Graduate College Summer Fellowship
 to work on her project "Quantification
 of Human Liver Cell Growth following
 Metolachlor Exposure".

Jean Gerrath was invited to give a seminar on Nov. 10, 2009 to the Horticulture Department, ISU. The title of her talk was "Taming the Wild Grape"

Sandi Ingles received a Panther Pride Award from the University of Northern Iowa chapter of The National Residence Hall Honorary.

Laura Jackson gave an invited talk at Grinnell College on Nov. 14, 2009. The title of her talk was "Who designs the agricultural landscape?" and was

given to students and faculty in an experimental multidisciplinary senior seminar called Environmental Challenges and Responses.

Jim Jurgenson was granted a Professional Development Award to study a method of inducing plant resistance to pathogens known as Virus Induced Gene Slicing (VIGS) at Washington State University working with Dr. Scot H. Hulbert. As a result of the work performed during this past spring, Jim, Scot, and Tilahun Abebe have submitted an NSF proposal.

Cherin Lee

- received the Ross A. Nielsen Professional Service Award for 2009 given to a faculty member who has "an extraordinary record of meritorious service to both UNI and the individual's academic discipline."
- was nominated for the Dean's Faculty Award for Excellence-Departmental Programs.

Mark Myers received a Graduate College Summer Fellowship to carry out a project entitled "Assessing the Value of Biomass Energy Prairie Plantings as Wildlife Habitat in an Agricultural Landscape".

Steve O'Kane has been working with colleagues on a book entitled Four Corners Flora, which has a publication date of 2010. He has also been offered a contract by the University of New Mexico Press for a new New Mexico Flora book to be published in 2014 or 2015.

Axel Schwekendiek

 gave a presentation at the 2nd International ISHS Hop Symposium in

- Ghent, Belgium, from Sept. 1-5, 2009. His talk was entitled: "A temporary immersion system for the effective micropropagation of hop". A manuscript with the same title as the conference proceedings was written together with Scott Hanson (a UNI undergrad Biology student who wrote a senior thesis about the project in May 2008) and Maggie Crain (also a UNI undergraduate Biology student) as co-authors.
- chaired "Section 1 Hops, Breeding, and Molecular Genetics" at the 2nd International ISHS Hop Symposium in Ghent, Belgium, from Sept. 1-5, 2009.

Daryl Smith

- received the Twenty-Year Integrated Roadside Vegetation Management Service Award.
- showed his film American's Lost Landscape: The Tallgrass Prairie and gave a presentation on the making of the film at the Nebraska State Science Teacher's Conference on October 9, 2009. The following day he presented a workshop on the curricular materials being developed to accompany the film. America's Lost Landscape: The Tallgrass Prairie was one of 30 films selected to be a part of the American Documentary Showcase. This United Nations funded project provides for showing of the films in U.S. embassies around the world. The making of the film was overseen by Dr. Daryl Smith and David O'Shields.

Jeff Tamplin

- was a nominee for the Dean's Award for Teaching Excellence in Departmental Programs.
- was named an Honorary Sideline Coach for the UNI Men's Basketball Team.

Faculty and Staff News (continued)

Carl Thurman

- received a Fulbright Fellowship to Brazil.
- received a grant from the University of Iowa, Center for Global and Regional Environmental Research.
- has been granted Visiting Faculty status in the Department of Biology at the Universidade de Sao Paulo, Ribierão Preto, SP, Brasil from May to November 2009.
- presented a seminar on October 14, 2009, at the Universidade Estadual Paulista, Julio de Mesquita Filho, Campus de Botucatu, Instituto de Biociencias entitled "Brasil-Iowa Connection: A Biological Approach to Coastal Conservation".
- presented a seminar on October 15, 2009, Universidade de Sao Paulo, Campus de Ribeirao Preto, Faculdade da Ciencias, Biologia. Title: Crabs, Kidneys, and Continents: Adventures in Evolutionary Physiology.

- gave a seminar on his Brasil research at the Institute de Ciencies del Mar, Barcelona, Spain on Dec 17, 2009 titled: Crabs, Kidneys, and Continents: Adventures in Evolutionary Physiology.
- **Michael Walter** is completing patent-related work on an anthrax spore detector that uses actual virus as part of the electronic detection system. Several students have contributed to this project.

Darrell Wiens received the Tri-Beta 2009 Award for Excellence in Teaching.

