

COLLEGE OF SCIENCE, ENGINEERING AND TECHNOLOGY
April 2008
GOOD NEWS

BIOLOGICAL SCIENCES

Mahoney, A.M. and R.R. Kowal. 2008. Three new varieties of *Packera paupercula* (Asteraceae, Senecioneae) in Midwestern and Southeastern North America. *Novon* 18: 220-228.

A paper published by Dr. Steve Mercurio, Professor, from the Oxford Round Table on Global Warming and Sustainable Development: Governing a Crisis. Mercurio, S.D. (2008) Problems with producing the biofuel ethanol sustainably via large-scale corn agriculture. *Forum on Public Policy* 3: 367-370.

Nora R. Ibargüengoytía, Juan Carlos Acosta, Jorgelina M. Boretto, Héctor J. Villavicencio, José A. Marinero, and **J. D. Krenz**. In Press. Field thermal biology in *Phymaturus* lizards: Comparisons in arid environments from the Andes to the Patagonian steppe in Argentina. *Journal of Arid Environments*.

The following talk was given: Zachary Bateson, John Krenz, and Robert Sorensen, "Sperm precedence in squamates: may the best man win", Midwest Ecology and Evolution Conference. Ohio University, Athens, OH, March, 2008.

Zachary Bateson, a biology graduate student, received the Best Presentation Award for his talk given at the Midwest Ecology and Evolution Conference. Ohio University, Athens, OH, March, 2008.

Michael Witthaus and Adam Sudbeck, undergraduates majoring in biology, presented a poster entitled "Characterization of Pripheal Neurovascular Capillary Structure" at the Minnesota Academy of Science meeting. Their presentation won first place for the Tri-Beta, John C. Johnson Award for Excellence in Undergraduate Research. In addition, they received the Brooks and Johnson Travel Stipend to present their work at the next Tri-Beta national convention. Tri-Beta is a biological honor society and the Pi Psi chapter was chartered for Minnesota State, Mankato in Spring 2007.

The MSU Mankato Food Science program was honored at the FFA convention in Minneapolis April 28, 2008. Dr. Dorothy Wrigley (Biology) and Joye Bond (Family and Consumer Science) were awarded honorary FFA degrees for their work with the FFA Food Science Career Day Event.

CHEMISTRY AND GEOLOGY

Dr. Stephen Losh, Assistant Professor, was the presenter for the 2008 Douglas R. Moore Faculty Research Lecture, which took place on Monday, April 14, at 7:00 pm in the CSU Ostrander Auditorium. Dr. Losh's lecture topic was "Petroleum Exploration and Production Technology: High-Tech Deep Down".

Dr. Jeff Pribyl, Professor, was a facilitator for two sessions at the Minnesota State Colleges and Universities/Project Kaleidoscope conference, "Keeping Students Engaged in STEM" held at Southwest Minnesota State University, April 25-26, 2008. The focus of the sessions was on Process Oriented Guided Inquiry Learning (POGIL).

ELECTRICAL AND COMPUTER ENGINEERING AND TECHNOLOGY

Qun Zhang, Changbao Ma, and Edward Van Keuren, "Confinement Analysis in Symmetric and Asymmetric Nanoscale Slab Slot Waveguides," accepted (oral presentation), Optical Society of America (OSA) 2008 Integrated Photonics and Nanophotonics Research and Applications (IPNRA) Topical Meeting. (Drs Ma and Keuren are from Georgetown University.)

Qun Zhang, Changbao Ma, and Edward Van Keuren, "Confinement optimization of symmetric and asymmetric slab slot waveguides," submitted to OSA Optics Express.

INFORMATION SYSTEMS AND TECHNOLOGY

Dr. Christophe Veltsos, Assistant Professor, was selected as a speaker at the 2008 Secure360 conference which will take place on May 13-14 in Minneapolis. Secure360 is the biggest security-related conference in Minnesota, covering topics such as risk management, information security, governance, audit, contingency planning and human capital.

MATHEMATICS AND STATISTICS

Dr. Christopher Danielson, Assistant Professor, presented two sessions at the Minnesota Council of Teachers of Mathematics annual conference in Duluth, April 25 and 26. The first session presented a set of ideas for improving pre-service elementary teachers' understanding of place value and was titled, "Can you count to @!?! or Playing with place value". The second session shared preliminary results from a research project involving the geometry knowledge of pre-service secondary math teachers and was entitled, "Geometry knowledge in technology: Sketchpad as an assessment tool."

Dr. Francis T. Hannick, Professor, presented a workshop on Hands-On Experience with Numerous Activities for the Elementary School Mathematics Curriculum at the Annual Meeting & Exposition of the National Council of Teachers of Mathematics in Salt Lake City, UT on April 11, 2008.

Tsao, Y.L & Chen H. L. (2008). Applying Mathematical Path for Math Learning. *Science Education Monthly Journal*. 302, 21-37.

In-Jae Kim and Bryan L. Shader, Sign patterns that require a positive or nonnegative left inverse, *Electronic Journal of Linear Algebra* 17 (2008), 209-218.

In-Jae Kim and Bryan L. Shader, On Fiedler- and Parter-vertices of acyclic matrices, *Linear Algebra and its Applications* 428 (2008), 2601-2613.

Dr. I.-J. Kim presented "Inertias of Matrix Patterns" at the Mathematical Association of America (MAA)-North Central Section meeting hosted by the College of St. Benedict in St. Joseph, MN on April 26.

MECHANICAL AND CIVIL ENGINEERING

Drs. Patrick Tebbe (Mechanical Engineering), Saeed Moaveni (Mechanical Engineering) and Louis Schwartzkopf (Physics) have received a Renewable Energy grant from the Minnesota Office of Energy entitled "Performance Analysis of Solar Thermal Walls in the Twin Cities Area - Minnesota State University Mankato".

Dr. Patrick Tebbe, Associate Professor, and student co-authors Brian Weninger and Corey Thibeault have been notified that their 2008 ASEE conference paper "Construction of a Radiant Cooling and Control Demonstration Unit for Use in Engineering Courses" has won a Best Paper award for the Energy Conversion and Conservation Division.

PHYSICS AND ASTRONOMY

Dr. Russ Palma, Professor, gave an invited seminar entitled "The Early Solar System: Surprises from NASA's Stardust Mission" at St. Olaf College, Northfield, MN on April 16.

CSET

Research by Ms. Tracey Hammell (History), "Amelia Bowling and the One Thousand-Acre Forest," was honored as a Graduate Student Project of the Year by the President's Commission on the Status of Women. Ms. Hammell is an Academic Advisor in our College Advising Office.