



THE GEOLOGICAL SOCIETY OF AMERICA

Geoscience Education Division

<http://gsaged.org/>

May 2008

From your Newsletter Editor

Greetings, everyone. We are publishing our second GED Newsletter of this year a little earlier than usual, to get out to our members important information about the Fall 2008 GSA Annual Meeting in Houston, prior to the accelerated abstract deadline – **June 3** (a month early! Yikes!)

We also have elections, for GED Chair, First Vice-Chair, and Second Vice-Chair. Please check out the candidate biographies at the end of the Newsletter, and either mail in your vote using the ballot form at the end of this newsletter, or vote online at <https://rock.geosociety.org/ballot/vote.asp?Name=ged> by August 31.

As always, if you have items you would like included in the next newsletter, please e-mail them to me at mhafen@cas.usf.edu.

Mark Hafen
Department of Geography
University of South Florida

Summer Geology Seminar at Craters of the Moon

Craters of the Moon National Monument and Preserve will be offering a geology seminar in partnership with the Sawtooth Science Institute on August 8th and 9th. Half of the time will be spent in the field studying the geology of Craters of the Moon firsthand. Call the Sawtooth Science Institute (208) 788-9686 to register. Workshop fee is \$50, recording fee for college credit is \$50. For questions contact Doug Owen, Park Geologist (contact information below).

Doug Owen, Park Ranger (Interpretation)/Park Geologist
Craters of the Moon National Monument and Preserve
P.O. Box 29
Arco, ID 83213
Phone: (208) 527-3257 ext. 302
Fax: (208) 527-3073

Action Photos of GED Members

Check out Geoscientist Educators *in action* by viewing the photos members have sent in for our website. Go to <http://gsaged.org/> and select "photos". Thanks to all of you for sending in photos and to Hugh Rance for posting these on our website!

We are always looking for more photos for our website and for the Division poster displayed at the fall GSA Annual Meeting. If you have some to share please send them along with captions to website manager Hugh Rance hughrance@rcn.com or to Kristen St. John stjohnke@jmu.edu.

Geoscience Education Fund Established by GED

With over 1000 members, the Geoscience Education Division (GED) is one of the largest Divisions of the Geological Society of America (GSA). GED broke new ground for the Division this spring by establishing its first endowed fund, The Geoscience Education Fund, through the GSA Foundation. (*continued, p2*)

The Geoscience Education Fund will benefit GED membership broadly and will support the Division's mission of fostering active participation of members of the Society in earth-science education. By reallocating \$25,000 from a non-interest bearing account to this new Foundation account, the Division expects to draw on the interest to financially support geoscience education awards, grants, scholarships, and other activities as determined by the GED management board. These include the recently established GED Service Award, student travel awards, student scholarships to participate in GED-sponsored field trips and workshops, and subsidies to help offset the facilitator costs of geoscience education workshops held in conjunction with GSA meetings.

As the fund grows, the GED management board plans to add other focus areas, such as:

- a student recognition award for best paper or presentation
- geoscience education student receptions
- travel support for invited speakers and/or international presenters

To place the new Fund on a successful path, GED is also putting forth a fundraising call to all members and friends of the Division. We request members to "Make a Donation - Double Your Dues" this year in support of the Geoscience Education Fund. With 1000+ members (and dues at \$5/person) our goal is to raise an additional \$5000 over the next year to be placed in the temporarily restricted account of the Geoscience Education Fund.

This is such a new fund, it isn't yet up on the GSA Foundation website, but it will be soon. In the interim, if you would like to make your donations, please contact Donna Russell drussell@geosociety.org with the GSA Foundation. If you have questions about the Geoscience Education Division or the Geoscience Education Fund, please feel welcomed to contact GED Chair, Kristen St. John at stjohnke@jmu.edu or 540-568-6675.