TRIP TO CHICAGO FOR DARWIN BICENTENNIAL

Biology faculty members traveled to Chicago to learn about the developments in the field of Evolutionary Biology at the Darwin 2009 Meetings at the University of Chicago (October). The photo was taken in Dr. Neal Shubin's lab.



From left to right Theresa Spradling, Pete Berendzen, Steve O'Kane, Marek Sliwinski, Neil Shubin (co-discoverer of *Tiktaalik roseae*, the famous transition fossil between fish and amphibians, University of Chicago), Jim Demastes, and P. Z. Myers (Developmental Biologist, University of Minnesota).

BOTANICAL CENTER WINS SECOND PLACE

The Cedar Valley
Arboretum and Botanic
Gardens hosted the eleventh annual Fall Harvest
Festival and Scarecrow
Contest in September at the arboretum east of Hawkeye
Community College in
Waterloo.

Scarecrows were created by several dozen community businesses, event sponsors and individuals.

The UNI Botanical Center Scarecrow 'Flora', created by staff, won second place in her division. Several Botanical Center staff volunteer at this local public garden each year.



'Flora' is now on display at the Botanical Center.

FOCUS ON UNI BIOLOGY STUDENTS

Students

Abdul Alsheddi won the Lux Service Award in the Spring of 2009. The Lux award is presented annually to three undergraduate students who best represent the ideal of service to the university community. Abdul is currently in Gambia, West Africa completing an internship with the Foundation for Research on Women's Health, Productivity, and the Environment.

Katie Berge worked with Dr. Alina Avanesyan in the Department of Zoology at Hertzen State University in Russia. Katie presented in the Annual Russian-American Scientific and Practical Conference on Modern Concepts of University Education.

Cydney Brook will attend the graduate program in Neuroscience at Iowa State University.

Gabe Connell received the graduate prize at the 16th Annual Sigma Xi poster conference for his poster entitled, "Is a QCM electrode-binding soil phage assemblage less diverse than a 'wild' *Bacillus cereus* soil phage assemblage?" with Michael Walter.

Maggie Crain was the recipient of the Alan Orr Research Award.

Sami Crane was accepted into physical therapy school at the University of Iowa.

Andrew Cyr was accepted in the medical program at the University of Iowa.

Alex DeWitt was accepted to a PhD program in Biology: Ecology, Evolution, and Population Genetics at Purdue University. She received a Sloan Fellowship for Native Americans and a teaching assistantship.

Olivia Egen received a Dr. Timothy Greiner Undergraduate Biology Scholarship.

James Feimster received a J.S. Latta Scholarship.

Michelle Gleason will attend the University of Iowa School of Pharmacy in Fall 2009.

Sean Hartnett (Biology Master of Science student) received Intercollegiate Academic funds to complete his MS thesis "Molecular Effects of Metolachlor on Human Cells". He also presented his thesis work at the 121st Annual Meeting of the Iowa Academy of Science.

Jack Kosmicki received a NASA Space Grant Scholarship and Career Scholar Award to work on a project using GIS and ecological niche modeling to determine the historical distribution of fishes in the Mississippi River basin.

Selena Losee was the recipient of a Dr. Dave Swanson Genetics Research Award.

Alex Mark received a J.S. Latta Scholarship.

Gabriel Martin received a Vivian Wiseman Fuller Scholarship.

Jim Mason, a Biology graduate student, received the Myrle Burk Scholarship in Ornithology from the Iowa Academy of Science

Susan Meerdink has been awarded one of the Iowa Space Grant Consortium/NASA scholarships for the second year. Susan also received the Northern Iowa Association of Pond and Water Gardeners Society Scholarship.

Eric Moellers received a J.S. Latta Scholarship.

Jeremy Pritchard was the recipient of a Dr. Dave Swanson Genetics Research Award.

Chelsea Reinhardt was accepted into the Veterinary College at Iowa State University.

Morgan Rilling received a J.S. Latta Scholarship.

Anna Schrad received an award from the Robert and Yvonne Koob Fund for Student Community Engagement, the Myrna and Gary Floyd Scholarship which supports undergraduate student research and also a LaDuke Family Scholarship.

Erin Schrunk will attend the University of Iowa Carver School of Medicine in Fall 2009.

Aaron Stahl and **Bethany Stanhope** (Biology graduate students) received IAF funds to present their original research at the annual meetings of the American Society of Ichthyologist and Herpetologists in Portland Oregon in July 09.

