The Past and the Future

Welcome to the Fall newsletter of the GSA Structural Geology and Tectonics Division. Since the last newsletter, my colleague Bob Hatcher passed along a copy of the communication from the first officers of the Division to the then membership-to-be. Some of you may still have your copy of that letter and attachments from 1981, but if you do not, you can view them at http://rock.geosociety.org/sgt/GSA_Proceedings_1981.pdf as a PDF. The Division was an outgrowth of discussions at a Penrose Conference in 1980, was approved by GSA Council in 1980, and was inaugurated with a special session about “The Frontiers in Structural Geology” at the 1981 GSA Annual Meeting in Cincinnati. A clear goal for the Division was to provide a single venue via GSA for a strong collection of technical presentations concerning “field, experimental and theoretical research that illuminates general principles or provides examples of interest to a wide range of structural geologists.” Reading the document, the original officers were not entirely comfortable with the role of tectonics (two of them know where I live, so they can find me and set me straight on this point!), as indicated by “exclude geometrical and plate tectonics, a topic adequately covered at the AGU meetings.” It is safe to say that AGU has exceeded that brief over the years in a rather constructive manner.

Still, the name of the Division is “Structural Geology and Tectonics,” and its goal was to gather great science into one venue so as to serve the professional needs of its broad and diverse membership. Going forward, that is still the purpose of the Division. This year, we have taken new steps toward focusing and strengthening the Division’s efforts to build a technical program worthy of its membership and their collaborators. As is often the case with large volunteer organizations, the direct payoff will not come immediately, but will begin to be obvious for the Houston meeting in 2008. Before that event, and as we prepare for the Denver meeting in the very near future, the Division has two tasks for which we are looking to the membership for assistance. They are:

continued on p2
Chair’s Message (continued from p1)

1) Working with the Division’s Program Committee:
The Committee has “been on the books” from the inception of the Division, but has certainly not been in use for a long time. This committee is Eric Erslev, Claudia Lewis, Pete Copeland, Zoe Shipton, and Jeff Lee, who are initially tasked to develop a program for the 2008 GSA Annual Meeting in Houston, but also to start planning for Portland in 2009. Houston offers us a great opportunity to interact with our colleagues in the oil and gas industry, who bring powerful perspectives to the deformation of the Earth. I would ask that you give thought to possible theme sessions, particularly ones that would draw our colleagues in industry and from around the world to give presentations. I am sure that if you have a good idea with a capable leader identified (possibly even yourself!), Eric would appreciate hearing from you. Also, if a member of the program committee contacts you, please work with them. Thanks in advance for your help.

2) Revising the definition for who the Division is to serve:
To be honest, when we worked to revise the bylaws, we realized that the definition of the division needed to be revised. Yet, we also thought that any definition that we provided would likely require broader comment and agreement from the membership of the Division. That will be the task for the coming year, and so in a break with “tradition,” Eric Erslev, as the incoming chair, will use this newsletter to discuss the issue.

So, let me encourage everyone to participate in these efforts, and I look forward to seeing you in Denver.

Bill Dunne
September, 2007, Knoxville

A note from the incoming SGT chair:
Through his amazing persistence and dedication, Bill Dunne has provided us a huge advance by modernizing our bylaws, making them both more closely matched to our current practices and better suited to accomplish our future goals. It became apparent during this process, however, that there were diverse opinions as to what “structural geology and tectonics” really mean today. As a result, the definition in the revised bylaws (below) was meant to be the opening on this larger conversation:

“ Structural geology and tectonics are the investigation of the geometry, kinematics, dynamics, and mechanics of deformation in natural earth materials at all scales. These investigations are frequently field-based, and also draw on remote observation, experimental work and computer simulations. They frequently involve other earth scientists, other scientists and/or other members of society. The investigations increase the basic understanding of geological processes and contribute to the well being of society.”

This lightning rod has already attracted numerous queries. David Pollard noted the redundancy of having geometry, kinematics and dynamics with mechanics in the opening line since the first 3 constitute the parts of mechanics. He suggested that the first three be omitted, leaving “mechanics” to cover all of them. Ben van der Pluijm and Mike Brown suggested that we needed to broaden our definition to be more inclusive of the tools from other disciplines (e.g., thermochronology) that are commonly used to constrain structural and tectonic processes.
Rather than assemble a new definition from these few comments, we will start our Fall business meeting with a short discussion of just what constitutes today’s “structural geology and tectonics.” Responses will be recorded and will be solicited from the membership as a whole – you can send initial suggestions to me at erslev@warnercnr.colostate.edu. While it is not possible that everyone will agree to a single definition, some brainstorming on how to represent our diverse threads should be illuminating and hopefully invigorating.