Kristen St. John, GED Chair
James Madison University

GSA Annual Meeting Happenings

Biggs Award Winner

The Biggs Earth Science Teaching Award recognizes innovative and effective teaching of earth science among early career faculty and is the Geoscience Education Division's Named Award. Earth science instructors and faculty from all academic institutions engaged in undergraduate education who have been teaching full-time for 10 years or less are eligible.

The winner of the Biggs Award for 2008 is Karen Kortz, of the Community College of Rhode Island. Each of the reviewers stated that the final decision was very difficult, speaking to the overall quality of the nominees. In her nomination materials, colleagues noted her instructional innovation and her creativity in tackling difficult pedagogical problems. She was also cited for her enduring connection to students, well beyond their enrollment at CCRI, challenging their worldviews and making real and relevant the lessons that she presents. She will be recognized at the joint NAGT/GED awards luncheon at the GSA Annual Meeting in Houston, Sunday, October 5, 11:30 a.m. – 2:00 p.m.

Eric Pyle, GED Second Vice-Chair
James Madison University

GED Student Travel Grants

GED Student Members: Are you presenting at GSA this fall? The Geoscience Education Division will offer several travel grants up to \$250 to student members who are presenting work in geoscience education at the 2008 GSA Annual Meeting in Houston. Grants will be awarded based on merit and financial need.

To be eligible for an award, you must be:

- A student member in good standing of GSA and the Geoscience Education Division. If you're already a GSA member, call 1-888-443-4472 to add GED membership. If you're not a GSA member, go to <http://gsaged.org/> and click on "How Do I Join?"
- Presenting a poster or talk at the 2008 Annual Meeting in a geoscience education topical or discipline session.

To apply for the award, please send as a single email attachment:

- (1) Confirmation of your standing as a student member of the GED (member number),
- (2) A copy of your accepted abstract,
- (3) A current CV, limited to 2 pages, and
- (4) A brief itemized budget and statement of your financial needs, including all other sources of funding.

Applications should be sent to Eric Pyle pyleej@jmu.edu and must be received by **August 1, 2008** for consideration. Notification of grant status will be made prior to the September 2 registration deadline, and awards will be made following confirmation of attendance at the GSA Annual Meeting.

Faculty, please direct your students in geoscience education to this opportunity!

Heather Petcovic, GED Past Chair
Western Michigan University

Get Social at GSA

Plan to attend any or all of these Geoscience Education Social and Business Events for 2008 GSA:

➤ **Geoscience Social Educators Reception**

Join other educators in a relaxing forum for socializing, sharing ideas, and meeting other geoscience community members interested in education. Come and meet the GSA Education Staff. Appetizers and cash bar provided.

Saturday, 4 Oct, 5:00 – 7:00 pm, location TBD

➤ **National Association of Geoscience Teachers and GSA Geoscience Education Division Awards Luncheon**

Join other educators for a banquet-luncheon and Geoscience Education awards reception. GED members are encouraged to buy their tickets early to assure availability.

Sunday, 5 Oct, 11:30 am – 2:00 pm, location TBD
Ticketed Lunch for 140

➤ **Geoscience Education Division Open Business Meeting**

This is a time to provide direct feedback to the GED board on division activities, learn about new initiatives, and interact with your fellow members. Open business meeting with light refreshments.

Monday, 6 Oct, 4:00 pm – 6:00 pm, location TBD

K-12 Education Events at GSA

➤ **Evolution in the Classroom Teacher Forum**

Join GSA for an afternoon with experts in the field of evolution. Activities, the latest research, and answers to your questions about the challenges of teaching evolution will be covered. Teachers will also receive free evolution resources.

Saturday, 4 Oct, 1:00 - 4:30 pm, location and further details TBD

➤ **Geoscience Social Educators' Reception**

Join other educators in a relaxing forum for socializing, sharing ideas, and meeting other geoscience community members interested in education. Come and meet the GSA Education Staff. Appetizers and cash bar provided.

Saturday, 4 Oct, 5:00 – 7:00 pm, location TBD

➤ **Understanding Evolution: A Public Forum**

Everyone is invited to hear the latest evidence and ask questions about the theory of evolution and the importance of keeping it in our classrooms.

