



# The Henson News

SPRING 2010

## Visit Us On the Web

- Salisbury University Home Page  
[www.salisbury.edu](http://www.salisbury.edu)
- Henson School of Science & Technology  
[www.salisbury.edu/henson/](http://www.salisbury.edu/henson/)
- Department of Biological Sciences  
[www.salisbury.edu/biology/](http://www.salisbury.edu/biology/)
- Department of Chemistry  
[www.salisbury.edu/chemistry/](http://www.salisbury.edu/chemistry/)
- Department of Geography and Geosciences  
[www.salisbury.edu/geography/](http://www.salisbury.edu/geography/)
- Department of Health Sciences  
[www.salisbury.edu/healthsci/](http://www.salisbury.edu/healthsci/)
- Department of Mathematics & Computer Science  
[www.salisbury.edu/mathcosc/](http://www.salisbury.edu/mathcosc/)
- Department of Nursing  
[www.salisbury.edu/nursing/](http://www.salisbury.edu/nursing/)
- Department of Physics  
[www.salisbury.edu/physics/](http://www.salisbury.edu/physics/)



Richard A. Henson

## IN THIS ISSUE:

- Studies Abroad
- Department News
- Henson School Research
- Student and Faculty Achievements



## From the Henson Dean's Office

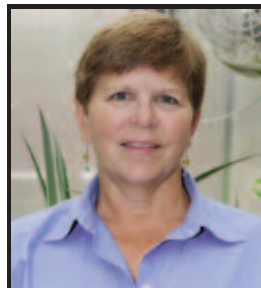
Despite declining state and federal budgets, the Henson School achieved a banner year in grants and contracts funding.

The Henson School faculty increased its activity in both submitting proposals and winning competitive awards from a variety of state and federal agencies as well as private foundations.

Applications increased to nearly \$5 million in requests in the first half of FY10 compared with an average of roughly \$2.5 million per year for the past five years. External awards spiked dramatically, from less than \$1 million just two years ago to nearly \$1.8 million in FY09 and an additional nearly \$1.8 million for just the first half of FY10.

Nursing Chair Lisa Seldomridge targeted three areas needed for expansion of nursing programs and then sought granting agencies to support each.

Her application to the Robert Wood Johnson Foundation provided scholarships for eight second-degree nursing students (a total of \$80,000; with \$160,000 for an additional 16 students still pending). In partnership with Peninsula Regional Medical Center and Atlantic General Hospital, Seldomridge then successfully applied to the Maryland Higher Education Commission to support expansion of clinical instructorships (\$635,000).



Henson Dean  
Karen Olmstead

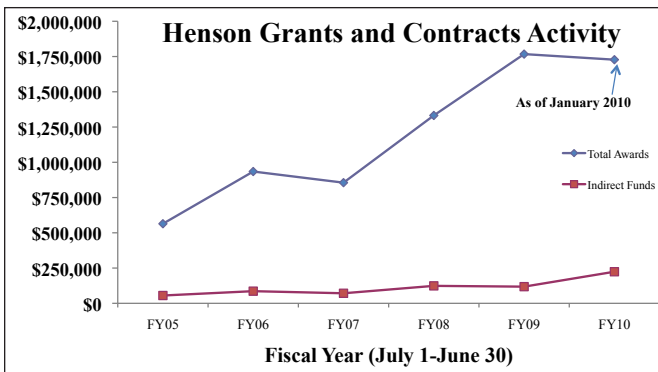
With funding for scholarships and additional clinical faculty in place, the final component was a high-fidelity simulation center. Dr. Seldomridge received more than \$937,000 from the Maryland Hospital Association to fund equipment and staffing for a state-of-the-art Simulation Center that will be operational by September 2010.

Dr. Mike Scott, associate professor of geography, and his team at the Eastern Shore Regional GIS Cooperative (ESRGC) have been involved in a number of important projects including development of geospatial tools for crime analysis and broadband planning (stories on page 3). The ESRGC and the Perdue School's Business, Economic and Community Outreach Network have also been active in an initiative to provide technical assistance to community leaders to develop state-of-the-art data visualization tools that merge traditional business intelligence, geographic information and dynamic modeling to support regional economic-development decision-making. Titled GeoDash, the project is in partnership with the Mid-Shore Regional Council and the Tri-County Council for the Lower Eastern Shore, and is funded by the U.S. Department of Commerce and the Maryland Department of Business and Economic Development.

The ESRGC finished FY09 with nearly \$750,000 in funding and is on track to exceed that in FY10.

Dr. Mark Frana and Dr. Elichia Venso, both professors of biology and co-directors of the Henson School's Bacterial Source Tracking Lab (BSTL),

Continued on page 8



# Studies Well Beyond the Classroom

Regions of successful Henson alumni can attest that a Henson School education will take one places in a metaphorical sense. For some Henson students, involvement in research projects and study abroad makes the notion literal and exotic.

## Destination: Curacao

For the last 10 years, Coral Reef Biology (BIOL 399) has traveled to tropical waters for on-site study of living reefs. For many years, the class, alternately taught by Drs. Joan Maloof and Ann Barse, travelled to Roaton, Honduras. This year, the class of a dozen students studied at the Caribbean Marine Biological Institute (CARMABI) in Curacao, Netherlands Antilles.