Aaron Stahl received \$1000 from Sigma-Xi Grants In-Aid of Research for his Master's thesis research on the effects of atrazine on the embryonic development of the African dwarf frog.

Students (continued)

Jessica Steinberg received a Caroline Czarnecki Biological Sciences Scholarship.

Jacob Thomas received a J.S. Latta Scholarship.

Alexa Warwick graduated in the spring with degrees in biology and spanish with university honors. She also received the purple and gold award. She was accepted to a PhD program in Biological Sciences and in the area of Ecology and Evolution at Florida State University. She also received the highest fellowship awarded at FSU (Florida State University Presidential University Fellowship), which is awarded to only one graduate student. Alexa also received the University of Northern Iowa Merchant Scholarship, which is awarded to a student to attend graduate school. Alexa also received the undergraduate prize for her poster presentation at the 16th annual Sigma Xi poster

conference. The title of her presentation was "Comparison of larval distribution, geographic range, and genetic variation of the fiddler crab Uca minax (Uca: Ocypodidae)" with Pete Berendzen and Carl Thurman.

Scott Whitmore (graduate student) and his thesis advisor, Theresa Spradling, received \$2,500 from the 2009 Iowa DNR Wildlife Diversity Program for the study of "Conservation genetics of the central newt in Iowa".

Anna (Brigid) Wieman received the Myrna and Gary Floyd Scholarship which supports undergraduate student research. Anna also received a LaDuke Family Scholarship.

Brooke Zehr had a summer internship at the National Zoo in Washington DC.

Student Nature Society



Student Nature Society Officers from left: Chris Heyer, Katie Berge, Cassandra Boevers, Susan Meerdink, Alexa Dostart

The Student Nature Society (SNS) is one of the fifteen biology clubs active in UNI's Biology Department. The club is focused on fostering an understanding and appreciation of the natural world and also encourages student involvement in community conservation efforts. The most notable SNS activities include volunteering at Hartman Reserve, participating in UNI's Darwin Days and Earth Day, assist in conservation efforts for the Iowa State DNR and taking overnight camping trips at one of Iowa's state parks in the fall.

However, the most prominent SNS event is the spring plant sale that the club co-hosts with the UNI Botanical Center. The plant sale traditionally takes place in April as an all-day event after months of preparation. Student Nature Society members assist the greenhouse staff in cutting and potting the plants, setting them

up for display, and handling transactions and directing customers on the day of the sale. The event is extremely popular and receives much support from the university and community. This year, funds generated by the Spring 2009 Annual Plant Sale will be used to provide two scholarships in the amount of \$250. The club hopes to promote the natural world and increase awareness of conservation through these scholarships.

The club welcomes input and support from local experts and alumni, particularly as guest speakers at the bi-weekly meetings. If you have a desire to be a guest speaker or want to learn more about the club, please contact president Susan Meerdink at meerdins@uni.edu.

OTHER BIOLOGY CLUBS

- Biotechnology Club
- Microbiology Club
- Pre-Chiropractic Club
- Pre-Dental Club
- Pre-Medical Club
- Pre-Mortuary/Forensic Science Club
- Pre-Occupational Therapy Club
- Pre-Optometry Club
- Pre-P.A. Club
- Pre-P.T. Club
- Pre-Pharmacy Club
- Pre-Vet Club
- Students for Organ Donation
- Tri-Beta (Beta Beta Beta)

RETIREMENTS

❖ Jean Gerrath

Jean Gerrath will be retiring at the



end of the Summer, 2010. Jean came to UNI in 1994 and has been a valuable member of this Department since her arrival.

During her career as a scientist, Jean has had nearly 30 publications in refereed journals, more than ten other professional publications, five funded grants in the past five years, including one from the National Science Foundation, and awards for professional service, scholarship, and teaching. She has also advised four MS students, served on at least a dozen other MS and MA committees, and supervised several undergraduate researchers in her lab.

Jean is well known for her work on the morphological and anatomical development of grapes. Jean grows grapes both in the UNI greenhouses and has a plot associated with the UNI preserves system. As Gerrath rhymes with wrath, her grape vines are fondly known as "The Grapes of Gerrath". Jean is equally well known among students for her quality of teaching and her no-nonsense approach. When an assignment is due, it is due and students have been heard discussing in the hallways the "Wrath of Gerrath"!!