Tuesday, 7 Oct, 7:00 – 9:00 pm, location TBD

➤ **K-12 Fieldtrips**

418. Texas Coastal Systems: K-12 Teachers Trip to Galveston Island and the Brazos River

- Sunday, 5 Oct. Co-sponsored by ConocoPhillips. Alison Henning, Rice University, Houston, TX, 713-446-6417, ahenning@rice.edu.
- Fee: US\$?, includes lunch.

➤ **K-12 Short Courses**

514. Teaching Darwin

- Saturday, 4 Oct, 9 am – noon. Co-sponsored by the GSA History of Geology Division. Leo F. Laporte, University of California at Santa Cruz.
- Limit: 50. Fee: US\$70. CEU: 0.4.

533. More! Rocks in Your Head: Earth science PD for Teachers Grades 3-8 (K-12 welcome)

- Friday, 3 Oct, 8 am – 4:30 pm. Co-sponsored by AAPG, HGS, the Ellison Miles Geotechnology Institute & ESC Region 4. Janie Schuelke, Consultant.
- Limit: 60. Fee: US\$Free; includes lunch. CEU: 0.8.

534. Discovering Plate Boundaries for Middle and High School Teachers

- Friday, 3 Oct, 12 – 5 pm. Co-sponsored by HGS & ESC Region 4. Dale Sawyer, Rice University.
- Limit: 40. Fee: US\$Free; includes lunch. CEU: 0.4.

Geoscience Education Research Interest Group

Planning on going to the GSA Annual Meeting in Houston? Meet, socialize, and network with your colleagues interested in **geoscience education research**.

Tuesday, Oct 7, 5:00 – 7:00 pm; Location: TBA

Heather Petcovic, GED Past Chair
Western Michigan University

22 TOPICAL SESSIONS Sponsored by the Geosciences Education Division

For details about each session, and to submit an abstract, visit the GSA Fall meeting website at <http://www.geosociety.org/meetings/2008/sessions/topical.asp>.

Remember the **abstract deadline** this year is much earlier than usual: **June 3**.

- ❖ T11 Global Warming Science: Implications for Geoscientists, Educators, and Policy Makers
- ❖ T110 Analog Sites and Field Exercises for Training Planetary Field Geologists *
- ❖ T151 Uranium In-Situ Leach (ISL) Mining: Possible Effects on Surrounding Groundwater Quality and Adequate Post-Mining Restoration Techniques
- ❖ T174 Teaching and Learning about Complex Earth Systems: Effective Strategies in Undergraduate Classrooms and Teacher Development Programs
- ❖ T175 What Should Students be Learning in Our Geology Classrooms?
- ❖ T176 The Human Connection with Planet Earth: What is it and Why is it Important?
- ❖ T177 Disseminating Hands-on Geological Knowledge and Creating a Greater Awareness for the Environment: Emphasis on the Involvement of Undergraduates and K–12 Students (Posters)

- ❖ T178 Critical Perspectives on Geohazards in Latin America and the Caribbean and Their Implication for Geoscience Education Research and Practice
- ❖ T179 Geocognition: Researching Student Learning in the Geosciences
- ❖ T181 Geology Field Trips in Urban Settings: Making the Most of a “Paved-Over” Landscape
- ❖ T182 Teaching Petrology and Structural Geology in the 21st Century
- ❖ T186 Using GPS Technology to Bring Geoscience to the Wider Community
- ❖ T187 Research on Geoscience Teaching and Learning in Experiential Environments
- ❖ T188 Challenges and Experiences of Teaching Geosciences: Perspectives From New Instructors and Teaching Assistants
- ❖ T189 Classroom Innovations that Facilitate Undergraduate Research in the Earth, Environmental, and Agricultural Sciences (Posters)
- ❖ T191 Quantitative and Qualitative Methods and Results in Geoscience Education
- ❖ T192 Professional Society, Organization, Institution, and Federal Agency Achievements Supporting K–12 Teachers and Students
- ❖ T193 Undergraduate Research as a Tool in Geoscience Pedagogy
- ❖ T194 Undergraduate Research as a Transformative Process for Geoscience Faculty (Posters)
- ❖ T202 Propagating Geoinformatics and Virtual Globe Resources into the K–12 Environment: Integrating Spatial Earth System Data with Classroom Science for a Future Workforce
- ❖ T201 Geoantiquities and Unique Geological Heritage
- ❖ T206 Geoscience Diversity 2008: Status, Strategies, and Successful Models