Student Carlene Avalone offered a five-star review of the experience in the department newsletter. "We cannot thank Dr. Maloof enough for her dedication to this course . . . . We packed so much fun and activity into just one week. I felt like every day was a whole week in itself . . . . Coral reefs are truly magnificent and ecologically invaluable ecosystems, and we've been very lucky to have seen them firsthand," Avalone said.

Other participating students included Rick Highers, Kristin Brannock, Emily Solak, Laura Hundy, Megan Fischbach, Ally Clyde, Jennifer Scott, Becky Lang, Ryan Protzko, Michelle Meininger and Caitlin Sauers.

## Destination: Tanzania

In January, 10 nursing students travelled to Arusha, Tanzania, as part of the Global Health HIV/AIDS in Africa – A Community Perspective course led by Dr. Karin Johnson. In this program, students learn about the

challenges of HIV/AIDS in Tanzania and the unique African strategies for addressing these challenges.

Under the auspices of the Global Service Corps based in Arusha, students receive an intensive week of training on HIV/AIDS in Tanzania and local prevention strategies, Tanzanian culture and basic Swahili. During the second week of the program, working with young Tanzanian college-age students, participants taught HIV/AIDS prevention classes in a train-the-trainer program in small villages near Arusha. Participants in these classes are local villagers who are expected to learn about HIV/AIDS prevention and to train others in the village.

The students who participated include Katherine Bernoske, Alexandra Duff, Jon Guzman, Elisse Kenty, Jamie Knapp, Lauren Mlinac, Stacey Moyers, Morgan Peters, Lindsay Thompson and Kathryn Wagner. Kortni Pedlow, an SU alumnae, and Anne Willey, an interested community person, also participated on the trip.

This was the fourth year Johnson has led a class to Tanzania.

## Destination: Indonesia

During summer 2009, student Shelby Smith traveled to Indonesia with Drs. Kimberly and Richard Hunter, Biological Sciences, to conduct a feasibility study for development of a genetic field lab on Hoga Island in the Wakatobi National Park in the southeast Sulawesi region of the country. Their fieldwork, supported by Operation Wallacea, focuses on hard corals that are thriving in marginal mangrove systems.

## Destination: China

In late spring 2009, a group of SU nursing students and alumni traveled with faculty members Dr. Dorothea McDowell and Katie Hinderer to study Traditional Chinese Medicine (TCM). While in China the group had opportunities to be educated in TCM and see the techniques in practice at a TCM hospital. While in Jingzhou City, Hubei, McDowell and Hinderer presented talks on "Prevention of Healthcare Acquired Infections" and "Critical Care Nursing in the United States" to the Academy of Jingzhou Nurses. Alumni Kortni Pedlow and Aaron Sebach presented talks on "Care of the Acute MI Patient" and "Trauma Nursing" to students of the Medical School of Yangtze University.

## Destination: Estonia

Dr. Karen Olmstead, Henson School dean, travelled to Tartu, Estonia, in November 2009 as part of a four-person delegation from SU working to establish a new study abroad program with the University of Tartu (UT), one of the most prestigious centers of learning in northern Europe. Ranked as one of the world's top 600 universities, UT is a robust research institution with a beautiful and historic campus dating back to the 1600s.

Starting in fall 2010, "Salisbury Abroad: Estonia" will allow SU students to live in Tartu and explore European studies and business at UT for the same cost as in-state tuition and housing in Salisbury.

Located on the banks of the Emajõgi River, Tartu is known as a city of young people with a rich heritage and culture.

Estonia has partnered with the State of Maryland since the northern European country emerged from the Soviet Union and gained independence in 1991. Since then, the Maryland National Guard has worked with Estonian colleagues on a variety of development projects. Maryland has more Sister City International relationships in Estonia than with any other nation in the world, including the City of Salisbury's formal partnership with Tartu. SU's involvement with UT will enhance ongoing collaboration with Estonia's civic, business and government organizations.

Opportunities for Henson students may include general education courses and academic minors as well as science, technology and mathematics courses and programs.



Henson students and faculty travel to Curacao: (from left, standing) Rick Highers, Kristin Brannock, Emily Solak, Laura Hundy, Megan Fischbach, Ally Clyde, Jennifer Scott, Becky Lang, Carlene Avalone, Mark Vermeij (CARMABI), Ryan Protzko, Caitlin Sauers, (kneeling) Joan Maloof (faculty), Michelle Meininger, Ann Barse (faculty).

## Double GIS Duty for Lembo

Dr. Art Lembo, Geography and Geosciences, recently received funding for two major projects—one that examines crime and another that evaluates spatial aspects of food production.

Lembo, an expert in the development of GIS mapping applications, received a \$185,000 grant to partner with the Salisbury Police Department to develop modules to identify locations, patterns and trends of crime activities in the city. These modules include an Internet-based crime-mapping system, an interactive crime-analysis dashboard and an in-field GIS application.

