THE GEOLOGICAL SOCIETY OF AMERICA

Geoscience Education Division

http://geosciedu.org/ Summer 2005

From your Newsletter Editor

I hope you all are having productive and/or relaxing summers. I am teaching two courses this summer, as well as handling undergraduate advising, so I'm anxiously looking forward to the end of July and a much-needed break before gearing up for the Fall semester.

This is a short but informative summer version of the GED newsletter. We are attempting to get this out prior to the abstract deadline for the Fall 2005 GSA meeting in Salt Lake City, so that items related to paper and poster sessions and the abstract deadline will not be missed. July 12 is the GSA abstract deadline…I'm sure some of you will be joining me at the eleventh hour as I try to submit mine!

As always, if you have any news items for the next GED newsletter (Winter 2006), send them to me at mhafen@cas.usf.edu. I hope to see many of you in Salt Lake City!

Mark R. Hafen
Department of Geography, University of South Florida

GSA Topical Sessions of Interest

1. GIS and Interdisciplinary Education

Your interest is solicited for a Topical Session 101 for the 2005 GSA Meeting to be held in Salt Lake City, Utah on 16-19 October. The proposed session is entitled, "Interdisciplinary education: applications of GIS and the infusion of spatial concepts across the curriculum." The co-conveners are seeking your abstracts for an oral or poster presentation. From the interest expressed in your e-mails, invited speakers will be selected as part of the proposed oral and poster topical sessions. The co-conveners of the session will be Richard B. Schultz, Elmhurst College richs@elmhurst.edu, Mark R. Hafen, University of South Florida mhafen@cas.usf.edu, and J. Christopher Haley of Virginia Wesleyan College jchaley@vwc.edu.

This interdisciplinary session, emphasizing the diverse and unique applications of GIS and education of spatial concepts, showcases global applications for GIS and creates an awareness for the infusion of spatial concepts across the educational curriculum. While the session is most certainly open to anyone wishing to submit an abstract, the predominant focus will be geoscience education and spatial concepts "across the curriculum." The session is expected to create a sharing of cross discipline techniques for spatial concept education. There will be both an oral session and accompanying poster session to allow for interactive discussions.

The electronic abstracts submission form is available on GSA's Web site at www.geosociety.org. Submitters are encouraged to use this form. Abstracts deadline is July 12, 2005.

Richard Schultz, Elmhurst College
Mark Hafen, University of South Florida
Christopher Haley, Virginia Wesleyan College

2. REU at 25: Its Impact on Undergraduate Geoscience Education

We would like to encourage geoscience researchers to consider volunteering an abstract for the following topical session to be held at the Geological Society of America's Annual Meeting in Salt Lake City, October 16-19, 2005:

REU at 25: Its Impact on Undergraduate Geoscience Education
Sponsored by National Association of Geoscience Teachers (NAGT) and Council on Undergraduate Research (CUR-Geoscience Division)

The REU Program has been in existence for 25 years, and in this time, hundreds of undergraduate students have participated in research efforts that span all the sub-disciplines in our field, and all around the globe. Our intent with this session is to highlight the best and the brightest among many exceptional REU-supported efforts, and to draw from the now large body of information that this program has produced, to try and identify the most effective way(s) to work with undergraduates on geoscience-related problems, and to clarify the role that REU experiences are playing in geoscience Bachelor's programs today.

The session will be in both an oral and poster format. Abstract deadline is July 12. Abstracts can be submitted online through the GSA website: http://www.geosociety.org/meetings/2005/.

Please Note: Beginning this year, GSA will allow an individual to submit and present a second volunteered abstract ***if*** the second abstract is submitted for consideration to a poster session in Geoscience Education or Public Policy discipline categories, or any Geoscience Education or Public Policy Topical Session that is in a poster format. This new abstract policy pertains to anyone submitting a poster for this topical session, **REU at 25**.

We hope you will consider submitting to what promises to be a very lively and informative session. Please do not hesitate to contact us with any questions.

Session co-chairs Jeffrey G. Ryan jryan@nsf.gov, Lori Bettison-Varga lbettison@wooster.edu, Laura Guertin uxg3@psu.edu.

Dr. Laura Guertin
Penn State Univ. Delaware County

Bierman Honored by NSF

Paul Bierman of the University of Vermont was recently given a Distinguished Teaching Scholar award by the National Science Foundation "for having achieved not only groundbreaking results in research, but for [his] strong teaching and mentoring skills and major educational contributions." Bierman is one of a team, including colleague Christine Massey (also of UVM), whose work was recently showcased in the April/May 2005 issue of *GSA Today* ("Old images record landscape change through time"). According to NSF, his new award will help extend work on a previous NSF grant that created a web-based archive of more than 10,000 historical images. It will include a research demonstration that brings together students with science and images, and new Web tools that will facilitate learning and research. He will also pursue a nationwide effort to disseminate this image-based approach to learning. Visit this link to learn more about the NSF Distinguished Teaching Scholar awards: http://nsf.gov/news/news_summ.jsp?cntn_id=104250.

Of importance to Education folks, says Bierman, will be the workshop this grant will enable his team to run in summer 2007. More information on that will follow, but the focus will be on using images of landscapes to teach, with particular emphasis on geoscience. They hope to draw teams of people from around the US. The work is linked to the Landscape Change Program web site, supported by NSF (Geoeducation) and is the focus of the article in *GSA Today*. A PDF of the article will be available from the GED web site http://geosciedu.org/.