Hope to see you at the meeting!
Eric Erslev
2008 SGT Division Chair

A Few More Announcements from the Current Chair

1) Results of Division Election

Thanks for your participation in the balloting process this year, which involved the revision of the bylaws. The revised bylaws and the new rules and regulations passed comfortably with some members abstaining. Based on the modest feedback that we had from the membership during this process, we believe that some of these abstentions related to the content of the definition, which will be an item of business for the Division in the coming year.

Turning to the officer elections, I wish to congratulate Michele Cooke as our new second vice-chair and to thank Adolph Yonkee for serving as a candidate. Both Michele and Adolph were willing to volunteer to help you and the Division, and that is appreciated. Another election marked a major transition for the Division with Mary Hubbard being elected as the incoming secretary/treasurer who replaces Peter Vrolijk, the longest serving officer in the history of the Division. Other elections yielded Eric Erslev as the incoming division chair and Claudia Lewis as the incoming first vice-chair. So, the Division should have a leadership team that combines experience with new perspectives.

Division support for student research

This year, we had two opportunities to aid the careers of student geoscientists with resources derived from Division dues. They are:

1) Support of student travel to “Continental Tectonics and Mountain Building: A Celebration of the Centenary of the Peach and Horne Memoir” in Ullapool, Scotland, organized by GSA and GSL. The students receiving support were David L. Cannon (MS, advisor: Terry Engelder, Penn State), Clayton Cloehn (PhD, advisor: Bob Tracy, VaTech), and Arthur J. Merschat (PhD, advisor: Bob Hatcher, UTK).

2) Support for student research through the GSA Student Research Grant program. The students are Daniel Jones (PhD, advisor: Art Snoke, Wyoming), Sara Smaltz (MS, advisor: Eric Erslev, Colorado State), and Ephraim Taylor (PhD, advisor: Sharon Mosher, UT Austin).

Congratulations to these worthy students. This year, we continued last year’s trend of supporting student travel to a GSA-supported, disciplinary meeting of importance (Backbone of the Americas — Patagonia to Alaska) and also providing student research support. Thanks to all Division members for paying the dues that provide this support.

Thanks are in order
In a voluntary organization the size of SGT, little happens without the willing help of many individuals, and it is important to recognize the contributions. This year, volunteers that made a difference include:

Career Achievement Award Committee – Peter Hudleston (chair), John Platt & John Bartley
Best Paper Award Committee – John Weber (chair), David Ferrill & John Oldow
Nomination Committee – Rick Allmendinger, Sharon Mosher
Newsletters – Barbara Sheffels, Tim Wawrzyniec
Website (including a redesign this year) – Kevin Smart

Finally, I wish to personally thank Peter Vrolijk for yeoman’s service to the Division as secretary/treasurer. Peter works to stay out of the limelight, and he will assure you that his role is modest, but the corporate memory and continuity that he has provided has helped the Division.

It is NEVER too Early to Make Nominations for Career Contribution and Best Paper Awards

Even though the GSA Annual Meeting has not yet happened, the Division is already thinking about next year’s awardees (please come and enjoy the presentation of this year’s award at the Division business meeting at the GSA Annual Meeting in Denver).

We are looking for nominations for the Career Contribution Award meeting the requirement that the individual has made numerous distinguished contributions throughout her/his career which have clearly advanced the discipline of structural geology and/or tectonics. The successful candidate need not be a citizen of the United States, and further is not required to be a member of the Geological Society of America.

Please contact the incoming chair of the CCA committee, John Platt (jplatt@usc.edu) with your nomination document [including (1) name of nominee, present institutional affiliation and address; (2) summary statement of nominee's major career contributions to the science of structural geology and tectonics; (3) selected key published works of the nominee; (4) name and address of nominator.]