All of the faculty and staff agree that Jean has been a wonderful colleague throughout the years. We have often sought out her advice and have come to depend on her clear and logical thought processes. We also appreciate her sense of humor, which can come about when one least expects it. Jean will return to Canada to spend time with her family and continue to spoil her grandson, James.

❖ Sherry Nuss

Sherry Nuss has recently said



goodbye to the Biology Department, accepting the early retirement incentive offered by UNI. She began working here in late summer of 1998 as the Departmental

Advisor, filling a position newly created by the Department based on the felt need to improve communications with students in the growing Department. In 1998, the Biology Department had some 450 majors and minors. In Fall 2009 we have 773! She estimates that she has worked with 2000+ students. She worked to develop the position in ways that benefited the many students who

sought her for information and answers to questions, accomplishing some advising through group venues and an e-newsletter called TIPS going to all current Biology majors/minors. Through the 11+ years of serving Biology students, Sherry has seen and heard most everything. A bright spot on the first day of classes each of the past 5 fall semesters is the large bouquet of flowers that arrives at her desk from a grateful graduate. She states that her favorite part of the job is hearing the success stories of students who are accepted to particular professional schools or graduate programs or who find jobs in their field of interest. Sherry plans to spend more time with her son's family and those beautiful grandchildren (4-year-old Tanner and 2-year-old Mallory) and has plans to work independently as a Waverly-area helpful/handy woman doing those jobs people either can't do for themselves or want help in tackling. After years of deskwork, her goal is physical activity through service to others.

❖ Lanny Schwartz

As Lanny Schwartz contemplates



retiring after 30 years at UNI, two thoughts stand out in his mind. First, how the institution has changed during his years from the somewhat sleepy atmosphere of a

teachers college to that of an exciting and modern university. When Lanny first arrived in 1980, most of the faculty saw their jobs as teaching to future teachers. Lanny was the fourth faculty member hired with the expectation that he would teach and set up a research program in his specialty of ecology. Now with all 30+ faculty teaching and researching, there is a lively intellectual atmosphere in the department. Lanny states that the research of the Biology faculty keeps them current in their subject and engaged in their specific discipline and it provides many opportunities for student participation in research projects. "This is not your father's Biology Department."

Secondly, Lanny has mentioned the wonderful colleagues that he has worked with over the past years. He states "My colleagues have a remarkable generosity of spirit toward coworkers and students. Faculty are always willing to share time, facilities, and equipment with students and other faculty. Differences of opinion in academic matters get resolved with quiet discussion and compromise. This remarkable workplace atmosphere is not an accident. As we have hired faculty we select those with the promise of excellence in teaching and research, but we also carefully consider the personal qualities of applicants.

Lanny takes great pride in his many years at UNI, with the department's great success in placing its graduates in jobs or advanced schooling. Among the thousands of students Lanny has taught, he will often hear of those who have gone on to become doctors, medical researchers, park rangers, ecologists, and even a few professors. Lanny says that in an idle moment he sometimes thinks he has helped make the world a better place.

In retirement, Lanny plans to travel the world to study and enjoy the aesthetics of nature. He is also looking forward to some writing and volunteer opportunities.

YOU MAKE A DIFFERENCE! Messages from our donors. . . .

Gary and Myrna

Myrna and I both had great undergraduate experiences in all kinds of science classes, now many years ago at UNI. We found the relatively small classes, always taught by professors, to be invaluable. Since those undergraduate days, we both have gone on for advanced degrees, and then taught at the middle school level, and in my case, at the MS and PhD levels. In every single class, as students or as teachers, we have never lost sight of how important it is to have "small" classes with direct contact, as often as possible, between the two. UNI continues to provide this kind of learning environment, and we therefore want to encourage and support promising young people in their first and formative years. The pure joy of learning is an experience second to none, that only a relatively small proportion of our society gets to experience. If we can help this to happen with the brightest and the best at UNI, we see it as a really great way to extend our experience, to help keep this door open to the young people that have the motivation to excel in education, and lastly - maybe this kind of support for UNI will help keep us "young forever."