The Internet-based mapping system will allow Salisbury Police to explore crime patterns and trends city-wide based on factors such as crime type, time of year and time of day. The Salisbury PD seeks to identify potential clusters of criminal activity or correlations with other crimes, such as burglaries and abandoned homes. The crime

analysis dashboard will act like an automobile dashboard, displaying information collected from various sources in a visual and understandable format. The in-field GIS application is an Internet-based map in patrol cars.

Lembo serves as technical director for the Eastern Shore Regional GIS Cooperative (ESRGC) and is working with SU computer science alumnus and ESRGC programmer Tu Hoang ('09). SU senior Frank Rowe, a computer science major, is also working on the project.

Lembo is also a collaborator on a study of foodsheds based at Cornell University and Tufts University that is supported by a \$790,000 W.K. Kellogg Foundation grant. Foodsheds are geographic areas that supply food to populations. Lembo has developed a web-based GIS program that maps potential, local foodsheds in the New York region and will apply the model to other regions including

Michigan, Mississippi and New Mexico as part of the project.

"There are great risks to food security in our country and the world, due to transportation and production costs and political instability," Lembo said. "Foodshed analysis allows us to better understand the sources, and potential sources, of food. SU is using cutting-edge technology to explore these spatial relationships."

The work is an extension of the Mapping Local Food Systems project, which previously conducted research funded by the U.S. Department of Agriculture that examined New York's ability to supply its own food needs.

Lembo's portion of the current project's funding is \$60,000. SU senior Bryan Thom, a geography major, is assisting Lembo with the research.

## Evaluating a New Fuel Source

Two Henson School researchers are at work on Eastern Shore farm fields in an effort to explore the virtues of sorghum as a source of ethanol production.

Dr. Samuel Geleta and Dr. Christopher Briand, both in Biological Sciences, are working in collaboration with Solar Fruits Bio Fuels, LLC on a series of trials of eight sweet sorghum varieties to test the plants' potential as stock for ethanol production on Delmarva. The work has been done on a Wicomico County farm owned by Dr. Jeffrey Benner.

According to Geleta, sorghum is attractive as a prospective fuel source because it is drought resistant, fast-growing and has low nutrient and fertilization requirements. It also may have cost and energy efficiency advantages over the predominant source of ethanol: corn.

"Sweet sorghum can be grown on marginal land with less fertilizer and water as compared to corn," Geleta said. "Since sweet sorghum

juice contains simple sugar, producing ethanol from it simply requires extracting the juice and fermenting. With corn, you have to hydrolyze the starch to simple sugar before fermenting."

Five SU students have had the opportunity to work with the researchers on the project. They include SU seniors Hoa Nguyen, Kristen King and Steven Weschler, along with juniors Kayla Pennerman and Brian Knepper.

Funded by the Maryland Grain Producers Utilization Board, the study was launched by the Delmarva Sweet Sorghum for Ethanol Group. Other researchers involved are Ron Mulford and Dr. Robert Kratochvil from the University of Maryland College Park. Additional support comes from Venture Manor Farms/Oakley's Farm Market and the University of Maryland.



Biology students (from left) Hoa Nguyen, Kayla Pennerman and Brian Knepper worked on the sweet sorghum project.

## Mapping Broadband's Reach

The Henson School-based Eastern Shore Regional GIS Cooperative (ESRGC) is one of two SU organizations to receive a \$540,000 award for a two-year project to research and map broadband service across Maryland.

The ESRGC and the Business, Economic and Community Outreach Network (BEACON) received the grant as part of \$2 million awarded to Maryland through the

National Telecommunications and Information Administration's State Broadband Data and Development Grant Program.

"For our area, in particular, this is a critical piece of the puzzle to move the Eastern Shore forward in the 21st century," said Dr. Mike Scott, ESRGC director. "The shore needs high-speed internet access that is affordable."

The ESRGC will create maps associating some 3.5 million addresses in the state with

accessibility, quality and affordability of broadband service. BEACON, which is based in the Perdue School of Business, will host focus groups statewide to explore opinions about the future of broadband in Maryland. The broadband mapping is one of many projects underway at the ESRGC, which recently moved into a new home on South Division Street and now employs six full-time GIS professionals.

# Department News

## Biology

■ Through the efforts of Dr. Mark Holland and Dr. Eugene Williams, SU received an invitation from the Washington Academy of Science to establish the organization's first student chapter. Holland and Williams are long-time members and officers of the organization, which dates to 1898 and whose founders included such distinguished scientists as Alexander Graham Bell and Samuel Langley, secretary of the Smithsonian Institution. Scientific societies, including the National Geographic Society, the Entomological Society of America and the Philosophical Society of Washington, initially affiliated with the organization. Student members will be able to take advantage of professional development and network connections through this organization, which now includes more than 60 professional affiliate organizations.

In March, 12 SU students presented their work at CAPSCI, the biennial meeting of the Washington Academy of Sciences.

■ A new M.S. Applied Biology Program was approved by the University System of Maryland and will begin in fall 2010.