In addition we are looking for nominations for the Best Paper Award that meets the requirement of being awarded for a published work (paper, book, or map) of exceptional distinction which clearly advances the discipline of structural geology and/or tectonics. Authors do not need to be members of the Geological Society of America and may be citizens of any country.

Please contact the incoming chair of the BPA committee, David Ferrill (dferrill@swri.edu) with your nomination document [including (1) full citation: author(s), title, date, journal or book (with publisher), volume number, and page numbers; (2) statement in support of nomination (particularly comment on the exceptional achievement or significance of the publication – additional supporting material such as letters, published discussions, or reviews may be included; (3) name and address of nominator.]

Thanks greatly in advance for your nominations.
Tectonics Program
The Tectonics Program supports a broad range of field, laboratory, computational, and theoretical investigations aimed at understanding the evolution and deformation of continental lithosphere through time. Proposals to elucidate the processes that act on the lithosphere at various time scales and length scales, either at depth or the surface, are encouraged. Because understanding such large scale phenomena commonly requires a variety of expertise and methods, the program supports integrated research involving the disciplines of structural geology, petrology, geochronology, sedimentology, stratigraphy, geomorphology, rock mechanics, paleomagnetics, geodesy, and other geophysical techniques.

Please note that the Tectonics Program Solicitation (NSF 06-544) has recently been updated and can be found at the following URL: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06544.

Continental Dynamics Program
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.

The Continental Dynamics Program Solicitation can be found at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf04512

EarthScope Program
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 USArray. 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. The solicitation can be found at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06562

SGT 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 tfw@unm.edu or Barb Sheffels barbsheffels@comcast.net. If we can’t print it, Kevin Smart ksmart@swri.org can put it on the web page!
2007 GSA Annual Meeting & Exposition
28-31 October • Colorado Convention Center • Denver, Colorado
Earth Sciences for Society
Beginning of the International Year of Planet Earth

Pardee Sessions

P4. New Data, Models, and Concepts of the San Andreas Fault System
Cosponsored by GSA Structural Geology and Tectonics Division
Tues., 30 Oct., 1:30 p.m.–5:30 p.m.
Basil Tikoff, University of Wisconsin, Madison, Wisc.; Mark Zoback, Stanford University, Stanford, Calif.
A session dedicated to integrating spatial and temporal variations of deformation observed on the San Andreas fault system in central California. The session will address new results from SAFOD (San Andreas Fault Observatory at Depth) in addition to other ongoing studies.

P7. Pulse of the Earth: Geochronology and Paleomagnetism of Large Igneous Provinces - The Key to Reconstructing Precambrian Supercontinents
Cosponsored by Precambrian [At Large]; International Geological Correlations Program Project 509, Paleoproterozoic Supercontinents and Global Evolution
Sun., 28 Oct., 1:30 p.m.–5:30 p.m.
David A.D. Evans, Yale University, New Haven, Conn.; Joseph G. Meert, University of Florida, Gainesville, Fla.
Supercontinents and large igneous provinces (LIPs) relate mantle processes to environmental conditions in deep time. Focused geochronologic and paleomagnetic studies of LIPs can reconstruct pre-Pangean supercontinents and assess relationships with geodynamics, metallogeny, paleoclimate, and life.

Structural Geology Technical Sessions

T39. Hydrogeology of Mountainous Terrains
GSA Hydrogeology Division
Shemin Ge, Andrew Manning
This session provides a forum for sharing research results, progress, and ideas related to hydrogeologic processes in mountainous settings. Topics include, but are not limited to, field observations, experiments, and theoretical or numerical modeling studies. Oral.

T63. Gas Shales of North America
GSA Sedimentary Geology Division; GSA Structural Geology and Tectonics Division
Ibrahim Çemen, James Puckette, Darwin Boardman
Several research groups have been studying different geological, geophysical, and economic aspects of North American gas-shale units. This session will provide a forum for formal discussion of geological problems related to gas-shales. Oral.
T80. Active Faulting, Neotectonics, Paleoseismology: A Tribute to James E. Slosson  
_GSA Engineering Geology Division; GSA Structural Geology and Tectonics Division_  
Wanda Taylor, Keith Sverdrup, Vincent S. Cronin  
This session to honor Jim Slosson's work on seismic safety will concentrate on studies concerning the recognition or description of faults active in the Neogene, or characterization and mitigation of seismic hazards. Oral.