~ Gary and Myrna

Dr. Tim Greiner

I had concerns about the rapid increase in tuition costs since 2000 in the state schools, therefore, I thought I should try to help. In 2007, after hearing about the program cuts that had been made at UNI, I became more interested to do so. In 2007, it was 30 years ago that I graduated from UNI with my B.A. in Biology. I appreciate the scholarship that I received as part of the Science Symposium competition that I participated in the fall of 1972. I was a first-generation college attendee and with 6 other brothers and sisters, the scholarship was a huge benefit to my family. In 2007, I decided that I would give back my scholarship to the Biology Department so that the department could invest in other students' lives. I suggested to the Dean of the college that a "Gratitude Campaign" could be initiated with all prior scholarship awardees.

~ Dr. Tim Greiner

Dr. Bob & Brenda Good

Why have we given? Because the people of the Biology Department gave to us opportunities to make our undergraduate education much greater than would be ordinarily expected. It was not simply a BA degree in Biology, but opportunities to learn research techniques, travel support to present papers and ideas, and encouragement to continue to succeed. We have 3 daughters with 3 son-in-laws representing 14 degrees (12 in science or medicine) from 10 universities and now 2.5 grandchildren (1 pregnancy) that will start the third generation, all initiated with a Plant Physiology class from Dr Smith!

We have been successful educationally, financially, and with a great family that all started at the UNI Biology Department. We are simply trying to give back to the system to help other students experience the same type of rewards so they have similar opportunities in their lives. We have felt that the Summer Research Fellowship was an ideal forum to promote undergraduate research. Our first year of the 5 year commitment has provided more information about turtles and their inclination to temperature variations than we ever knew before. but more importantly supported another student who will have successful career.

~ Bob & Brenda

NEW ADVISOR FOR BIOLOGY



Michelle Garris recently joined the department as the new academic advisor replacing Sherry Nuss who recently took early retirement. Michelle comes to us from the athletics department where she served as an athletic academic advisor. Prior to that, Michelle was the recruitment and academic services coordinator in the Department of Industrial Technology. As such, Michelle brings much advising and student services experience to our Department. Michelle will continue the tradition of working with students to create plans of study, review degree audits and transcripts, register for classes, and will make students aware of the many internship and employment opportunities. Michelle has shown much enthusiasm and energy in her interactions

with our students. We believe she is a fine addition to our Department and will be a great asset to our faculty, staff, and in particular, our students!

BIOLOGY VIDEO

he Department of Biology has a new recruitment video developed over this past summer. The video showcases the Department and its commitment to student education. You can go to the Departmental Website at http://www.biology.uni.edu/ and view the video at http://www.youtube. com/watch?v=IvmH9xx9mC0 or it can be viewed in YouTube by searching for Biology Department University of Northern Iowa. From the video you will get a chance to see many of our current faculty and students and our facilities such as the Botanical Research Center, Tallgrass Prairie Center, and McCollum Science Hall. Please let us know what you think.

YOU CAN MAKE A DIFFERENCE!

e take much pride in the accomplishments of our students and we hope that we have played some role in their success. We take very seriously our responsibility to educate and provide opportunities to our students and we are continually looking for ways to improve. With each passing year this has become increasingly difficult. Our Departmental budget has not seen an increase in the past ten years. Yet the costs of equipment, supplies, and travel have continued to rise. Our faculty have attempted to meet these challenges and have found ways to support students and provide students with opportunities by obtaining external funds. However, this too has become more difficult.

The cost to students continues to rise through increased tuition coupled with fewer opportunities available to students via University-sponsored programs. It now costs the average student about \$22,000 per year to attend UNI. Most of our students work outside of the University to support themselves and to pay for tuition. This in turn can impede their education and reduce their time for experiential learning. Although working while attending school can benefit students in learning time management skills, it may also defeat the purpose of attending a university and taking part in all that it can offer.

The financial support of many of our alumni help to provide what would otherwise be lost opportunities to our students. Many of the student scholarships that are offered via private funds have the caveat that students must work within the Department in order to receive scholarship funds. This is a wonderful idea as it requires the

students to participate in our Department and I hope this, in turn, stimulates the students to think of our Department as their home away from home. It provides faculty the opportunity to better know our students and provides our students the opportunity to interact with faculty, a win-win situation for both. Unfortunately, we have too few of these scholarship opportunities available for our students. Your financial support of existing scholarships or the endowment of new scholarships would ensure that our students today receive the same opportunities that were afforded to you. This is a legacy worth leaving. Your financial support of student scholarships and the Department as a whole would be much appreciated. Listed below are the current scholarship funds available for students as well as the Department's Biology fund which supports student/faculty research.