* Here are some details regarding session T110:

Session T110: Analog Sites and Field Exercises for Training Planetary Field Geologists

Sponsors: GSA Planetary Geology Division; GSA Geoscience Education Division; Gulf Coast Association of Geological Societies

We encourage those interested in planetary sciences, field work, and the education of the next generation to submit an abstract to GSA session T110 which covers educational field activities that can be completed by students at a suite of planetary analog sites.

Submissions can cover past, ongoing, or future ideas for activities at a single field site, workshops, camps, trips, and even simulations with activities geared for college and graduate students, post-docs, and K-12 Educators and with no limits to locations, length of activity, or number of field participants.

Presentations should focus on: 1) the overall geology and field objectives, 2) data sets and planetary equivalents, 3) results of the field exercise and any student feedback, 4) field methods and integration of new technology, and 5) what comparative insight into planetary geologic processes is gained. Conveners: W. Brent Garry (Smithsonian Institution - NASM/CEPS) garryw@si.edu and Jacob E. Bleacher (NASA-GSFC) Jacob.Bleacher-1@nasa.gov.

GED Elections – Candidate Biographies

Chair

Elizabeth A. Nagy-Shadman. Tectonics; geoscience education. Educ: BA Geol, U Colorado; MS Geol, PhD Geol, Caltech. Prof Exp: IPG-Paris, Postdoc Flw 97-99; Syracuse U, Postdoc Flw 00-01; Jordan-Elbridge CSD, Gr 10 Earth Sci Tchr 01-02; CSU Northridge, Asst Prof, ‘Teachers for a New Era’ Faculty 03-present. Prof Affil: GSA mbr since 91; NAGT; NSTA. GSA Serv: GSA Campus Rep since 04; GED 2nd vice-chr 06-07, 1st vice-chr 07-08. Honors/Awards: CSUN Rsrch, Schol, & Creative Actvty Awrd 06-07; Châteaubriand Postdoc Flw 97-98; NSF Intl Rsrch Flw Awrd 98-99. Rsrch Int: Improving science educ for pre-service K-12 teachers; science misconception studies; use of student response technology; continental & transitional plate tectonic study using structural and field geology, geochronology, paleomagnetism, volcanology, and isotope geochemistry.

First Vice-Chair

Eric J. Pyle. Geoscience education; igneous/metamorphic petrology. Educ: BS Earth Sci/Geol, UNC-Charlotte; MS Geol, Emory U; PhD Sci Educ, U Georgia. Prof Exp: Georgia Geol Surv, Contract Geol 84-86; Monroe (NC) HS, Sci Tchr 86-92; UNC-Charlotte, Dept Geog & Earth Sci, Instructor 89-92; U GA, Rsrch Asst 92-95; West Virginia U, Dept Curr & Instr, Asst Prof 95-01, Assoc Prof 01-04; WVU Dept Geol & Geog, Adjct Assoc Prof 02-04; James Madison U, Dept Geol & Envtl Sci, Assoc Prof 05-present. Prof Affil: GSA 88-90, 05-present; NSTA, ASTE, NARST, WVSTA, VAST, NAGT, NESTA, Sigma Xi. Service: GSA GED 2nd vice-chair 07-08; Chr, NSTA Spec Educ Adv Brd, 99-02; NSTA Dist VIII, Dir 00-02; WVSTA, Pres 03-04; Chr, VAST Earth Sci Cmte, 06-present. Honors/ Awards: Gustav Ohaus/NSTA Innovations in Sci Tchg, 99; WVU Fndtn Outstndng Tchr, 02. Rsrch Int: Earth science teacher preparation & professional development; inquiry in Earth science; Earth science curricula design; motivating adolescents in science education.