T82. The Structure, Composition and Evolution of the Lithosphere of Western North America  
_GSA Geophysics Division; GSA Structure and Tectonics Division_  
Walter D. Mooney, Catherine M. Snelson, Eugene Humphreys, Richard C. Aster  
The session focuses on insights into the processes that have formed and modified the entire lithospheric column of Western North America. Results from seismic imaging, non-seismic geophysics, structural geology and geochemistry are welcome. Oral.

T85. Combining Geophysics and Geology to Solve Geoscience Problems  
_GSA Geophysics Division; GSA Structural Geology and Tectonics Division; GSA Geology and Society Division_  
Scott Giorgis, Eric Horsman, Sarah Titus  
Simultaneous application of geophysics and geology to geoscience problems often generates critical insights. Geophysics provides data unavailable from geological analysis. Geology provides constraints for processing and interpreting geophysical data. This session highlights that synergistic relationship. Oral.

T106. Geologic Structures, Fluid Flow, and Ore Deposits  
_GSA Hydrogeology Division; GSA Structural Geology and Tectonics Division, GSA Geophysics Division, Society of Economic Geologists, U.S. Geological Survey; GSA Geology and Society Division_  
Jonathan Saul Caine, Eric P. Nelson  
This session focuses on the structure of ore deposits integrated using advances in tectonics, fluid flow, permeability structure, and geochemical processes. Research from field, laboratory, geophysical, remote sensing, conceptual and computer modeling studies are welcome. Oral.

T107. Recognition and Implications of Coseismic Fault-Zone Structures  
_GSA Structural Geology and Tectonics Division; GSA Geophysics Division_  
Laurel B. Goodwin, James P. Evans  
Fault-zone structures provide an enigmatic record of earthquake and fault mechanics. We will focus on how to read this record more effectively, utilizing ideas and approaches from both geology and geophysics. Oral.

T108. Reservoirs to Ruptures: Multidisciplinary Approaches to Studying Fault Rock Distribution and Evolution in the Seismogenic Crust  
_GSA Structural Geology and Tectonics Division; GSA Geophysics Division_  
Ruth H. Wightman, Jonathan Imber, Steven Smith, Robert E. Holdsworth
This session brings together a range of earth scientists from industry, academia, and government research organizations to discuss multi-disciplinary approaches to characterizing and predicting the nature and distribution of fault rocks within the seismogenic crust. Oral.

**T109. Mélanges: Processes of Formation and Societal Significance**  
*GSA International Division; GSA Structural Geology and Tectonics Division; GSA Engineering Geology Division, GSA Sedimentary Geology Division*  
John Wakabayashi, Yildirim Dilek  
This session explores advances in the study of mélanges. We seek to bring together researchers from around the world, spanning a wide range of geoscience disciplines, including structural, sedimentary, and engineering geology. Oral.

**T110. Combining Kinematics and Mechanics in Understanding Deformation Processes**  
*GSA Structural Geology and Tectonics Division*  
David Wütschko, John Spang  
Kinematic and mechanical models are often viewed as competing methods of understanding structures. The purpose of this session is to bring together researchers attempting to apply both geometric and mechanical analyses to understand deformation processes. Oral.

**T113. Regional Tectonics of Basement-Cored Foreland Shortening: Integrating Geological and Geophysical Insights from Laramide and Analogous Orogens**  
*GSA Structural Geology and Tectonics Division; GSA Geophysics Division*  
Eric A. Erslev, Tim F. Wawrzyniec  
We'll explore tectonic controls on basement-involved foreland shortening in orogens like the Laramide of the Rockies by integrating lithosphere-scale observations from the Rockies with the tectonics of adjoining regions and insights from active analog orogens. Oral.

*GSA Structural Geology and Tectonics Division*  
Allen J. Dennis, Jim Hibbard  
From defining tectonic events with rift-drift sequences and clastic wedges, to contrasting lower-upper plate rift stratigraphy, origins and consequences of long-lived lithospheric fracture zones, rifting diachroneity, development of ribbon continents, and far-traveled terranes. Oral.

