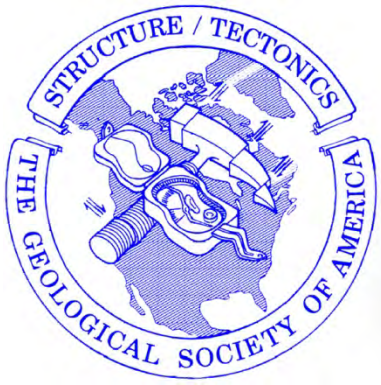


STRUCTURAL GEOLOGY AND TECTONICS DIVISION Newsletter

Volume 36, Number 1 *May, 2016*

CHAIR'S MESSAGE

This year the GSA Annual Meeting returns to Denver, Colorado. Please mark your calendars as the meeting is unusually early—September 25–28, 2016. The abstract deadline is July 12 and the early registration deadline is August 22 when many of us will be in the field. So please plan accordingly. Based on the technical sessions that have been proposed, it looks to be a great meeting for the SGT community.

This past year was a busy one for the division, not the least because it was the division's 35th anniversary. Here are the highlights from the past year.

1. 35th Anniversary Celebration. We celebrated the division's 35th anniversary with a symposium at the annual meeting. **Tanya Atwater**, this year's Career Contribution Awardee, gave a presentation looking back in time at the plate tectonics revolution while **Alexis Ault** and **Jack Loveless** each gave presentations looking ahead to the potential impacts of recent innovations in thermochronology and GPS data analysis. These presentations were followed by a Q & A session with NSF program officers **David Fountain**, **Stephen Harlan**, and **Lina Patino**. David, Steve, and Lina's presentations can be found on the division's website at http://rock.geosociety.org/sgt/NSF-Tectonics_GSA2015.pdf and http://rock.geosociety.org/sgt/NSF-workforce-development-programs.pdf.

2. Career Contribution Award. Tanya Atwater of the University of California, Santa Barbara, received the 2015 Career Contribution Award. **Clark Burchfiel** read the citation, which was crafted by **Joann Stock**. See p. 4 of the newsletter for a photograph from the Reception, Award, and Business Meeting in Baltimore and the division website for the citation and response (http://rock.geosociety.org/sgt/2015-CCA-Citation-Response.pdf). Many thanks to the award committee members **Daniel Stockli**, Chair, **Gary Axen**, and **Michele Cooke**.

3. Outstanding Publication Award. Konstanze Stübner and coauthors received the 2015 Outstanding Publication Award for their paired 2013 papers in *Tectonics* on the Shakhdara migmatitic gneiss dome. **Christian Teyssier** read the citation. See p. 5 of the newsletter for a photograph from the Reception, Award, and Business Meeting in Baltimore and the division website for the citation and response (http://rock.geosociety.org/sgt/2015-OPA-citation-response.pdf). Many thanks to the award committee members **Paul Karabinos**, Chair, **Juliet Crider**, and **John Wakabayashi**.

4. Stephen E. Laubach Structural Diagenesis Award. Austin Boles, a Ph.D. student at the University of Michigan, received the 2015 Stephen E. Laubach Structural Diagenesis Award. **Nicholas Williams**, an M.S. student at Northern Illinois University, received an honorable mention. The award was presented by the Sedimentary Geology Division. Many thanks to **Jim Evans** who was the division's member on the award committee.

5. Student Research Grant Awardees. The five students with the top proposals in structural geology and tectonics in the 2015 GSA Graduate Student Research Grant competition were awarded travel grants from the division to present their research at a GSA Annual Meeting. See p. 6 of the newsletter for a list of the 2015 awardees. Three of the 2014 awardees and three of the 2015 awardees presented their research in Baltimore. See p. 6 of the newsletter for a photograph from the Reception, Award, and Business Meeting in Baltimore.

6. Field Trip and Short Course Grants. Twenty-one students received support from the division to attend field trips and short courses at the 2015 GSA Annual Meeting in Baltimore. A large proportion of these students attended the Reception, Award, and Business Meeting where they each spoke briefly about the ways in which their participation in the field trip or short course advanced their careers.

7. The Student Fund. This year an impressive $6996 was donated to the Structural Geology and Tectonics Division Student Fund. The fund has now grown to the point that we are able to use earnings to support student activities. Many thanks to all the members of the division who have supported the fund since its initiation in 2010.

8. GSA-SGT and EGU-TS Cosponsored Sessions. Andrew Meigs and **Sarah Roeske** have worked to improve ties between the division and the European Geosciences Union Tectonics and Structural Geology Division. This past year marked the first time cosponsored sessions with the same title were held at the EGU General Assembly and the GSA Annual Meeting.