The web link for the program is http://www.uvm.edu/perkins/landscape, and people interested can contact either Paul pbierman@uvm.edu or Christine Massey cmassey@uvm.edu.

Paul Bierman
University of Vermont

New Ph.D. Program at University of South Florida

The University of South Florida has begun a new Ph.D. program in Geography and Environmental Science and Policy (ESP). It is an interdisciplinary program, the curriculum of which is designed around the strengths of the University in critical areas of geography and the environment. The program is designed to integrate fully the strengths of the Departments of Geography and ESP. Emphasis is placed on providing theoretical rigor and methodological skills enabling the students to make significant and original research and policy contributions in an integrated interdisciplinary environment. In addition, the degree has a very strong applied component as the constituting Departments have strong emphases in working on solutions to real-world geographical and environmental problems.

The program will focus on developing state-of-the-art researchers able to navigate in today's complex world. It is anticipated that students will address many important local, regional, national, and global issues that require a cross-disciplinary perspective. The degree has five particular emphasis areas chosen to reflect strengths of existing faculty and key research needs:

1. Economic, Social, and Planning Issues in the Urban Environment
2. Karst Science and Climate Change
3. Natural/Technological Hazards and Health
4. Landscape Ecology
5. Water Resources and Policy

These areas will be functionally supported by strong departmental resources, which include Geographic Information System (GIS) and remote sensing facilities, a computerized meteorology laboratory, a soils and physical geography laboratory, and faculty with strong statistical and modeling experience.

For more information, visit the USF Geography web site at http://www.cas.usf.edu/geography/index.html (Dr. Philip Reeder, Graduate Director at preeder@cas.usf.edu) or the ESP web site at http://www.cas.usf.edu/esp/ (Dr. Donald Duke, Graduate Director at ldduke@cas.usf.edu).

Mark Hafen
University of South Florida

Tom Vaughn: Distinguished Alum!

Tom Vaughn was recently selected as a Distinguished Alumni Award winner from Lesley University, Cambridge, MA. Tom earned a Certificate of Advanced Graduate Studies in computers in education in 1985 from Lesley University. After a 36-year career as an earth science teacher in the Arlington Public Schools, he is now retired from K-12 education teaching and serves as an educational consultant and adjunct college professor at Northeastern University, UMass/Dartmouth, and Middlesex Community College. He is a frequent presenter on geoscience topics, technology, and leadership issues at state, regional, and national conferences.

Tom continues to be active in many professional organizations that support teachers and help student learning. He is a fellow of the Teacher Leadership Academy of Massachusetts and active member of the Massachusetts Association of Science Supervisors. During his teaching career as an earth science teacher, Tom has been awarded twelve major distinctions. Among these awards, he was granted the Pathfinder Award by the Massachusetts Governor's Education Technology Advisory Council (1991), inducted into the Massachusetts Science Educator Hall of Fame (1992), and was designated the Outstanding Earth Science Teacher in New England by the National Association of Geoscience Teachers. He was also named a Tandy Technology Scholar, with his picture appearing in Time magazine (1996). In 1999, he was chosen as a Presidential Awardee for Excellence in Mathematics and Science Teaching, which included a week of events in Washington, DC, culminating with an invitation from President Clinton to visit the White House. In addition, he was given the distinction of two other Distinguished Alumni Awards from the University of Massachusetts at Lowell (2000) and Boston University (2002). *(continued on p. 4)*

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Tom has been an advocate for science education reform by serving on the committee that wrote the Massachusetts high school earth science standards and by serving on the MCAS Grade 8 science advisory committee. He recently helped at a regional meeting with revisions on the NAEP, the nation's report card. In all his teaching and presentations, Tom takes pride in representing the geographic/geoscience field to his students and audiences for the betterment of Planet Earth.

Tom did his undergraduate studies in Canada at Mount Carmel College, Niagara Falls, Ontario, in history and geography (1968). In 1972 he graduated from Boston University with a Master's degree in physical geography and in 1977 from UMass/Lowell with a Master's in secondary educational administration.

Cochise Website Continues to Expand

The Cochise College Geology Instructional Resources website has expanded greatly since last spring. The purpose of the website is to provide free Internet resources in the following areas: physical geology, historical geology, planetary geology, and gemstones. There are currently 4400 copyright free illustrations available to students and instructors, which include minerals (708), rocks (291), fossils (586), gemstones (904), meteorites (79), crystals and crystal model (300+), plus maps, and virtual geology field trips. There are also over 13,500 geology links plus an illustrated physical geology vocabulary.

Some of the newest attractions include: photos of crystals and crystal models, link collections for meteorites, views of Mars, Venus and Jupiter's satellites, invertebrate fossils, and 34 student presentations.

In the Virtual Geology Field Trips for the State of Washington, there is an exciting 31 view tour of the famous APE cave lava tube.

This website is rapidly becoming an encyclopedia of geology. In the coming months at least another 300 additional photos are planned to be added.

The website is located at http://skywalker.cochise.edu/wellerr/aawellerweb.htm. If this is too much to remember, just use Google to search for "Cochise Geology." The Cochise College geology website will be the first thing that pops up. Or contact Roger Weller wellerr@cochise.edu for more information.

Roger Weller
Cochise College

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