The M.S. in Applied Biology Program is an outgrowth of the very successful undergraduate program in biology at SU. The department currently has about 520 undergraduate majors and places particular emphasis on undergraduate research experiences. The new M.S. in Applied Biology Program offers students with bachelor's degrees and working professionals in technical positions the opportunity to build on undergraduate and work experiences while gaining proficiency in the technical aspects of bench science and new skills. At present, opportunities for graduate study, particularly in the areas of molecular and cellular biology, are very limited on the Eastern Shore.

## Chemistry

■ In March, 2009, SU chemistry alumnus Jeffrey Miller and Dr. Miguel Mitchell received a U.S. patent for a method for the synthesis of curcumin analogues.

■ The department completed its five-year recertification report for the American Chemical Society's Committee on Professional Training

■ The department kicked off a Supplemental Instruction (SI) Program, which is the first in the Henson School. SI consists of a series of weekly review sessions for students taking historically difficult courses. Students participating in SI were more successful (more Cs or better) than students who did not participate.

■ Dr. Steven Habay recently received a \$44,700 Cotrell Young Investigator Award in a competition sponsored by the Research Corporation for Science Advancement. The project focuses on the synthesis of decahydroquinolines by inverse electron demand-controlled IMDA reaction.

■ Dr. Chasta Parker, SU alumna, joined the chemistry faculty in fall 009. Parker, a biochemist, previously taught at Winthrop University in South Carolina.

## Geography and Geosciences

■ Dr. Mike Scott received two major awards during 2009-10. Scott was a recipient of a University of Maryland System Elkins Professor Fellowship for the academic year. The fellowship recognizes outstanding faculty within the system and includes an \$80,000 award. Scott also was named the 2009 Third Quarter HAZUS User of the Year for his analysis of potential flood damage in Maryland. HAZUS-MH is a risk assessment tool developed under the Federal Emergency Management Agency (FEMA) for analyzing potential losses from floods, hurricane winds and earthquakes. Each quarter, FEMA spotlights the contributions of a HAZUS user who has provided exceptional services to help expand the program.

■ The department began a new undergraduate degree program in earth science, including a track in secondary education.

## Health Sciences

■ The first group of students to earn degrees through respiratory therapy's Bachelor of Science Program at the Universities of Shady Grove is expected to graduate in May.

As part of the program, classes are taught at Shady Grove and Salisbury University via interactive, two-way video. Clinical experiences are available at Shady Grove Adventist, Holy Cross and other area hospitals. As an advanced practitioner

program, graduates qualify for the National Board for Respiratory Care (NBRC) exams. SU has the only Committee on the Accreditation of Respiratory Care (CoARC)-accredited baccalaureate respiratory therapy program in Maryland. Classes at Shady Grove began in fall 2008. The program is coordinated by Adriana Guerra, M.P.H., RRT.

■ Dr. Robert Joyner recently was named as one of four consultants to the National Board for Respiratory Care, which is the professional organization responsible for developing and administering the national board exam. Joyner also was recently recognized as a Fundamentals of Critical Care Support (FCCS) Instructor by the Society of Critical Care Medicine. Joyner's status as an FCCS Instructor is unique among Registered Respiratory Therapists (RRT).

■ Dr. Diane Davis recently was appointed as a member of the Clinical Chemistry Examination Committee of the American Society for Clinical Pathology (ASCP). As a member of this committee, Davis supports the efforts of the ASCP's Board of Certification to assure that individuals performing laboratory tests are qualified and proficient. Appointment to the Clinical Chemistry Examination Committee reflects the high regard Davis has among her national peers.

■ Respiratory therapy joined with the Department of Respiratory Care at Peninsula Regional Medical Center to host Partners in Respiratory Care Excellence X in March. The conference, now in its 10th year, brings together top professionals in respiratory care and critical care from around the nation to interact with respiratory care students and local professionals in the field. More than 150 attended the event.

■ Dr. Sidney Schneider, professor of health sciences in respiratory therapy and applied health physiology, has been appointed chair of the Health Sciences Department beginning with the 2010-11 academic year. Dr. Robert Joyner will step down from the position to begin duties as associate dean of the Henson School in July 2010.

■ Applied Health Physiology (AHPH) Program students are now able to use Shady

Grove Adventist Hospital as a clinical site as part of a recent combined affiliation agreement involving the AHPH program, respiratory therapy and the hospital. The agreement, by creating the opportunity to participate in Shady Grove Adventist's Cardiac Rehabilitation Program, expands geographical options for AHPH students.

## Mathematics and Computer Science

■ Dr. Homer Austin recently received a Faculty Appreciation Award from the SU Alumni Association. The annual awards recognize faculty members seen as inspirational to SU students. Austin was recognized by the group as "... one of the most approachable, understanding and enthusiastic professors and advisors. He can make statistics come alive and that is truly a remarkable feat."

■ Dr. Michael Bardzell became chair of the department beginning with the 2009-10 academic year. Dr. Kathleen Shannon stepped down as chair after serving 10 years in the position and spent the academic year on a well-deserved sabbatical.

## Nursing

■ *Focus on Health*, a public access television program that explores issues and innovations in the world of medicine and is hosted by associate professor Dr. Mary DiBartolo, marked its 100th broadcast episode on PAC 14.