9. Management Board. This past year the management board said goodbye to **Yvette Kuiper**, who served as the division's secretary–treasurer for four years. Yvette skillfully managed the division's funds and kept the management board on track with her well-timed reminders and deep reservoir of knowledge about the division. The management board welcomes **Becky Flowers** as the new secretary–treasurer. **Andrew Meigs** has also rotated off the management board after serving the division as second vice chair, first vice chair, chair, and past chair. Andrew's down-to-business approach, compassion, and sense of humor kept the management board working efficiently during his four years of service. The management board welcomes **Margi Rusmore** as the new second vice chair. **Levi Crooke**, an M.S. student at the University of Alabama and the division's first student representative, has completed his term. Levi did a wonderful job setting the tone for this new position on the board. The management board welcomes **Ben Johnson**, a Ph.D. student at West Virginia University, as the new student representative.

10. Communications and Committees. This past year the management board welcomed **Hal Bosbyshell** as the new newsletter editor. **Kevin Smart** and **Kurt Burmeister** have provided the division with many years of service as the division's webmaster and Facebook manager, respectively, and will continue to do so for the coming year. **Chuck Bailey**, the division's outgoing lead JTPC representative, spearheaded the organization of

the division's technical program at the Baltimore meeting. **Mary Hubbard** is the incoming lead JTPC representative, and she has begun the arduous task of amassing and organizing the division's technical program for the upcoming Denver meeting. **Juliet Crider** will take over the reins for the 2017 GSA Annual Meeting in Seattle. The Career Contribution Award committee for the 2016 award consists of **Terry Pavlis**, Chair, **Andrew Meigs**, and **Delores Robinson**. The Outstanding Publication Award committee for the 2016 award consists of **Juliet Crider**, Chair, **John Wakabayashi**, and **Seth Kruckenberg**.

As you can see, the division is all about people. As the division leadership continues its efforts to showcase the research and accomplishments of the broader SGT community, to expand opportunities for students, and to facilitate communication on a range of topics, we know that you—the two thousand strong members of the GSA SGT Division—are also hard at work building and strengthening the SGT community. We are looking forward to another exciting year.

Jean Crespi
Chair, GSA Structural Geology and Tectonics Division

1-4 NOVEMBER
GSA 2015
Baltimore, Maryland, USA

Highlights from the Structural Geology & Tectonics Division
Business Meeting and Awards Reception
at the 2015 Annual Meeting in Baltimore, Md.

GEOLOGICAL SOCIETY OF AMERICA
STRUCTURAL GEOLOGY AND TECTONICS DIVISION

2015 CAREER CONTRIBUTION AWARD

Tanya Atwater

Clark Burchfiel and SGT Division Chair **Sarah Roeske** with 2015 Career Contribution Award winner **Tanya Atwater**. Please visit the Division website to read the award citation by **Joann Stock** and Tanya's response. http://rock.geosociety.org/sgt/2015-CCA-Citation-Response.pdf

2015 OUTSTANDING PUBLICATION AWARD

Stübner, K., Ratschbacher, L., Rutte, D., Stanek, K., Minaev, V., Wiesinger, M., Gloaguen, R., & Project TIPAGE members (2013) The giant Shakhdara migmatitic gneiss dome, Pamir, India-Asia collision zone: 1. Geometry and kinematics. Tectonics 32, 948-979.

Stübner, K., Ratschbacher, L., Weise, C., Chow, J., Hofmann, J., Khan, J., Rutte, D., Sperner, B., Pfänder, J.A., Hacker, B.R., Dunkl, I., Tichomirowa, M., Stearns, M.A., & Project TIPAGE members (2013) The giant Shakhdara migmatitic gneiss dome, Pamir, India-Asia collision zone: 2. Timing of dome formation. Tectonics 32, 1404-1431.

Outstanding Publication Award winner **Konstanze Stübner** (center) flanked by SGT Division Chair **Sarah Roeske** and presenter **Christian Teyssier**. Please visit the Division website to read Christian's award citation and Konstanze's response. http://rock.geosociety.org/sgt/2015-OPA-citation-response.pdf.

Nominations for the OPA and CCA are due March 1 each year.

2015 STEPHEN E. LAUBACH STRUCTURAL DIAGENESIS RESEARCH AWARD

Austin Boles, University of Michigan (Ben van der Pluijm, Project Supervisor), Diagenetic illite growth records the composition and timing of orogenic fluid expulsion in the Northern Appalachian Basin

Honorable Mention: **Nicholas Williams**, Northern Illinois University (Mark Fischer, Project Supervisor), Paleohydrologic Structure of an Allochthonous Salt Weld

2015 STUDENT RESEARCH GRANT AWARDEES

Each year the SG&T Division recognizes graduate students for excellent research proposals in the annual GSA solicitation. These students receive funds to help with travel to the annual meeting in which they present the results of the funded research. In 2015 the following students were recognized as having submitted outstanding research proposals in Structural Geology and Tectonics.

