Chair’s Message – On to Houston!

Welcome to the September newsletter of the GSA Structural Geology and Tectonics Division! For those of you packing for Houston, word is that the city center was largely spared by the hurricane, except for a lot of debris that is currently being cleaned up. Unfortunately for those who put off their housing decisions until the last minute, housing in Houston is very tight right now – one off-site hotel had rooms for a mere $775 per night!

If you are going to the meeting, be sure to come to the SG&T meeting and subsequent social gathering at 5:30 pm on Tuesday, October 7, in Convention Center Room 320ABC. We will briefly go over division business and then honor and toast the recipients of the SG&T student research and professional awards. John Suppe will be flying in from Taipei to receive this year’s Career Contribution Award. Bill Thomas will be receiving the best paper award for his 1977 paper titled, “Evolution of Appalachian-Ouachita salients and recesses from reentrants and promontories in the continental margin,” which was published in the American Journal of Science (v. 277, 1233-1278). Come to the meeting to hear John and Bill’s citationists as well as their presumably humble rebuttals!

I would also like to congratulate the following winners of the SG&T student research grant awards for their excellent proposals: Jeff Marsh (University of Maine, advisor Scott Johnson), “Investigation of Coupled Strain Localization Processes in Continental Crust”; Tim Nesheim (University of Iowa, advisor Jane Gilotti), “Are 1.1 Ga deformational fabrics present in metasedimentary rocks of the Belt Supergroup in Northern Idaho?”; and Nickolas Van Buer (Stanford University, advisor Elizabeth Miller), “Erosional exhumation of the Sierra Nevada Batholith in the Basin and Range.”

Last year’s meeting in Denver was a success, yet the number of technical sessions (31) and related short courses (2) lagged a bit relative to those of some other divisions. The program committee, consisting of
Claudia Lewis (chair), Jeff Lee, Pete Copeland, and Zoe Shipton, was initiated last year to help catalyze more SG&T contributions to annual meetings. This year, our presence has been greatly enhanced by the hard work of the program committee and other individuals, resulting in 38 technical sessions and 5 short courses with SG&T sponsorship!

Results of the Division Election

I know we all appreciated Scott Johnson (University of Maine) and Christine Siddoway (Colorado College) being on the ballot for the 2008-2009 SG&T Second Vice-Chair position. This is not a nomination to be taken lightly, as it is a commitment of 4 years of committed service to our division. Both are to be commended for their willingness to serve you, the SG&T membership. It was a very tight election, and Scott Johnson has been elected to the post. Christine, we’ll catch up with you later!

Planning for the 2009 GSA Annual Meeting in Portland, OR – October 18-21, 2009

Next year at this time, many of us will be getting to ready to visit the Pacific NW for the GSA Annual Meeting. Our program committee, chaired by Michele Cooke, will be busy catalyzing contributions, but self-motivation is always the best route. For those with things to share, please note these deadlines, and look for more information shortly on the GSA website http://www.geosociety.org/:

- Short course and field trip proposals are due December 2, 2008
- Topical session proposals are due January 6, 2009

I hope to see many of you in Houston, and for those I don’t, please enjoy the coming year!

Best, Eric Erslev, SG&T Division Chair, Fort Collins, CO

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Last Call: Students--Free $$$

Student members of the SG&T Division are eligible to apply for grants to supplement the cost of field trips and short courses associated with the GSA Annual Meeting in Houston. Send applications to Eric Erslev erslev@warnercnr.colostate.edu. Include your name, institution, class, specialty, poster or talk title, field trip title, and indicate why the field trip or short course is important to your research/professional development. Deadline: Wednesday, October 1, 2008!

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Division Members

If you're doing great stuff, we want to hear about it! When news happens, let us know! Send your updates and announcements to your friendly SG&T Newsletter co-editors, Tim Wawrzyniec tw@unm.edu and Barb Sheffels barbsheffels@comcast.net. If we can’t print it, SGT webmaster Kevin Smart ksmart@swri.org can put it on the Division web page!
Directorate for Geosciences, Division of Earth Sciences

The Division of Earth Sciences (EAR) supports research and education in most areas of the solid-Earth and surficial-terrestrial sciences. Emphasis is on the support of basic research aimed at improving our understanding of the Earth's structure, composition, natural processes, evolution, paleobiology, and interactions with the Earth's biosphere, atmosphere, and hydrosphere. In addition, EAR provides support for instrumental and observational infrastructure and encourages innovative educational activities in the earth sciences.