The program, in its sixth year on the air, is produced by the Nursing Department in an on-campus studio and presents current information on medical research, diseases, treatments, medicines, procedures and prevention strategies. In some episodes, the cameras go into the treatment room for procedures such as knee replacement, carpal tunnel repair, cardiac catheterization and open-heart surgery.

■ The department celebrated 30 years of awarding the B.S. in nursing at a gala held in May 2009. Over 100 people were in attendance.

■ SU nursing students achieved the highest pass rate of all baccalaureate programs in Maryland on the National Council Licensure Examination (NCLEX) in 2008-2009. That marked the second consecutive academic year SU students scored the highest pass rate, according to the Maryland Board of Nursing.

With some 96.05 percent of students passing on the first try, SU surpassed peers



Dr. Homer Austin (mathematics, third from right) was recognized with a 2010 SU Alumni Association Outstanding Faculty Award. Also pictured are other Alumni Award recipients and Jason Curtin (far right), SU alumni relations director.

including Johns Hopkins University and the University of Maryland. SU also topped its pass rate of 95.45 percent from the previous year.

The statistics represent the efforts of students in SU's two undergraduate nursing tracks: traditional first-degree students and accelerated second-degree students. Some 73 out of 76 passed on the first try.

## Physics

■ Dr. Mark Muller, an expert in mechanical engineering joined physics in a tenure-track position at the start of the 2009-10 academic year. Muller earned his Ph.D. from the University of Hawaii in 2008 and is interested in the computational modeling and analysis of sonar signals.

■ Dr. Andrew Pica worked with the Henson Dean's Office to modify degree options in a way that will facilitate the transition of students of the SU Physics Department to the A. James Clark School of Engineering at University of Maryland College Park. Pica worked to develop a re-negotiated and clarified Memorandum of Understanding between SU and College Park for students seeking a three-two dual degree option.

■ The department reported that, in awarding an average of 9.5 bachelors degrees in physics over the last four graduating classes, SU is producing more than double the national average of physics degrees awarded at comparable universities.

## Dean's Office

■ The Dean's Office coordinated the efforts of a number of Henson faculty who contributed to three proposals currently pending with the National Science Foundation. Dr. Stephen Habay (chemistry)

served as principal investigator (PI) on a proposal to provide scholarships and other support to students in selected STEM majors. Dr. Tom Jones, recently appointed as Salisbury University's STEM coordinator, served as PI on a proposal to provide academic support to STEM students and to increase outreach to high-school and community college students. Dr. Mike Scott and colleagues in geography worked on a proposal to transition SU's M.S. in GIS Administration Program to a professional science master's program through funding for graduate assistantships and other support.

■ Dr. Robert Joyner, associate professor of health sciences in the respiratory therapy, begins duties as associate dean of the Henson School in July.

■ After three and a half years of service in the Dean's Office, Dr. Michael Folkoff (previously interim dean and associate dean) decided it was time to return to his faculty role in the Department of Geography and Geosciences. Folkoff's insights and strategic vision will be missed, but we applaud his eagerness to return to teaching and research.

■ Dr. Karen Olmstead, Henson School dean, recently received two external appointments. She was selected as a member of the 2010 Class of Leadership Maryland, and she was elected chair of the Committee on Comprehensive Institutions of the Council of Colleges of Arts and Sciences.

# Henson Student Achievers

**Mary Cockey**, nursing, recently won a national essay contest sponsored by the Robert Wood Johnson New Careers in Nursing Scholarship Program. Contestants wrote on the theme "I Believe This About Nursing." Cockey was also one of eight SU students awarded \$10,000 scholarship as part of the program. The other scholarship winners were Gerald Brenner, Jon Guzman, Sanette Jackson, Kristen Knepp, Rachael Lewis, Travis Pike and Lakshmi Sigamony.

**Anna Mackley**, clinical lab sciences, recently received a prestigious American Society for Clinical Pathology/Siemens Healthcare Diagnostics Legacy Scholarship. The award is one of five given nationally for a program which is open to a child, grandchild or sibling of a clinical laboratory professional. Mackley's mother is a practicing clinical laboratory scientist at Carroll Hospital Center in Westminster, MD. Mackley is currently involved in an undergraduate student research

project on the survival of *E. coli* O157:H7 on bathroom surfaces.

**Mario Crisalli**, biological sciences, completed an internship during summer 2009 with The Jackson Laboratory, a leading biomedical research institution based in Maine and California. He was one of 33 interns selected from a group of more than 300.

**Five SU students** recently placed at the 12th annual Undergraduate Research Symposium in Chemical and Biological Sciences at the University of Maryland Baltimore County. Chemistry students Christopher Simms and Patrick Riley took second places honors in poster sessions. Biology students Katherine Pflaum, Ryan Protzko and Jesse Bowden also won second place awards in poster sessions. Dr. Bo Luttrell, chemistry, and Dr. Les Erickson and Dr. Elizabeth Emmert served as research mentors.

mentors Dr. Kim Hunter (biological sciences) and Katherine Miller (chemistry).