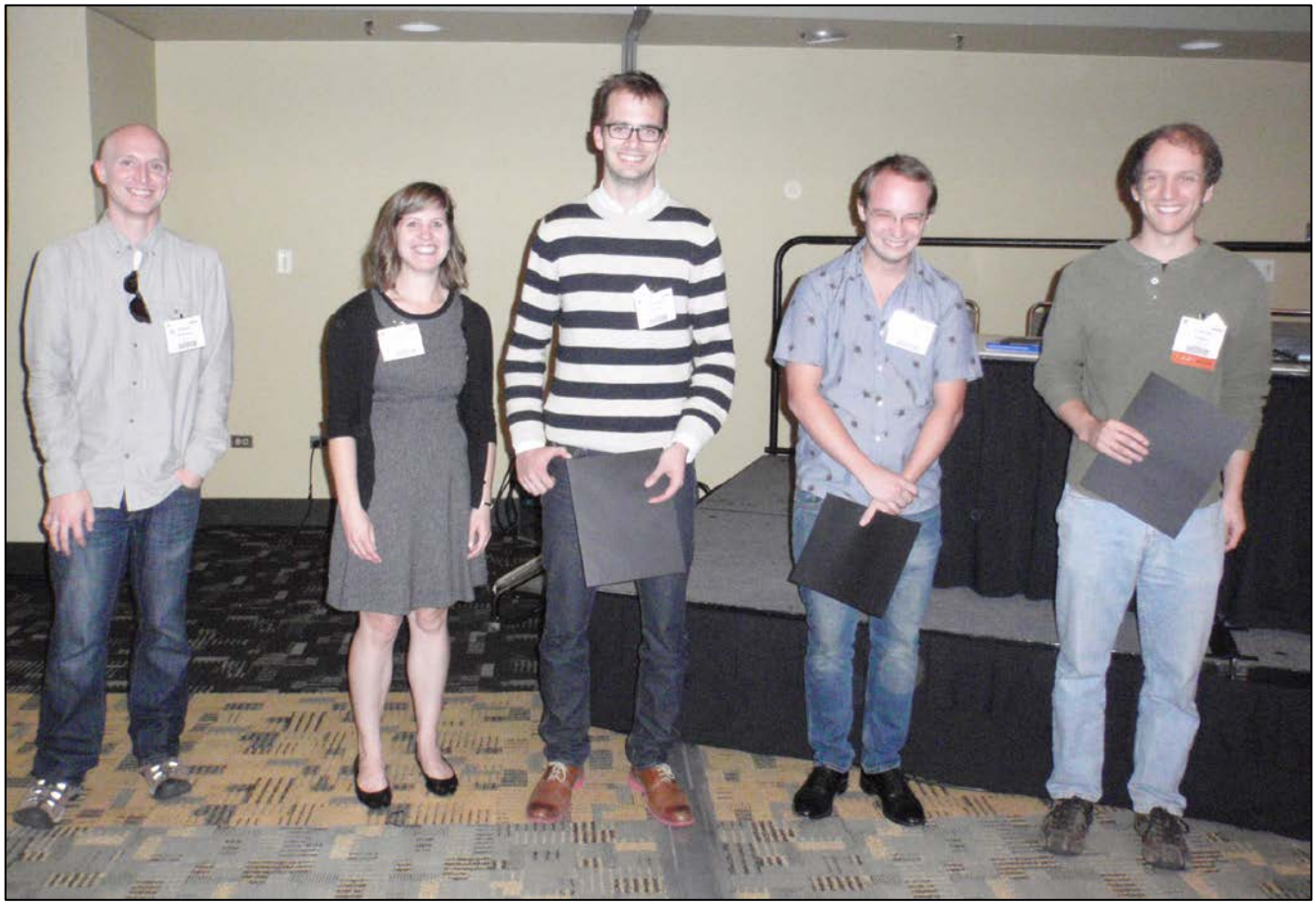
Cody Colleps, University of Texas at Austin (Daniel Stockli, Project Supervisor), Exhumation of the Lesser Himalaya of Northwest India: (U-Th)/He thermochronometric constraints and implications for the Neogene isotopic composition of seawater

Michael Eddy, MIT (Samuel Bowring, Project Supervisor), Testing the origin of the Siletzia LIP using high-precision U-Pb zircon geochronology