The research programs and activities in the EAR Division are organized into two areas: core research and special emphasis. Core Research programs support research in the following areas: the solid Earth, with emphasis on our understanding of the Earth's dynamic behavior and structure; surficial-terrestrial research, which deals with processes related to the Earth's environmental envelope and near-surface phenomena; and instrumentation and facilities and education, which focuses on the development and acquisition of instrumentation for the research community and educational aspects of the earth sciences. Special Emphasis areas include research directed toward special scientific opportunities that accommodate the changing needs of the scientific community. This research is often interdisciplinary or multidisciplinary in character or focuses on newly emerging areas of the earth sciences.

Tectonics Program (NSF 06-544)
The Tectonics Program (TE) supports a broad range of field, laboratory, computational, and theoretical investigations aimed at understanding the evolution and deformation of continental lithosphere and how deformational processes have modified the lithosphere through geologic time. Because understanding such large-scale phenomena commonly requires a variety of expertise and methods, TE supports integrated research involving the disciplines of structural geology, petrology, geochronology, sedimentology, stratigraphy, geomorphology, rock mechanics, paleomagnetics, geodesy, and other geophysical techniques. Proposals to elucidate the processes that act on the lithosphere at various time-scales, either at depth or the surface, are encouraged. Full proposal target dates are June 1 and December 1 annually. Contact persons are Dr. James Dunlap, Program Director, Rm. 785 S, (703) 292-2740, jdunlap@nsf.gov and Dr. David M. Fountain, Program Director, Rm. 785 S, (703) 292-8552, dfountai@nsf.gov. Please note that the Tectonics Program Solicitation (NSF 06-544) can be found at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06544.

Continental Dynamics Program (NSF 04-512)
The Division of Earth Sciences (EAR) will consider proposals for multidisciplinary research that focuses on an improved understanding of the processes governing the origin, structure, composition, and dynamical evolution of the continents and continental building blocks. The program is particularly oriented toward projects whose scope and complexity require a cooperative or multi-institutional approach and multi-year planning and execution. The intent of the program is to fund only relatively large projects that do not fit easily within other Earth Sciences programs and that have broad support of major sections of the Earth Science community. Proposal due date is November 15, 2008. Contact: Leonard Johnson, (703) 292-8559, lejohnso@nsf.gov. The Continental Dynamics Program Solicitation can be found at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf04512.

EarthScope Program (NSF 06-562)
EarthScope is an Earth science program to explore the 4-dimensional structure of the North American continent. The EarthScope Program provides a framework for broad, integrated studies across the Earth sciences, including research on fault properties and the earthquake process, strain transfer, magmatic and hydrous fluids in the crust and mantle, plate boundary processes, large-scale continental deformation, continental structure and evolution, and composition and structure of the deep-Earth. In addition, EarthScope offers a centralized forum for Earth science education at all levels and an excellent opportunity to develop cyberinfrastructure to integrate, distribute, and analyze diverse data sets. The nucleus of the Program is the EarthScope Facility, consisting of the Plate Boundary Observatory (PBO), the San Andreas Fault Observatory at Depth (SAFOD), and the USAArray. The EarthScope Facility is a multi-purpose array of instruments and observatories that will greatly expand the observational capabilities of the Earth Sciences and permit us to advance our understanding.
of the structure, evolution and dynamics of the North American continent. The Facility is designed to continually incorporate technological advances in geophysics, seismology, geodesy, information technology, drilling technology, and downhole instrumentation. This Solicitation calls for single or collaborative proposals to conduct scientific research associated with the EarthScope Facility and support activities that further the scientific and educational goals of EarthScope. Proposal deadline was July 16, 2008. Contact person: Kaye Shedlock, (703) 292-4693, kshedloc@nsf.gov. The solicitation can be found at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06562.
T101. Geological and Geophysical Remote Sensing Applications for Earth, the Moon, and Mars
(GSA Structural Geology and Tectonics Division; GSA Geophysics Division; GSA Planetary Geology Division; GSA Engineering Geology Division; Gulf Coast Association of Geological Societies)
Kenneth P. Kodama, John W. Geissman and R. Douglas Elmore