Seven Henson students will present their research at the National Conference of Undergraduate Research at the University of Montana, Missoula in April. Among the 21 SU students travelling to Missoula for NCUR 2010 are Charles Davis, Ryan Protzko (biological sciences), Ronald Marney, Lauren Kopishke, Chris Fitzpatrick (geography/geosciences), Oluwadamilola Ekundayo (nursing) and Nicole Massarelli (mathematics).

**STEM Living-Learning Center:** During the 2009-2010 academic year, first-year students interested in academic areas within the Henson School enjoyed the opportunity to live within a residential community of similarly focused scholars when a Science, Technology, Engineering and Mathematics (STEM) floor was added to the SU Living-Learning Communities program.

The Living-Learning Communities are specialized housing options that allow first year students to study, reside and make friends with others who have similar interests. They feature planned activities by STEM faculty and resident assistants.

Housed on the fifth floor of Chester Hall, the STEM community is open to any major with an interest in a STEM discipline. Together the students take a variety of classes together. Outside the classroom, they participate in group activities ranging from career nights to weekend canoe trips.



Chemistry students (from left) Christopher Simms and Patrick Riley and biology students Katherine Pflaum, Ryan Protzko and Jesse Bowden each won second place in their respective poster sections at the 12th annual Undergraduate Research Symposium in the Chemical and Biological Sciences held October 10, 2009, at the University of Maryland Baltimore County.

The **SU World Geography Bowl Team** won the 2009 Middle Atlantic Division of the Association of American Geographers Geography Bowl. The team included students Wes Skeeter and Sean Adkins and faculty advisor Dr. Mark de Socio.

**Shelby Smith** presented her research at an international meeting in Turin, Italy, with research

## Henson School in the Community

Henson School faculty and students maintain an extensive record of lending academic expertise, facilities, and time to support community programs and projects. Here are a few recent examples of such efforts:

- Dr. Sophie Wang was an active contributor to the Henson School efforts to support K-12 STEM programs in the region and state. Wang engaged students in the programming of computer games, and her work with STEM students at Salisbury Middle School was highlighted in a January feature article in *The Salisbury Daily Times*.

- The Department of Mathematics and Computer Science recently hosted 60 students from 20 high schools in Delaware, Maryland and Virginia in the 26th annual Eastern Shore High Schools Mathematics Competition.

This major STEM outreach effort was developed by mathematics faculty in 1984 and provides savings bonds and books as prizes for top competitors. Drs. Kurt Ludwick and Jennifer Bergner, mathematics, served as coordinators for the most recent edition of the contest.

- Despite being more than 1,400 miles from Haiti, 36 geography majors volunteered to help the Earthquake Engineering Research Institute (EERI) on a photo interpretation project to examine devastation in the Caribbean nation. Based in Oakland, CA, EERI is the nation's premier professional organization dedicated to earthquake hazard assessment and reduction worldwide. The Henson students joined scientists and engineers from some 19 countries who mobilized to help with Operation GEO-CAN (Global Earth

Observation-Catastrophe Assessment Network). Using a Google Earth application tool, the student volunteers compared and evaluated detailed, high-resolution aerial images of Haiti from before and after the earthquake to identify damaged buildings. The project was designed to aid ground crews as they worked to conduct damage assessments, prioritize rebuilding and help victims' families.

- The Physics Department helped launch local middle school student efforts in the First Lego League. Physics major Andrew Green coached the Wicomico Middle School Team that went to the state finals.

# Henson Faculty in Print

Heartly congratulations to the many Henson School faculty members whose research and scholarship efforts have yielded recent publications in academic journals and books.

This list includes publications by Henson School faculty since January 2009 and is intended as a comprehensive list. If any faculty member has a publication that didn't find its way onto the list, please forward the information to the Dean's Office for inclusion in the next issue of *The Henson News*.

## Biological Sciences

Beerkircher, L., F. Arocha, **A. Barse**, E. Prince, V. Restrepo, J. Serafy, and M. Shivji. 2009. Effects of species misidentification on population assessment of overfished white marlin *Tetrapturus albidus* and roundscale spearfish *T. georgii*. *Endangered Species Research* 9: 81–90.

Fenwick, A.M., **R.L. Gutberlet, Jr.**, J.A. Evans, and C.L. Parkinson. 2009. Morphological and molecular evidence for phylogeny and classification of South American pitvipers, genera *Bothrops*, *Bothriopsis*, and *Bothrocophias* (Serpentes: Viperidae). *Zoological Journal of the Linnean Society* 156: 617–640.

**Holland, M.** in press. Give and Take from Phylloplane Microbe, chapter for *Ecological Aspects of Nitrogen Metabolism in Plants*. Polacco and Todd eds. Wiley/Blackwell.

**Malooof, J.** 2009. Ken Wu: the fight for Canada's remaining Pacific old growth. Terrain.Org, www.terrain.org/articles/24/malooof.htm.