Brittany Huerta, California State University Northridge (Doug Yule, Project Supervisor), Rate of slip and earthquake recurrence on the Garnet Hill strand of the San Andreas Fault near Whitewater, CA

Calvin Mako, Virginia Tech (Richard Law, Project Supervisor), Thermal Structure of the Northern Scottish Caledonides: Refinement using Monazite Geochronology

Louis Wersan, Indiana University (Julie Fosdick, Project Supervisor), Reinvestigating the Mission Creek Fault: Holocene slip rates in the Northern Coachella Valley and implications for Southern California earthquake hazard assessment



Graduate Student Research Grant Awardees at the Reception, Award, and Business Meeting at the Annual Meeting in Baltimore, Maryland. From left to right: 2014 awardees who presented their research in Baltimore—**Randy Williams** and **Andrea Stevens** (missing Long Wu); 2015 awardees who presented their research in Baltimore—**Michael Eddy** and **Cody Colleps** (missing Louis Wersan); 2015 awardees who plan to present their research next year in Denver—**Calvin Mako** (missing Brittany Huerta).

Structural Geology and Tectonics Division Field Trip and Short Course Grant Recipients for the 2015 GSA Annual Meeting in Baltimore, Md.

This past fall, 21 students received grants from the SGT Division to support their participation in field trips and short courses held in conjunction with the 2015 GSA Annual Meeting in Baltimore, Md.

Field trip grant recipients:

Wes Buchanan, Colorado School of Mines
Timothy Daniel, University of North Carolina at Asheville
Benjamin Davis, Florida State University
Emilie Gentry, Colorado School of Mines
Miquela Ingalls, University of Chicago
Mary Lupo, Florida State University
Amelia Nachbor, University of South Florida
Thomas O'Shea, University of North Carolina at Asheville
Gina Roberti, Brown University
Chilisa Shorten, Syracuse University
William Ward, University of Iowa

Short course grant recipients:

Hannah Blatchford, University of Vermont
Wes Buchanan, Colorado School of Mines
James Carrigan, Lehigh University
Justin Delgado, University of Rochester
Ben Frieman, Colorado School of Mines
Diar Ibrahim, University of Iowa
Dakota Kolb, University of Mississippi
Yiduo Liu, University of Houston
Jingyao Meng, Oklahoma State University
Alison Severson, Colorado School of Mines

For more information on the SGT Division Field Trip and Short Course Student Grant Program, go to http://rock.geosociety.org/sgt/StudentTravelAward.htm.

THE SG&T DIVISION STUDENT FUND

Students represent the future of our division, and the board considers the support of students who are interested in structural geology and tectonics to be among our highest priorities. The Student Fund, established within the GSA Foundation, will allow us to more effectively meet this priority. The SGT Division Travel Grant Program for the Student Research Grant Awardees and the SGT Division Field Trip and Short Course Student Grant Program are made possible through donations to the SGT Division Student Fund. If you would like to make a donation to support the SGT Division Student Fund, go to http://rock.geosociety.org/sgt/SGT-Student-Fund.htm. Refer to the 2015 SG&T Division Management Board Meeting minutes, below, for more details about division finances.

Pre-meeting field trips at the 2015 GSA Annual Meeting in Baltimore embarked on Halloween (left). Participants in both pre- and post-meeting trips enjoyed beautiful early fall weather in the central Appalachians. Left, out-going SGT Division Secretary–Treasurer, Yvette Kuiper, on trip #415 - The tectono-thermal evolution of the central Appalachian Orogen: Accretion of a peri-Gondwanan (?) Ordovician arc. Right, participants on trip #425 - A Billion Years of Deformation in the Central Appalachians: Orogenic Processes and Products.

MINUTES
GSA Structural Geology and Tectonics Division Management Board Meeting
Monday, 2 November 2015, 11:30 AM–1:30 PM
Pratt Street Alehouse, Baltimore, MD
Prepared by Becky Flowers, incoming Secretary/Treasurer of the GSA SGT Division

Attending:
Chuck Bailey, Kurt Burmeister, Michele Cooke, Jean Crespi, Juliet Crider, Jim Evans, Becky Flowers, Mary Hubbard, Ben Johnson, Yvette Kuiper, Andrew Meigs, Sarah Roeske, Margi Rusmore

1. Welcome and introductions. Sarah Roeske (outgoing Division Chair)
Management board: Andrew Meigs—outgoing Past Chair. Sarah Roeske—incoming Past Chair. Jean Crespi—incoming Chair. Jim Evans—incoming First Vice-Chair. Margi Rusmore—incoming Second Vice-Chair. Yvette Kuiper—outgoing Secretary/Treasurer. Becky Flowers—incoming Secretary/Treasurer. Ben Johnson—incoming Student Representative.