**T139. The Future of Geoscience Field Courses**  
*GSA Structural Geology and Tectonics Division; GSA Geoscience Education Division; National Association of Geoscience Teachers, GSA Geophysics Division, GSA Quaternary Geology and Geomorphology Division*  
Steven J. Whitmeyer, L. Scott Eaton, Charles Onasch, Lee J. Suttner  
This session will focus on future directions of geoscience field camps. Principal themes will include traditional goals of teaching field geology and mapping, recent technological advances, and modern topics like geomorphology, geophysics, and environmental assessment. Oral.
Tectonics Technical Sessions

T1. Denver Then and Now: From Paleontology to Public Policy on the Front Range Urban Corridor
*Paleontological Society; Denver Museum of Nature and Science; GSA Geology and Society Division*
Ian Miller, Kirk Johnson, Robert Raynolds, Beth Ellis
This interdisciplinary session will cover such diverse subjects as water resources, Laramide tectonics, basin evolution, paleontology, and isotope geochemistry, with a focus on the geology of the metropolitan corridor along the Colorado Front Range. Oral.

T25. Deformation and the Landscape: Quantitative Approaches to Tectonic Geomorphology
Cameron Wobus, Kelin X. Whipple, Eric Kirby, Benjamin T. Crosby
This session will showcase research that quantitatively recreates the pattern and history of tectonic deformation through studies of landscape form. We welcome empirical, theoretical, numerical, experimental, or field-based approaches describing landscape response to tectonic forcing. Oral.

T64. The Sedimentary Tape Recorder: Characterizing and Quantifying the Dynamics of Geomorphic-Sedimentologic Coupled Systems
Estelle Mortimer, Douglas Paton, Bruce Trudgill
This session aims to bring together diverse, multidisciplinary studies utilizing the clastic sedimentary record to characterize and quantify the dynamics of geomorphic-sedimentologic coupled systems in response to spatio-temporal variations in climate and surface deformation Oral.

T84. Active and Ancient Tectonics along the Northern Cordillera Margin—Magmatism, Deformation, Metamorphism, and Basin Development (Posters)
*GSA Structural Geology and Tectonics Division; GSA Geophysics Division; GSA Sedimentary Geology Division*
Brian Hampton, Jeffrey M. Trop, Kenneth D. Ridgway
Resolving the tectonic processes and evolution of the northern Cordillera requires integration of geological and geophysical data through time and space. We encourage studies using geochronology, geodesy, geophysics, numerical modeling, petrology, stratigraphy, and structural geology. Posters.

T85. Combining Geophysics and Geology to Solve Geoscience Problems
*GSA Geophysics Division; GSA Structural Geology and Tectonics Division; GSA Geology and Society Division*
Scott Giorgis, Eric Horsman, Sarah Titus
Simultaneous application of geophysics and geology to geoscience problems often generates critical insights. Geophysics provides data unavailable from geological analysis. Geology provides constraints for processing and interpreting geophysical data. This session highlights that synergistic relationship. Oral.

T86. New Perspectives on the Rio Grande Rift: From Tectonics to Groundwater
*GSA Structural Geology and Tectonics Division; GSA Geophysics Division; GSA Hydrogeology*
Abundant new geologic and geophysical studies of the Rio Grande rift provide insights into synchronous Neogene faulting, sedimentation, and volcanism and their hydrogeologic controls on critical groundwater aquifers within multiple rift basins. Oral.

**T88. Geochemistry of Magmatic and Metamorphic Processes: In Honor of the Contributions of Joseph L. Wooden**

James Wright, Drew Coleman, Andrew P. Barth

In this session we seek to bring together geologists to describe the latest technical and scientific advances in geochemistry that are leading to greater insights into rock forming processes and their implications for geodynamics. Oral.

**T90. Geology of the Northern Plains of Mars: New Tectonic, Petrologic, and Geomorphic Perspectives**

*GSA Planetary Geology Division*

Joseph Michalski, Michael Wyatt

The northern plains of Mars contain an enigmatic suite of volcanic, tectonic, periglacial, sedimentary, and impact-related features. This session will explore new interpretations from recent spacecraft data and the implications for the evolution of Mars. Oral.