Second Vice-Chair Candidates (vote for one):

Paul E. Baldauf. Tectonics; science education. Educ: BA Geology, U Tennessee; MS & PhD Geology, George Washington U. Prof Exp: CDM Federal Programs, Project Geologist, 88-89; Heidelberg College, Asst Prof Geology, 98; Union Institute & Univ, Professor/Faculty Adviser, 98-present. Conc’t Pos: Univ at Buffalo, Lecturer, 03-present. Prof Affil: GSA member since 1988; NAGT, CUR. Rsrch Int: Andean tectonics, elementary and secondary science education.

Statement of Interest: For the past nine years, I have been working for a nontraditional university in Florida called Union Institute & University. Our undergraduate students are mostly first generation college students and come to our university with weak skills in science. Most of our students are education majors and will become teachers in Dade and Broward Counties, the 4th and 5th largest school districts in the country. I’ve been a leader within my institution in research and policy issues in science education, pedagogy, and underserved students. I would like to bring my knowledge of these issues to the GED management board and learn more about what my colleagues are doing around these issues.

Steven H. Schimmrich. Structural geology; Earth science education. Educ: AA Earth Science, SUNY Ulster; BA Geology, SUNY New Paltz; MS Geology, SUNY Albany. Prof Exp: Inst, Kutztown University, 97-98; Asst Prof, Calvin College, 98-99; Assoc Prof, SUNY Ulster, 99-present. Prof Affil: GSA since 92; NAGT. Honors/Awards: SUNY Chancellor’s Award for Excellence in Teaching 07. Rsrch Int: Geological education.

Statement of Interest: Strong believer in the unique educational mission of community colleges and would like to see representation within the GED by CC faculty.

Ballot Instructions.

This is the ballot for the election of 2008-09 officers for the **GSA Geoscience Education Division**. *Please refer to the candidate biographies immediately preceding this ballot.* Vote for no more than one candidate for each office. Submit your vote in one of the following ways:

- 1) **By Mail:** Vote on the paper ballot below. Complete the bottom section of the ballot. Mail the completed ballot to: Geological Society of America, PO Box 9140, Boulder, CO 80301, Attn: Division Ballot. Ballots must be **received at GSA by August 31, 2008 or**
- 2) **By Fax:** Vote on the paper ballot below. Complete the bottom section of the ballot. Fax the completed ballot to GSA, Attn: Division Ballot, at (303) 357-1074. Ballot must be **received at GSA by August 31, 2008 or**
- 3) **Online:** Vote online at <<https://rock.geosociety.org/ballot/vote.asp?Name=ged>>. Log onto the ballot using your GSA member number (given on your mailing label) **or** your e-mail address (which will work *only* if your e-mail address is in your GSA member record). For assistance, please contact GSA at <gsaservice@geosociety.org> or (303) 357-1000 (option 3) or tollfree in the U.S. at (888) 443-4472. Electronic votes **must be submitted by August 31, 2008.**

Ballot – Geoscience Education Division.

Vote for no more than one individual for each office. Term of each office is one year.

Chair:

- Elizabeth A. Nagy-Shadman
- Write-In _____

First Vice-Chair:

- Eric J. Pyle
- Write-In _____

Second Vice-Chair: (vote for one)

- Paul E. Baldauf
- Steven H. Schimmrich
- Write-In _____

Your Name (printed) _____

Your Signature (required) _____

Your GSA Member Number (required)* _____

* Given at the top of your mailing label. For assistance, please contact GSA at <gsaservice@geosociety.org> or (303) 357-1000 (option 3) or tollfree in the U.S. at (888) 443-4472.