Committees: Juliet Crider—incoming OPA Committee Chair. Michele Cooke—outgoing CCA Committee Member. Chuck Bailey—JTPC Representative for 2015 Annual Meeting. Mary Hubbard—JTPC Representative for 2016 Annual Meeting.

Communications: Kurt Burmeister—Facebook Manager.

2. Joint Technical Program Committee
Chuck Bailey is the outgoing lead JTPC representative. The Baltimore meeting had strong sessions in honor of individuals. The Bridging Two Continents had an excellent selection of SGTD-sponsored sessions.

Mary Hubbard is the incoming lead JTPC representative. Jim Evans will be assisting as first vice-chair.

The Denver meeting is Sept. 25–28, 2016. The meeting is a month earlier than the Baltimore meeting. The Dec. 1 field trip proposal deadline and Feb. 1 session proposal deadline are the same. The abstract deadline is July 12. The early registration deadline is Aug. 22. We need to encourage people to submit field trip and topical session proposals for the Denver meeting.

Juliet Crider volunteers to be the second JTPC representative (lead JTPC representative for the 2017 meeting in Seattle (Oct. 22–25)).

The JTPC recognizes there were technical difficulties with session organization at the Baltimore meeting that did not occur at last year's Vancouver meeting. Plan to explore what happened this year in order to avoid the recurrence of these problems next year in Denver.

3. Laubach Committee
Jim Evans and Marjorie Chan (Sedimentary Geology Division chair) managed the award this year. A main award and an honorable mention award were given. Efforts are being made to smooth the communication between the SGT and SG Divisions for this award. The award is in its 5th year and is in a review period. This award can be made to faculty, postdocs, or graduate students. There is consideration about whether to split into two awards or alternate the award years between faculty/postdocs and graduate students.

4. Financial state of the Division. Yvette Kuiper (outgoing Secretary/Treasurer)
The fiscal year ended June 30 with ~$18K in the SGTD operating account and ~$74K in the Student Fund. Some observations on trends over the past four years and recommendations by Yvette Kuiper as she is stepping down:

- Revenue: GSA's decision to make student memberships free has not significantly affected the income from membership dues.
- Expenses: SGTD support for student awards, field trips, and short courses steadily increases every year. In the past years, the SGTD also has supported occasional initiatives such as the Structural Geology and Tectonics Forum, GSA's On To The Future program, and this year's special session on Nepal.
- Student Fund: Has grown to the point that ~$3000/year can be withdrawn (based on the current fund). This will increase as the fund keeps growing. For that reason, the decision was made not to increase membership dues as was announced last year.

Discussion ensues about how to best spend the ~$3000/year from the Student Fund. Currently, the division makes five $500 awards to students with the top GSA student grant proposals in structural geology and tectonics for travel to the GSA annual meeting. A consensus is reached to increase the number of awards to a maximum of 10, with the exact number in a given year depending on the amount of funds available from the Student Fund. There is additional discussion about the pros and cons of supporting undergraduate students presenting a Sigma Gamma Epsilon or supporting more students to attend section meetings.

5. GSA Foundation
The outgoing board communicated with Chris Tallackson (GSA Director of Development) over the last 6 months. Chris made several recommendations: 1) Once a year, a certain percentage from the Student Fund (the investment earnings) should be moved to the Operating Fund to be spent on student activities in ways that SGTD believes will have the most impact. 2) Consider asking our top donors to match every gift above X up to an amount of $Y. 3) SGTD should develop a vision for the most important activities we want to support.

There is discussion during the board meeting about SGTD fundraising goals, vision, and what should be the priority for support. Much enthusiasm for establishing a new, separate field camp award as a specific fundraising target. Field camps are expensive—$5–6k. Agreement that input on other ideas like this one should be sought from the SGT community.

6. Membership communication. Kurt Burmeister (Facebook Manager), Hal Bosbyshell (Newsletter Editor), Kevin Smart (Webmaster)
Kurt presents summary of SGTD Facebook followers. Over 210,000 likes. Visits to the page have increased from 140,000 to 213,000 individuals over the last year. Should consider starting an Instagram and Twitter presence. Instagram is especially attractive because it allows users to browse photos, which could be a particularly powerful outreach tool for SGTD.

7. Career Contribution Award (CCA) committee
The outgoing committee consists of Danny Stockli, Gary Axen, and Michele Cooke. Terry Pavlis and Andrew Meigs are incoming members. A third member must be recruited. Trying to return to a 3-year cycle for committee members. Agreement that SGTD should pay GSA annual meeting registration fee for the CC awardee.