**T103. Pulse of the Earth: Geochronology and Paleomagnetism of Large Igneous Provinces, the Key to Reconstructing Precambrian Supercontinents**

*Precambrian [At Large]; Paleoproterozoic Supercontinents and Global Evolution (IGCP509)*

David A.D. Evans, Joseph G. Meert, Kevin R. Chamberlain, Stephen S. Harlan

Supercontinents and large igneous provinces (LIPs) relate mantle processes to environmental conditions in deep time. Focused geochronologic and paleomagnetic studies of LIPs can reconstruct pre-Pangean supercontinents and assess relationships with geodynamics, metallogeny, paleoclimate, and life. Oral.

**T110. Combining Kinematics and Mechanics in Understanding Deformation Processes**

*GSA Structural Geology and Tectonics Division*

David Wiltshko, John Spang

Kinematic and mechanical models are often viewed as competing methods of understanding structures. The purpose of this session is to bring together researchers attempting to apply both geometric and mechanical analyses to understand deformation processes. Oral.

**T111. Understanding Orogenesis Through Paleoelevation**

*Geochemical Society; Mineralogical Society of America*

Matthew Kohn

Contributions are encouraged in all areas of paleoelevation research, including theory and case studies using stable and radiogenic isotope geochemistry, geomorphology, atmospheric pressure proxies, and geodynamics. This session follows MSA/GS short course on paleoelevation 10/26–10/27. Oral.

**T112. A Synoptic Crustal Section from the Cascadia Margin to the Southern Appalachians**
Focusing EarthScope Research on Crustal Domains, their Boundaries, and Fundamental Processes of the U.S. Continent
GSA Structural Geology and Tectonics Division; GSA Geophysics Division
Ben A. van der Pluijm, G. Randy Keller, Basil Tikoff
Exploring the 4-D construction, stabilization, and modification of a continent—the aim is to construct a testable section across the United States that defines major research questions and offers a framework for EarthScope research. Oral.

T113. Regional Tectonics of Basement-Cored Foreland Shortening: Integrating Geological and Geophysical Insights from Laramide and Analogous Orogens
GSA Structural Geology and Tectonics Division; GSA Geophysics Division
Eric A. Erslev, Tim F. Wawrzyniec
We'll explore tectonic controls on basement-involved foreland shortening in orogens like the Laramide of the Rockies by integrating lithosphere-scale observations from the Rockies with the tectonics of adjoining regions and insights from active analog orogens. Oral.

T114. Mantle Dynamics and Crust-Mantle Interactions in Collisional Orogens
GSA International Division; GSA Structural Geology and Tectonics Division; GSA Geophysics Division; MARGINS Initiative
Yildirim Dilek, Paul T. Robinson
Ophiolite emplacement and magmatism contribute significantly to continental growth in collisional orogens and are strongly controlled by mantle dynamics and crust-mantle interactions. This session will examine relevant processes involved in the evolution of collisional orogens. Oral.

T115. The Blue Mountains Region of Oregon, Idaho and Washington: Recent Advances in the Mesozoic and Cenozoic History of an Enigmatic Accretionary Province
GSA Sedimentary Geology Division; GSA Structural Geology and Tectonics Division
Todd LaMaskin, Joshua Schwartz, Victor Camp
The Blue Mountains region offers insights into classic problems including the nature of the Mesozoic margin and plume versus non-plume origin of the Columbia River Basalts. We are soliciting abstracts for a multidisciplinary theme session. Oral.

GSA Structural Geology and Tectonics Division
Allen J. Dennis, Jim Hibbard
From defining tectonic events with rift-drift sequences and clastic wedges, to contrasting lower-upper plate rift stratigraphy, origins and consequences of long-lived lithospheric fracture zones, rifting diachroneity, development of ribbon continents, and far-traveled terranes. Oral.
In 2008, GSA's Cordilleran and Rocky Mountain sections will combine to hold their annual meetings on the University of Nevada-Las Vegas (UNLV) campus in southern Nevada. The UNLV Department of Geoscience (Cordilleran Section) is pleased to partner with the Northern Arizona University Department of Geology (Rocky Mountain Section) to host this joint meeting. The Cordilleran and Rocky Mountain sections are two of the most active sections in GSA, and their past joint meetings have been well-attended and highly successful. Please join us this year for a great meeting.