T166. Fault Seals or Conduits? Insights from Hydrologic and Petroleum Systems
(GSA Hydrogeology Division; GSA Structural Geology and Tectonics Division; Gulf Coast Association of Geological Societies)
Dean Riley and Wendy Calvin

T203. Geology and Health Issues in Texas, Mexico, and Beyond
(GSA Geology and Health Division; Gulf Coast Association of Geological Societies)
Robert B. Finkelman and Suzette A. Morman

Sunday, October 5, 8:00 AM-4:45 PM
General Session
Structural Geology / Tectonics / Neotectonics/Paleoseismology (Posters)

Technical Session
T26. Lake Cores: Climate Change and Tectonics (Posters)
(GSA Limnogeology Division; GSA Structural Geology and Tectonics Division)
Kevin M. Bohacs and Elizabeth H. Gierlowski-Kordesch

T140. Sigma Gamma Epsilon Undergraduate Research (Posters)
(Sigma Gamma Epsilon)
Richard Ford, Donald Neal and Charles Mankin

Sunday, October 5, 1:30 PM-4:45 PM
General Session
Structural Geology / Tectonics / Neotectonics/Paleoseismology I
Roberto S. Molina-Garza, Richard M. Engelkemeir and Steven J. Whitmeyer

Technical Session
T5. Coastal Tectonics of the Pacific Rim: Geomorphology, Structure, and Hazards
Monday, 6 October 2008, 8:00 AM-12:00 PM

Technical Session

**T74. Models of Folding and Structural History of Shale Basins**
(GSA Structural Geology and Tectonics Division; GSA Geophysics Division; Gulf Coast Association of Geological Societies)
John H. Shaw, Stuart Hardy, Chris A. Guzofski, David D. Pollard, Julia F. W. Gale and Terry Engelder

**T77. Recent Advances in the Understanding of Adirondack and Southern Grenville Province Tectonics I: In Honor of James McLelland**
(GSA Structural Geology and Tectonics Division; Gulf Coast Association of Geological Societies)
Graham B. Baird, Catherine Shrady and Bruce Selleck

**T78. From the Forearc to the Foreland: Contrasting Tectonics, Paleoecology, and Paleoenvironments of the North American Cretaceous**
(GSA Geophysics Division; GSA Structural Geology and Tectonics Division; GSA Sedimentary Geology Division; Society for Sedimentary Geology (SEPM); Gulf Coast Association of Geological Societies)
Claudia Schroder-Adams and James Haggart

Monday, 6 October 2008, 1:30 PM-5:30 PM

General Session

**Geophysics/Tectonophysics/Seismology**
Kevin Mickus and Catherine Snelson

Technical Session

**T63. Foreland Basins: Their Tectonic Setting, Structural Geology, Sedimentology, and Economic Significance**
(GSA Structural Geology and Tectonics Division)
Ibrahim Çemen, James Puckette and Darwin Boardman

**T77. Recent Advances in the Understanding of Adirondack and Southern Grenville Province Tectonics II: In Honor of James McLelland**
(GSA Structural Geology and Tectonics Division; Gulf Coast Association of Geological Societies)

**T86. Reconciling Geologic and Geodetic Rates of Deformation**
(GSA Quaternary Geology and Geomorphology Division; GSA Geophysics Division; GSA Structural Geology and Tectonics Division; Gulf Coast Association of Geological Societies)
Tuesday, 7 October 2008, 8:00 AM-12:00 PM

Technical Session

T59. EarthScope: Bringing Geology and Geophysics Together to Study the 4-D Evolution of the Lithosphere
(GSA Geophysics Division; GSA Structural Geology and Tectonics Division; GSA Geoinformatics Division; Gulf Coast Association of Geological Societies)
Anne Trehu, G. Randy Keller and Ben van der Pluijm