8. Outstanding Publication Award (OPA) committee
The outgoing chair is Paul Karabinos. The incoming chair is Juliet Crider. Other member is John Wakabayashi. A third member must be recruited. Concern about the limited number of OPA nominations. Perhaps key editors and reviewers can be targeted for nominations. There is no limitation on time since publication. Agreement that SGTD should pay GSA annual meeting registration fee for the OP awardee.

9. Penrose Conferences and Thompson Field Forums
These are not being proposed at as high a rate as the conference committee desires. In the past, the SGTD has been one of the major proponents of these meetings. There is $10,000 per conference available as a subsidy, limit 4/year. Speculation that the decline in proposals is likely because conference expenses have increased significantly over the last two decades but the $10,000 subsidy is unchanged. The conference committee could consider increasing the subsidy (to $20,000?).

10. Joint sessions with EGU

Joint sessions with EGU are a work in progress. This past year was the first time the SGTD had a session with the same title at EGU (April 2015) and GSA (Nov. 2015). One session proposed as a joint session filled at EGU but did not at GSA.

The Annual Meeting is early this year – the abstract deadline is July 12. The Structural Geology and Tectonics Division is sponsoring or cosponsoring one Pardee Keynote Symposium and 31 Topical Sessions that review advances, examine paradigms, and celebrate the breadth, depth, and vigor of the many topics of interest to division members. The division is also cosponsoring one pre-meeting field trip and one short course. The sessions, field trip, and short course are described below.

PARDEE KEYNOTE SYMPOSIUM

P1. Mastery of the Subsurface: The Challenge to Improve Subsurface Energy Systems. Conveners: Claudia I. Mora, George Guthrie, Susan S. Hubbard, Marianne Walck. Description: Subsurface energy sources satisfy more than 80% of total U.S. energy needs. The economic, sustainable, and environmentally sound utilization of our subsurface resources poses cross-cutting research and technology challenges: Can we understand, monitor, image, and ultimately predict the behavior of subsurface injected fluids, the state of stress and seismicity in the subsurface, and the integrity of a wellbore? Can we build the knowledge and tools needed to allow us adaptive control of subsurface fractures and fluid flow? Speakers will present geological challenges, state of the art, and research goals to meet the subsurface energy challenge. An open discussion will explore how research activities across federal labs, universities, and industry can be integrated to resolving these key challenges in subsurface science.

TOPICAL SESSIONS

T39. Go Small or Go Home: Microbeam Techniques Applied to Igneous, Metamorphic, and Sedimentary Petrology of Earth and Planetary Materials. Advocates: Kate Souders, Paul J. Sylvester. Description: We highlight method development and novel application of in-situ microbeam techniques (e.g., EPMA,

SEM/TEM/FIB, 3D CT, EBSD, SIMS, LA-[MC]-ICPMS) in Earth and planetary sciences. Presentations on chemical mapping and elemental/isotopic analyses are welcome.

T63. From Mantle to Landscape: Cenozoic Evolution of the Rocky Mountain. Advocates: Robert Moucha, Jolante W. van Wijk, Majie Fan. Description: This session encourages multidisciplinary studies ranging from mantle to surface processes, from numerical modeling to data collection and analysis to understand the tectonic and landscape evolution of the Rocky Mountains.

T67. Under Cover: Exploration for Concealed Mineral Deposits, Mapping Concealed Terranes, and Relating Crustal Architecture to Concealed Mineralizing Systems. Advocates: Mark Bultman, Mark E. Gettings. Description: Geophysical or integrated geoscientific techniques and interpretations aimed at identifying concealed lithologic terranes, locating covered mineral deposits, creating geophysical models of ore deposits, and delineating crustal architectures and their relationships to deep mineralizing systems.

T76. Digital Poster Session: Training Preservice Teachers to Apply Digital Technology across the Geoscience Curriculum (Posters). Advocates: Declan G. De Paor, Steven J. Whitmeyer, Callan Bentley. Description: To attract students into geoscience, we need to spark interest at school. This digital poster session will focus on ways of training pre-service teachers to make effective use of digital technology in geoscience education.

T154. Recent Advances in Understanding Magmatism along and within the Northern North American Cordillera. Advocates: Matthew E. Brueseke, Jeff Benowitz, Jeffrey M. Trop, Paul W. Layer. Description: Magmatism in the northern Cordillera is the result of diverse tectonic phenomena, including subduction, strike-slip, and extensional processes along convergent and transform margins. This session highlights research in the northern Cordillera aimed at understanding links between magmatism and plate tectonic processes.