Scholarships and Funding

Biology Awards & Honors

This fund is used to support "hard working" students who do not have any other financial assistance. Biology faculty nominate deserving students.

Biology Department Fund

This fund is for general support for the Department of Biology. Monies from this account are used to support faculty/student research, faculty/student travel, and purchase of teaching supplies and equipment.

Biology Preserves Fund

This fund is used to support the development and maintenance of the Biological Preserves System at UNI, including such items as purchase of trees, shrubs, and equipment as well as for the development of exhibit areas and support of personnel involved.

Caroline Czarnecki Biological Sciences Scholarship

This scholarship provides support for students who demonstrate merit and financial need with preference given to students with a declared major in biological sciences, with a grade point average of at least 3.0. The award amount is \$1000.

Floyd Scholarship

This fund is used to provide scholarship support for students at the University of Northern Iowa who demonstrate merit and financial need with preference given to students entering their senior year and majoring in junior high or senior high biology or science teaching.

Vivian Wiseman Fullmer Scholarship

This scholarship is awarded to undergraduates who have a major or emphasis in an environmentally focused undergraduate program. Students must have financial need, scholarship, and professional dedication. The amount of the award is \$300.

Dr. and Mrs. Robert Good Summer Research Fellowship

This fellowship is intended to support undergraduate student research carried out through the summer. The fellowship provides \$3000 for the support of an undergraduate research project.

Dr.Timothy Greiner Undergraduate Biology Scholarship

This scholarship provides support to undergraduate biology majors who are in no less than their second semester of their major. The award amount is \$1000.

LaDuke Scholarship

This scholarship is awarded to two students who will be juniors or seniors and who are pursuing an undergraduate biology degree with an emphasis in Ecology and Systematics. Each applicant will receive a total of \$500.

♦ J.S. Latta Biology Scholarship

This scholarship provides support for a declared biology major, either a freshman or sophomore having either completed or currently enrolled in both Organismal Diversity and Cell Structure and Function. The student must have GPA of 3.5 or higher. The amount of the award is between \$250 and \$500

Northern Iowa Association of Pond and Water Gardeners Scholarship

This scholarship provides support for biology students at UNI who are of sophomore, junior or senior standing and who demonstrate merit with preference given to students from Iowa who are interested in plants and/or aquatics. The amount of funding is \$1000 per student.

Dr. Alan R. Orr Research Awards Endowment Fund

This award supports undergraduate experiential learning through hypothesis-driven research. Applicants must be Biology majors conducting research with a faculty member in the Biology Department.

Dr. Dave Swanson Genetics Research Award

This award supports undergraduate experiential learning through hypothesis-driven research. Applicants must be Biology majors conducting research with a faculty member in the Biology Department.

Support for students or department

Would you like to support a Biology student and/or the Biology Department? If so, please fill out the form below and return it to:

Cassie Luze, Director of Development UNI Foundation, Commons 205 College of Natural Sciences Development Cedar Falls, IA 50614-0282

Phone: 319-273-6078 E-mail: cassie.luze@uni.edu

Name			
Address			
City		State	Zip
I/we would li	ke to support the following fund(s)		
\$	Biology Awards & Honors		
\$	Biology Department Fund		
\$	Biological Preserves Fund		
\$	Caroline Czarnecki Biological Sciences	Scholarship	
\$	Floyd Scholarship		
\$	Vivian Wiseman Fullmer Scholarship		
\$	Dr. and Mrs. Robert Good Summer Reso	earch Fellowship	
\$	Dr. Timothy Greiner Undergraduate Bio	logy Scholarship	
\$	LaDuke Scholarship		
\$	J.S. Latta Biology Scholarship		
\$	Northern Iowa Association of Pond and	Water Gardeners	Scholarship
\$	Dr. Alan R. Orr Research Awards Endov	vment Fund	
\$	Dr. Dave Swanson Genetics Research A	ward	
\$	Other		
Type of Paym	nent: Check enclosed, payable to the UNI Foundation	n O Credit	t Card: Please charge my card
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Card #			Exp. Date
Calu #			Exp. Date

Department of Biology

University of Northern Iowa Cedar Falls, IA 50614-0421



Contact into: David Saunders
Department He

Department Head 319-273-2456

Two new species of Physaria - known as bladderpods- (Brassicaceae - Mustard Family) discovered by Steve O'Kane in summer 2009.

Web info: http://www.biology.uni.edu/

Photos by Dr. Steve O'Kane