**Malooof, J.** in press. Maryland's Champion Trees: with new records for Wicomico County. *Maryland Naturalist*.

Morris, J.A.S., Jr., J.L. Akins, **A. Barse**, D. Cerino, D.W. Freshwater, S.J. Green, R.C. Munoz, C. Paris, and P.E. Whitfield. 2009. Biology and Ecology of the Invasive Lionfishes, *Pterois miles* and *Pterois volitans*. *Proceedings of the 61st Gulf and Caribbean Fisheries Institute*. Gosier, Goudeleoupe, French West Indies.

**Price, D.L.** and M. L. May. 2009. Behavioral Ecology of *Phanaeus* Dung Beetles (Scarabaeidae: Scarabaeinae): Review and New Observations. *Acta Zoologica Mexicana* 25(1): 211-238.

**Mirel, V.**, Y. Chen, and R. Rivers. 2009. The involvement of CGRP, adrenomedullin, and sensory nerves in remote vasomotor responses within the hamster cheek pouch microcirculation. *Microvascular Research* 77(2): 192-197.

## Chemistry

**Habay, S.A.**, S.S. Park, S.M. Kennedy, and A.R. Chamberlin. 2009. Methods for the chemical synthesis of non-coding amino acids found in natural product peptides. In *Amino Acids, Peptides, and Proteins in Organic Chemistry Volume 1: Origins and Synthesis of Amino Acids*. A.B. Hughes, Ed. Wiley-VCH, 163-244.

## Geography and Geosciences

**Bloodworth, G.** in press. Reflections of American academics following a foray into western Canada: what was learned as a result of attending the International Canadian Studies Institute. *American Review of Canadian Studies*.

**Chen, X.M.** 2009. GIS and Remote Sensing in Environmental Risk Assessment. In, Mehdi Khosrow-Pour (ed.) *Encyclopedia of Information Science and Technology*, 2nd Edition, Volume 4, IGI Global Publisher.

**de Socio, M.** 2010. Geographers mobilize: A network-

diffusion analysis of the campaign to free Ghazi-Walid Falah. *Antipode* 42(2): 310-335.

**de Socio, M.** 2010. Marginalization of sunset firms in regime coalitions: A social network analysis. *Regional Studies* 44(2): 167-182.

**de Socio, M.** in press. Urban and regional development. In, Warf B. (ed.), *Encyclopedia of Geography*. Thousand Oaks, CA: Sage.

**de Socio, M.** in press. Peter Taylor. In, Warf B. (ed.), *Encyclopedia of Geography*. Thousand Oaks, CA: Sage.

De Wan, A.A., P.J. Sullivan, **A.J. Lembo**, C.R. Smith, J.C.

Maerz, J.P. Lassoie, and M.E. Richmond, M.E. 2009. Using occupancy models of forest breeding birds to prioritize conservation planning. *Biological Conservation* 142(5): 982-991.

Gokmen M., **M. de Socio**, and G.-W. Falah. 2009. Geopolitics from below: Student perceptions of contemporary US-Turkey relations. *Arab World Geographer* 11 (1-2): 18-46.

Gokmen, M., **M. de Socio**, and G.-W. Falah. 2009. Geopolitics from above: A review of US-Turkey bilateral relations, 1947-2006. *Arab World Geographer* 11(1-2): 1-17.

**Skeeter, B.R.** 2009. A Revised Climatically Optimal Major League Baseball Season in North America. *The Geographical Bulletin* 50(2): 83-91.

Stewart, J., J. Hu, R. Koyen, **A.J. Lembo**, B. Collins, C. Davis, and T.D. O'Rourke. 2009. Use of airborne and terrestrial lidar to detect ground displacement hazards to water systems. *J. Surv. Engrg.* 135(3): 113-124.

Sousa, C., R. Malecki, **A.J. Lembo**, and L. Hindman. 2009. Monitoring habitat use by mute swans in the Chesapeake Bay. *Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies* 62: 88–93.

**Zaprowski, B.** 2009. *Earth and Beyond: An Introduction to Earth-Space Science* (2nd ed.) Kendall-Hunt, 323 p.

## Health Sciences

**Davis, D.L.** 2009. Tumor Immunology. In, C.D. Stevens (ed.), *Clinical Immunology and Serology*, 3rd edition. F.A. Davis. Philadelphia, PA.

**Davis, D.L.** in press. Safety Officers, Should You Be the Manicure Police? *Laboratory Medicine*.

**Davis, D.L.** and C. Williams. 2009. Methicillin-Resistant *Staph aureus* fomite survival. *Clinical Laboratory Science* 22(1):28.

**Insley, C., S. Schneider, and R. Joyner.** 2009. Physicians perspectives of the respiratory care practitioner as a mid-level practitioner in specific domains and settings of clinical practice. *Respiratory Care* 54:1551.

**Joyner, R.L. and S.R. Schneider.** 2009. Heated, humidified high-flow nasal cannula as an alternative to nasal continuous positive airway pressure for providing supplemental oxygen to premature neonates. *John's Hopkins University School of Medicine eNeonatal Review* 6(10):3-6.

**Insley, C.R., R.L. Joyner, and S. Schneider.** 2009. Is it time for a masters prepared mid-level respiratory care practitioner? *The Respiratory Exchange* 3: 6-8.