T155. Fifty Years of Innovation in Petrology and Orogenic Systems: A Tribute to Lincoln Hollister. Advocates: Harold Stowell, Bernardo Cesare, Lukas Baumgartner. Description: This session highlights new developments in metamorphic petrology and tectonics that build on fundamental contributions made by Lincoln Hollister. We seek contributions that enhance our understanding of metamorphic rocks, orogenic systems, and crustal growth.

T160. Friends of Hoth: Satellites of the Outer Solar System. Advocates: D. Alex Patthoff, Emily S. Martin. Description: We seek abstracts relating to surface, structural, and tectonic processes; interior and thermal evolution; and planetary analogs as they pertain to solid bodies in the outer solar system. This includes experimental, observational, and theoretical approaches.

T177. Insights and Challenges for Geomorphic, Geologic, and Paleoseismic Investigations in the Rocky Mountain–Central U.S. Transition Region (New Mexico, Colorado, Wyoming, and Montana). Advocates: Mark S. Zellman, Dean Ostenaa, Richard W. Briggs, Will Levandowski. Description: We look for submissions to highlight new findings and approaches related to the Quaternary tectonics and teomorphology in the Rocky Mountain–CEUS transition region of inherited structure, neo-tectonic transition, low fault- slip rates, and geomorphic diversity.

T181. Undergraduate Research Talks: The Next Step in Student Research Projects. Advocates: Jacqueline A. Smith, Bradley G. Johnson, Edward C. Hansen. Description: This session provides a venue for undergraduate students and recent graduates to present talks on completed research projects. Students may submit abstracts for research projects in any subdiscipline of geology, earth science, or environmental science.

T202. Detrital Zircons on the North American Continental Interior. Advocates: William A. Thomas, George Gehrels, Emily S. Finzel, Brian A. Hampton. Description: Detrital zircons document the tectonic components of sediment sources, as well as dispersal pathways across the North American continental interior during the past 1.3 billion years. Contributions will address various scales, ages, and locations of dispersal systems.

T205. The Colorado Scientific Society III: From the Mountains to the Plains—New Concepts and Discoveries in Colorado and the Rocky Mountain Region. Advocates: Lisa Rae Fisher, Libby Prueher. Description: Colorado and the surrounding Rocky Mountain region is a geology wonderland. The region is rich in geologic history, yet there is always something new. Join us for presentations and discussion to find out what's happening.

T208. Deconstructing Damage: Holistic Perspectives on the Spatiotemporal Evolution of Brittle Fault Zones. Advocates: James Kirkpatrick, Alexis K. Ault, Ram Weinberger, John P. Craddock, Jonathan Saul Caine. Description: This session highlights interactions among mechanical, thermal, and chemical processes as brittle fault zones grow and mature. Contributions integrating field, analytical, geophysical, numerical, and experimental studies providing holistic views of fault zones are encouraged.

T209. Earth History in the Broadest Context—Ophiolites, Global Tectonics, and Public Awareness of Earth Science: Celebrating the Contributions of Eldridge Moores. Advocates: John Wakabayashi, Yildirim Dilek. Description: Honoring the distinguished career of Eldridge Moores, we encourage the international geoscience community to contribute original overview and policy papers in global tectonics, Earth history, science for society, public awareness, and geoscience education.

T210. Folds and Folding: Form, Process, and Consequences. Advocates: Juliet G. Crider, Andreas Eckert. Description: We seek contributions examining the form of folds and processes of folding, including studies that investigate the causes and consequences of folding in the contexts of tectonic history, crustal deformation, landscape evolution, or fluid migration.

T211. Large-Scale Continental Extensional Tectonics. Advocates: Ibrahim Çemen, Spyridon Pavlides. Description: This session will bring together researchers studying extensional tectonics and associated structures in different parts of the world and provide a formal discussion for understanding many important questions related to tectonic evolution of extended terrains.

T212. Multifaceted Approaches to Understanding Fluid-Fault Interactions in Natural Resources and Geologic Hazards. Advocates: Randolph T. Williams, Elizabeth S. Petrie, Kelly Bradbury, Nick M.W. Roberts. Description: We welcome abstracts focused on multifaceted research related to fluid flow, deformation, and

mineralization associated with crustal faulting and fracturing. Research related to groundwater, hydrocarbons, sequestration, mineral deposits, landslides, and seismicity is particularly encouraged.

T213. Structure and Tectonics of Mesoproterozoic Basins. Advocates: James W. Sears, John S. MacLean. Description: Mesoproterozoic basins provide important windows into Earth evolution. The session will highlight recent research into these basins in the USA, Canada, and worldwide.

T214. Along-Strike Variations in Mountain Belts: Why Are They Important and What Causes Them? Advocates: Yvette D. Kuiper, Steven J. Whitmeyer, Christopher M. Bailey, H. Daniel Gibson, Jonathan S. Caine. Description: Mountain belts, including the Appalachians and the Cordillera, typically display orogen-parallel variations in tectonic style that are important in the evolution of continental lithosphere. Contributions from orogenic to local scales are encouraged.