While Las Vegas has a worldwide reputation as a glittering tourist town, it is also a geologic paradise. Located within the Basin and Range province adjacent to the Colorado Plateau, Las Vegas offers many field trip opportunities, including trips in the eastern Mojave Desert, the northwest Colorado Plateau, and the Northern Colorado River Extensional Corridor. The accessible geology includes Proterozoic basement complexes, Paleozoic marine strata, Mesozoic continental strata, Miocene-Pliocene volcanic-plutonic complexes and syn-extensional sedimentary basins, Quaternary volcanic fields, tilted crustal sections, and structures recording Mesozoic and Cenozoic tectonism.

The meeting venue is the newly completed UNLV Student Union on the eastern edge of campus. The second floor of the building houses a modern conference facility, including a large exhibit hall. A food court and coffee shop are housed in the building, and numerous lunchtime restaurants are a short walk off campus. The meeting is timed to coincide with UNLV’s spring break, so ample parking will be available on campus. Las Vegas is easily accessible with an international airport serviced by a large number of airlines just minutes from campus. Mid-March weather in southern Nevada is generally pleasant, with sunny skies, highs in the 70s, and lows in the 50s.

Rod Metcalf, Larry Middleton, General Meeting Co-Chairs
Terry Spell, Technical Program Chair
Eugene Smith, Ernie Duebenorfer, Field Trip Co-Chairs

Please plan to join us in the Buffalo-Niagara region of New York for the 2008 GSA Northeastern Section Meeting. Don't forget to mark 27-29 March 2008 on your calendar!

Twenty or so symposia and theme sessions are scheduled; if you have other suggestions, there's still a little time and room. Oral and poster sessions will run from Thursday, 27 March, through noon on Saturday, 29 March.

Back to top
The western New York and adjacent Ontario area is a mecca for geological sciences of all persuasions; Buffalo and southern Toronto offer opportunities for field excursions in a variety of geologic, lacustrine, environmental, and climatic settings. Snow willing, we will offer several field trips, which will be run mostly on Wednesday, 26 March, and each should provide a stage for discussion. Workshops and short courses, also mostly on 26 March, will cover a wide range of teaching, research, and applied interests. We look forward to seeing you!

Gary Solar, General Chair
Gary Lash and Jason Briner, Technical Program Co-Chairs

Call for Abstracts

South-Central Section Meeting
42nd Annual Meeting
30 March – 1 April 2008, Hot Springs, Arkansas
Abstracts due March 26th, 2008

The University of Arkansas at Little Rock Department of Earth Sciences and the Arkansas Geological Survey will host the 2008 annual meeting of the South-Central Section of the Geological Society of America. The meeting will be held Sunday, 30 March through Tuesday, 1 April at the Hot Springs Convention Center in Hot Springs, Arkansas. This new convention center sits just two short blocks from Hot Springs National Park.

The City of Hot Springs (pop. 38,000) is located in south-central Arkansas, 49 miles southwest of Little Rock. Hot Springs National Park surrounds the north end of the city. Hot Springs is the oldest property in the National Park System, dating back to 1832, when Congress established the first federally protected area in the nation’s history. Hot Springs Reservation — renamed Hot Springs National Park in 1921 — was created by Congress to protect the 47 naturally flowing thermal (147 °F) springs on the southwestern slope of Hot Springs Mountain.

Located within the core of the Ouachita Mountains, Hot Springs is surrounded by spectacular and diverse geology. Geologic and hydrologic features of interest within Hot Springs include the thermal springs, a well-exposed Ordovician through Mississippian sedimentary sequence of chert, shale, sandstone, and novaculite, complex geologic structures, and recent damage from landslides and flash floods. Nearby geologic features of interest include quartz crystal mines, the Magnet Cove alkalic intrusive complex, barite and vanadium mines, and diamond-bearing lamproite near Murfreesboro. For those with time for recreational activities, Hot Springs has many options. Within Hot Springs National Park, one can enjoy a relaxing bath spa and massage, tour the historic landmarks, including classic hotels and the famed Bathhouse Row, or shop for unique antiques and collectibles or fine art in world-class art studios. Nearby activities of interest include thoroughbred horse racing at Oaklawn Park, interactive museums, and Garvin Gardens — a 210-acre botanical garden.