T79. The Himalayan Orogen and Rise of the Tibetan Plateau: An Earth Systems Approach to the Tectonic and Landscape Evolution of Asia
(GSA International Division; GSA Quaternary Geology and Geomorphology Division; GSA Sedimentary Geology Division; GSA Structural Geology and Tectonics Division; GSA History of Geology Division; GSA Geophysics Division; Gulf Coast Association of Geological Societies)
Paul T. Robinson and Yildirim Dilek

T207. Alpine Concepts in Geology and the Evolution of Geological Thought
(GSA History of Geology Division; GSA Structural Geology and Tectonics Division; GSA International Division; GSA Geophysics Division; National Association of Geoscience Teachers)
Yildirim Dilek, W. G. Ernst and Giovanni B. Piccardo

Tuesday, 7 October 2008, 8:00 AM-6:00 PM

General Session

Structural Geology / Tectonics / Neotectonics/Paleoseismology II
Timothy L. Clarey and Jonathan E. Snow

Technical Session

T59. EarthScope: Bringing Geology and Geophysics Together to Study the 4-D Evolution of the Lithosphere (Posters)
(GSA Geophysics Division; GSA Structural Geology and Tectonics Division; GSA Geoinformatics Division; Gulf Coast Association of Geological Societies)
Anne Trehu, G. Randy Keller and Ben van der Pluijm

T97. Terrestrial Impact Structures: Origin, Structure, and Evolution (Posters)
(GSA Planetary Geology Division; International Continental Scientific Drilling Program (ICDP); GSA Sedimentary Geology Division; GSA Structural Geology and Tectonics Division; GSA Geophysics Division; Gulf Coast Association of Geological Societies)
Christian Koeberl and Jared R. Morrow
Tuesday, 7 October 2008, 1:30 PM-5:30 PM
Pardee Keynote Sessions

P4. Large Scale Continental Deformation at Plate Boundaries
(GSA Structural Geology and Tectonics Division)
Lucy M. Flesch and Nathan Niemi

Technical Session

T97. Terrestrial Impact Structures: Origin, Structure, and Evolution
(GSA Planetary Geology Division; International Continental Scientific Drilling Program (ICDP); GSA Sedimentary Geology Division; GSA Structural Geology and Tectonics Division; GSA Geophysics Division; Gulf Coast Association of Geological Societies)
Christian Koeberl and Jared R. Morrow

T182. Teaching Petrology and Structural Geology in the 21st Century
(GSA Structural Geology and Tectonics Division; On the Cutting Edge; Geoscience Education Division; Gulf Coast Association of Geological Societies)
Barbara J. Tewksbury and Jeffrey Ryan

Wednesday, 8 October 2008, 8:00 AM-12:00 PM
Technical Session

T56. Spatial and Temporal Evolution of Transform Faults
(GSA Structural Geology and Tectonics Division; Gulf Coast Association of Geological Societies)
Alexander Robinson, Michael Murphy, Gary Axen and John Dewey

T64. Lithospheric Structure and Geologic Evolution of the Gulf of Mexico Passive Margin
(GSA Geophysics Division; GSA South-Central Section; GSA Structural Geology and Tectonics Division; Gulf Coast Association of Geological Societies)
Elizabeth Y. Anthony, Stephen S. Gao and Robert J. Stern

T68. Brittle Deformation and Diagenesis as Coupled Processes
(GSA Structural Geology and Tectonics Division; GSA Geophysics Division; GSA Sedimentary Geology Division; Gulf Coast Association of Geological Societies)
Stephen Laubach and Peter Eichhubl

Wednesday, 8 October 2008, 8:00 AM-6:00 PM

T182. Teaching Petrology and Structural Geology in the 21st Century (Posters)
(GSA Structural Geology and Tectonics Division; On the Cutting Edge;
Geoscience Education Division; Gulf Coast Association of Geological Societies
Barbara J. Tewksbury and Jeffrey Ryan