Muller, S. M., T.R. Gorrow, and **S.R. Schneider**, S.R. 2009. Enhancing appearance and sports performance: are female collegiate athletes behaving more like males? *Journal of American College Health* 57(5): 513-520.

## Nursing

**Bracken, M.I.**, J.T. Messing, J.C. Campbell, L.N. La Flair, and J. Kub. 2010. Intimate partner violence and abuse among female nurses and nursing personnel: prevalence and risk factors. *Issues in Mental Health Nursing* 31: 137-148.

Cottingham, S., **DiBartolo, M. C.**, **Battistoni, S.**, & **Brown, T.** in press. Partners in Nursing: A mentoring initiative to enhance nurse retention. *Nursing Education Perspectives*.

**DiBartolo, M.C.**, and **L.A. Seldomridge.** 2010. From community outreach to reaching students: Using public access television as an educational strategy. *Nurse Educator* 35(3): 1-4.

**DiBartolo, M. C.**, and **L.A. Seldomridge.** 2009. Cinemeducation: Teaching end-of-life issues using feature films. *Journal of Gerontological Nursing* 35(8): 30-36.

Jeffers, L. A., and **M.C. DiBartolo.** in press. Raising health care provider awareness of sexually transmitted disease in patients over fifty. *Journal of Gerontological Nursing*.

**Webster, D.** 2009. Addressing nursing students' stigmatizing beliefs toward mental illness. *Journal of Psychosocial Nursing and Mental Health Services* 47(10): 33-44.

**Webster, D.** in press. Promoting empathy through a creative reflective teaching strategy: A mixed-method study. *Journal of Nursing Education*.

## Mathematics and Computer Science

**Austin, H.** and J. Austin. 2009. Binet's Formula for Recursive Integer Sequences. *Journal of Mathematical Sciences and Mathematics Education*. www.msme.us/2009-1-1.pdf.

**Bardzell, M.**, and **D. Spickler.** In press. Cellular Automata over Group Alphabets: Undergraduate Education and the PascGalois Project. *Journal of Cellular Automata*.

Bilodeau, G., P. Thie, and **G. Keough.** 2009. *An Introduction to Analysis*. Jones and Bartlett Publishers.

Coppin, C., W. Mahavier, **E. May**, and G. Parker. 2009. The Moore Method: A Pathway to Student Centered Learning. *MAA Notes* #75.

Duan, Q. and **E. Lu.** In press. Network service description and discovery for the next generation internet. *International Journal of Computer Networks*.

Groth, R., **J. Bergner, D. Spickler, and M. Bardzell.** 2009. A Qualitative Approach to Assessing Technological Pedagogical Content Knowledge. Published in *Contemporary Issues in Technology and Teacher Education*, Volume 9, Issue 4.

Lee, H.-C., **S.-E. Park**, Y.-J. Chung. In press. Performance evaluation of pre-evaluation functions in the collaborative filtering recommender system. *Proceedings of the 2009 International Conference on Parallel and Distributed Processing Techniques and Applications* (PDPTA '09).

Yang, M., H. Selvaraj, **E. Lu**, J. Wang, S.Q. Zheng, and Y. Jiang. 2009. Scheduling Architectures for DiffServ Networks with Input Queuing. *Electronics and Telecommunications Quarterly* 55 (1): 9-30.

## Your News Is Good News!

In *The Henson News*, we feature as many news items, professional achievements, community outreach efforts, faculty publications and student accomplishments as possible. Please be sure to forward news of note happening in your department, office, lab or classroom to the Dean's Office ([hensonschool@salisbury.edu](mailto:hensonschool@salisbury.edu)), and we'll include the item in the next issue of the newsletter.

The next issue of *The Henson News* will be published in early fall. That creates an excellent opportunity to include fall and winter calendar items of interest such as lectures, seminars, conferences, community outreach activities and any other special events. Please forward information to the Dean's Office about 2010-11 events as you add them to your calendar.

## Alumni News, Too!

It's always welcome news to hear about the professional opportunities and career achievements that our Henson School graduates experience after they've left campus. Please forward any interesting news about alumni to the Dean's Office ([hensonschool@salisbury.edu](mailto:hensonschool@salisbury.edu)), and we'll include them in the newsletter.



---

Continued from cover

### From the Henson Dean's Office

have collaborated for several years with the Maryland Department of the Environment (MDE) to characterize pollution sources in Maryland's waterways. The BSTL – MDE collaboration has been so productive that the BSTL will receive a base budget of more than \$130,000 annually from the MDE with additional funding for specific projects. This 'line-item' budgeting reflects the value that MDE places on the contributions of the BSTL, which include genetic typing of bacterial contaminants (e.g. wildlife, pets, livestock or human) in water and sediment samples as well as throughout watersheds.

I extend my appreciation to faculty who submitted proposals. Proposal preparation requires a tremendous amount of time and effort, but the rewards are many. Even if a proposal is not funded, our research, teaching and outreach programs are advanced as a result of the deep thinking required by the proposal-writing process. Thanks as well to our colleagues in University Research Services who diligently support our proposal and grant activities.