Jeff Connelly, Scott Ausbrooks, General Meeting Co-Chair
Beth McMillan, Technical Program Co-Chairs
Doug Hanson, Field Trip Chair
For the Latest on Meetings and Field Trips go to Upcoming Meetings
http://rock.geosociety.org/sgt/sgt_meetings.html

RESOURCE BIN

Blackwell/Wiley will be publishing the new, third edition of the textbook Global Tectonics by Kearey, Klepeis & Vine, in January 2008. Of interest to Structural Geologists, the book has been extensively revised and features entirely new chapters on continental tectonics, including Continental Rifts, Continental Strike-Slip Faults and Transforms, Orogenic Belts Fold-Thrust belts, and Precambrian Tectonics. It is aimed at junior/senior undergraduates and first-year graduate students. The price is better than most textbooks at under $80.

A full table of contents and descriptions appear on this website:

Greetings from New Mexico, the monsoon is nearly over and the chile roasters are beginning their annual appearance on the lots and street corners. Most of all, the summer heat is at last giving way to usual warm days and cool nights of the high desert fall. You will note we are still making some adjustments to the format. The goal is to produce less paper and have a document that guides you to actively updated content on the Division website (http://rock.geosociety.org/sgt/index.html) and beyond. As always, if you need a quick update or want to get your information out on the fly, contact me, Tim, at tfw@unm.edu, Barb barbsheffels@comcast.net, or Kevin ksmart@swri.edu, and we will get your information posted on the SGT website.

People on the Move: Nicholas (Nick) W. Hayman recently accepted a tenure track research position from the University of Texas at Austin, Institute for Geophysics. Congratulations on joining the rapidly growing Jackson School of Earth Sciences! Keith Howard received a proper sendoff into Emeritus status at the USGS in Menlo Park. This new stage in his career started with a festive retirement roast put on by colleagues and friends in April of 2007.

Academic News: Friends and former students of Bob Yeats have endowed a professorship in his name in the Department of Geosciences at Oregon State University in the field of earthquake geology and structural geology. Bob is a GSA Fellow and a former chair of the SGT Division. Micah Jessup, a former PhD student of Rick Law at Virginia Tech and a UNM alum, began this Fall as a new tenure-track assistant professor at the University of Tennessee Knoxville, so Bill Dunne is apparently now trapped in administration. In July 2007, John Geissman, Past Chair of the SGT Division and former Wolverine, became the Chair of the Department of Earth and Planetary Sciences at the University of New Mexico.

Industry news: Catalina Luneburg (PhD, 1996, ETH under John Ramsay) recently left Midland Valley and joined the structure group at Geo-Logic Systems in Boulder, CO – their LithoTect restoration and balancing software is typically provided to universities for free (info@geologicsystems.com).
2006-2007 Structural Geology and Tectonics Division Contacts

Chair: Bill Dunne, Department of Earth & Planetary Sciences, University of Tennessee, Knoxville, TN 37996-1410 USA; (865) 974-2366; wdunne@utk.edu.

First Vice-Chair: Eric Erslev, Department of Geosciences, Warner College of Natural Resources, Colorado State University, Ft. Collins, CO 80523-1482 USA; (970) 491-5661; erslev@cnr.colostate.edu.

Second Vice-Chair: Claudia Lewis, Los Alamos National Laboratory, EES-1, MS D462, Los Alamos, NM 87545; (505) 665-7728; clewis@lanl.gov.

Secretary/Treasurer: Peter J. Vrolijk, ExxonMobil Upstream Research Co., PO Box 2189, Houston, TX 77252-2189 USA; (713) 431-4151; peter.vrolijk@exxonmobil.com.

Past Chair: John W. Geissman, Dept of Earth & Planetary Sciences, 203 Northrop Hall, University of New Mexico, Albuquerque, New Mexico 87131-0001 USA; (505) 277-3433; jgeiss@unm.edu.

Newsletter Editors: Tim F. Wawrzyniec, Department of Earth & Planetary Sciences, University of New Mexico, MSCO3-2040, Albuquerque, NM 87131-0001 USA; (505) 277-2740; tfw@unm.edu, and Barbara M. Sheffels, 27 High Rock Rd, Wayland, MA 01778-1903 USA; (508) 358-5461; barbsheffels@comcast.net.

Website Manager: Kevin J. Smart, Southwest Research Institute, Geosciences and Engineering Division, 6220 Culebra Road, San Antonio, TX 78238-5166 USA; (210) 522-5859; ksmart@swri.edu.

SG&T Division Website: http://rock.geosociety.org/sgt/index.html

Back to top