Wednesday, 8 October 2008, 1:30 PM-5:30 PM

T81. Continental and Marine Fold and Thrust Belts I
(GSA Structural Geology and Tectonics Division; IUGS Task Group on Structural Geology and Tectonics; Gulf Coast Association of Geological Societies)
Luke A. Jensen, Hermann Lebit, Terry Pavlis and Rob Butler

T82. Southwest Pacific Cenozoic Tectonics and Comparisons with Other Orogenic Belts
(GSA International Division; GSA Structural Geology and Tectonics; GSA Geophysics Division; Gulf Coast Association of Geological Societies)
John Wakabayashi and Yildirim Dilek

T83. Mid- to Lower Crustal Deformation Processes: Strain, Kinematics and Relationships to Upper Crustal Structures
(GSA Structural Geology and Tectonics Division; GSA Geophysics Division; Gulf Coast Association of Geological Societies)
Sharon Mosher and Richard D. Law

Thursday, 9 October 2008, 8:00 AM-12:00 PM

Technical Session

T62. Recent Advances in the Study of the Laramide Orogeny and Related Processes in Mexico and the Southern United States
(GSA Structural Geology and Tectonics Division; GSA Geophysics Division)
Mariano Cerca, Martin Valencia and Gabriel Chávez-Cabello

T81. Continental and Marine Fold and Thrust Belts II
(GSA Structural Geology and Tectonics Division; IUGS Task Group on Structural Geology and Tectonics; Gulf Coast Association of Geological Societies)
Luke A. Jensen, Hermann Lebit, Terry Pavlis and Rob Butler

T84. Exhumation of Continental Ultrahigh-Pressure Terranes
(GSA Structural Geology and Tectonics Division; UNESCO International Lithosphere Program Task Force IV: Ultra-Deep Continental Crust Subduction; Gulf Coast Association of Geological Societies)
Jane A. Gilotti and William C. McClelland

RETURN TO THE TOP
OTHER UPCOMING MEETINGS

AAPG Annual Convention & Exhibition

June 7-10, 2009 • Denver, Colorado

Online submission of abstracts open.

The Rocky Mountains are booming!
Plan now to submit an abstract and join the geoscience community in Denver.

Structural Geology Sessions

- Stressed Reservoirs — Role of Geomechanics in Reservoir Characterization
- Salt Tectonics of the Northern Gulf of Mexico: New Insights from New Data
- Salt Basins of the World: Broadening our Understanding of Salt Tectonics
- Fault Seals in Carbonates and Siliciclastics
- 3-D Interaction of Tectonics and Sedimentation
- Role of Mechanical Stratigraphy in Reservoir Development
- Impact of Fracturing and Secondary Faults on Reservoir Play Sweet Spots
- Thrust Belt Plays — Revisit and Application of Emerging Technologies
- Fault Segmentation and Linkage: Impacts on Exploration and Development
- Detecting and Characterizing Fractures and Faults from Borehole, Geophysical and Engineering Data
- Tectonics and Diagenesis in Shale Basins

For the Latest on Meetings and Field Trips go to
Upcoming Meetings
http://rock.geosociety.org/sgt/sgt_meetings.html

RESOURCE BIN

Teaching Structural Geology in the 21st Century

The NAGT On the Cutting Edge project provides web-based content to help geoscience faculty stay current with geoscience research and teaching methods. In addition to supporting a wide range of workshops, the project sponsors great web-based resources for instructors of structural geology. The site contains a range of resources including activities, assignments, internet and computer resources, useful articles, maps, etc. One can also find presentations from the summer 2004 workshop on teaching structural geology, and working groups and a discussion forum. Follow the link for more information: http://serc.carleton.edu/NAGTWorkshops/structure/index.html.
Greetings from the Land of Enchantment! Here’s the Fall 2008 news—well, what there is of it. Don’t let the call for news for the spring 2009 newsletter go by without sending in your news. If you need a quick update or want to get your information out on the fly, contact Barb Sheffels barbsheffels@comcast.net, Tim Wawrzyniec tfw@unm.edu, or Kevin Smart, and we will get your post on the SGT website.

Academic moves: Tim Wawrzyniec became faculty in the Department of Earth and Planetary Sciences at the University of New Mexico. He teaches classes in tectonics, petroleum geology, and geospatial analysis. Anja Schleicher has joined Ben van Der Pluijm’s group at the University of Michigan. Anja is returning as a post-doc to work on aspects of clay mineralogy, and she is joined by Caltech graduate Charlie Verdel who is on a 2-year post-doctoral position studying the chronology of detachment faults in the southwestern US Cordillera. John Dewey was made an Honorary Member of the Royal Irish Academy – Congratulations John! John Suppe, having moved from Princeton to Taipei, is building an international research group at National Taiwan University (NTU) that is broadly focused on active structural, tectonic and geomorphic processes. He is joined this year by a crew of post-docs including Kamil Ustaszewski (active and regional tectonics of Dinarides and Carpathians, PhD Basel with Stefan Schmid), Michaela Ustaszewski (active tectonics, PhD Bern with Adrian Pfiffner), Mong-Han Huang (inSAR deformation, MS NTU with Jyr-Ching Hu), En-Chao Yeh (structural geology and scientific boreholes, PhD Penn State with Don Fisher), Vicki Chen (OSL dating, PhD NTU with Yue-Gao Chen), Maryline Le Beon (active tectonics of Dead Sea fault, PhD IPGP Paris with Yann Klinger and Paul Tapponnier) and Kristin Cook (lower-crustal flow, Longmenshan Mountains Sichuan, bedrock incision, PhD MIT with Leigh Royden). Ashley Griffith has accepted a post-doctoral position in Rome to work with Giulio Di Toro and Stephen Nielsen. Ashley completed her PhD at Stanford University where she worked with Dave Pollard. Laura Webb has relocated from Syracuse, NY to join the Department of Geology at the University of Vermont as an Assistant Professor. She will retain a Research Assistant Professor appointment in the Department of Earth Sciences at Syracuse University.

Industry moves: Gary Ingram was resigned in April as the Exploration Manager of the East Carpathian foreland area, an exploration division of Petrom in Romania. Gary had served as a principal regional geologist for Shell New Ventures, based in the Netherlands. P. Ted Doughty resigned his Associate Professor position at Eastern Washington University and started his own oil and gas consulting firm (PRISEM Geoscience Consulting LLC in Spokane, Washington.

2007-2008 Structural Geology and Tectonics Division Contacts:

Chair (until 10/08/08, then Past Chair): Eric Erslev, Colorado State University, Ft. Collins, Dept. Geosciences, Fort Collins, CO 80523-1482; 970 491-6375, erslev@cnr.colostate.edu

First Vice-Chair (until 10/08/08, then Chair): Claudia Lewis, Los Alamos National Laboratory, EES-1, MS D462, Los Alamos, NM 87545, (505) 665-7728, elewis@lanl.gov

Second Vice-Chair (until 10/08/08, then First Vice-Chair): Michele Cooke, University of Massachusetts, 230 Morrill Science Center, 611 N. Pleasant St., Amherst, MA 01003-9297; (413) 577-3142, cooke@geo.umass.edu

Second Vice-Chair (as of 10/08/08): Scott E. Johnson, University of Maine, Department of Earth Sciences, Orono, ME 04469-5790; (207) 581-2142, johnsons@maine.edu

Secretary/Treasurer: Mary S. Hubbard, Utah State University, 0305 Old Main Hill, Logan, Utah 84322-0001; (435) 797-3686, mary.hubbard@usu.edu

Past Chair (until 10/08/08, then free!): Bill Dunne, Department of Earth & Planetary Sciences, University of Tennessee, Knoxville, TN 37996-1410 USA, (865) 974-2366, wdunne@utk.edu

Newsletter Editors: Tim F. Wawrzyniec, tfw@unm.edu, Department of Earth & Planetary Sciences, University of New Mexico, MSC03-2040, Albuquerque, NM 87131-0001 (505) 277-2740 and Barbara M. Sheffels, 27 High Rock Rd, Wayland, MA 01778 USA; (508) 358-5461; barbsheffels@comcast.net