T215. Applications of Geochronology and Thermochronology for Understanding the Tectonic Mechanisms and Surface Processes of the Tibetan Plateau. Advocates: Devon A. Orme, Lydia Staisch, Alex Pullen. Description: We seek contributions on applications of geochronologic and thermochronologic analyses towards understanding tectonic, sedimentary, and surface processes of the Tibetan Plateau. Presentations on advances in plateau evolution from the mantle to the surface are encouraged.

T216. Cenozoic Evolution of the Southern Rocky Mountains and Northern Rio Grande Rift: Exploring Linkages between Geologic History, Processes, and Landscape Change. Advocates: Scott A. Minor, Ren A. Thompson. Description: The southern Rocky Mountains-Rio Grande rift has experienced diverse tectonism, magmatism, surface processes, and landscape change in the Cenozoic. Presentations are sought on research in this region exploring linkages between these processes at multiple scales.

T217. Earth History in the Broadest Context—Tectonics, Impacts, Mass Extinctions, and Big History: Celebrating the Contributions of Walter Alvarez. Advocates: David H. Shimabukuro, Philippe Claeys. Description: This session honors the distinguished career of Walter Alvarez. We encourage a broad and interdisciplinary set of contributions from the fields of tectonics, impacts, stratigraphy, paleomagnetism, the history of geology, and Big History.

T218. Evidence for Neotectonic Earthquakes and Their Driving Mechanisms in the Intraplate Region of Central and Eastern North America. Advocates: J. Wright Horton Jr., Christine A. Powell, Robert A. Williams. Description: This session presents evidence for intraplate neotectonic earthquakes in central and eastern North America and their driving mechanisms in relation to lithospheric structure, and invites novel multidisciplinary field, laboratory, and modeling approaches.

T219. In Honor of Chuck Kluth: The Pennsylvanian–Permian Ancestral Rocky Mountains and its Links to the Texas and Southern California–Northwestern Mexico Continental Margins of North America (Posters). Advocates: Paul J. Umhoefer, Gary L. Gianniny, Ron Blakey. Description: This session explores the tectonics and basins within the Ancestral Rocky Mountains and their link to the west Texas Permian basin and South American collision and to the west and southwest to the Pacific margin.

T220. Physical and Numerical Modeling of Geologic Processes. Advocates: Raphaël Gottardi, Suzon Jammes, Lijun Liu, Gabriele Morra, Mélody Philippon, Jacqueline E. Reber, Jolante W. van Wijk. Description: This cross-disciplinary session will foster synergies between the experimental and numerical modeling communities to quantify and improve the incorporation of geological processes in models from the mineral to plate-tectonic scale.

T221. Plate Tectonics, Arc-Trench Systems, Cordilleran Tectonics, Sedimentary Basins, Sandstone Provenance, and Geoarchaeology: A Celebration of William R. Dickinson's Career. Advocates: Raymond V. Ingersoll, Stephan A. Graham, Timothy F. Lawton. Description: This session will honor William R. Dickinson for his leadership in the diverse fields of plate tectonics, arc-trench systems, Cordilleran tectonics, sedimentary basins, sandstone provenance, and geoarchaeology.

T222. Proterozoic Accretion of the North American Continent—United Plates of America Revisited. Advocates: M.L. Williams, Karl E. Karlstrom, David Corrigan, Jeffrey Amato, Deanne van Rooyen. Description: This session will focus on the Proterozoic accretion and stabilization of the North American continent, particularly the timing and orogenic processes including the stitching of Archean blocks and the subsequent southward growth of continental crust.

T223. Rates in Metamorphism and Tectonism: From Mineral Growth to Orogenesis. Advocates: Thomas M. Etzel, Eric D. Kelly, Kyle T. Ashley, Elizabeth J. Catlos. Description: This session focuses on rates of processes associated with metamorphism and orogenesis, specifically the connections and dependencies among various rates. We encourage submissions on rates of diffusion, crystallization, heating/cooling, fault/plate motion, and other orogenic processes.

T224. Records of Subduction Initiation in Modern and Ancient Settings. Advocates: Nancy Riggs, Kathleen M. Marsaglia, Andrew P. Barth, M. Robinson Cecil. Description: Geodynamic models for subduction initiation are testable in a few ancient and modern examples (e.g., Cordilleran Permo-Triassic, Izu-Bonin-Mariana). The session explores subduction initiation from rock record, temporal, and geodynamic perspectives, emphasizing the need for integrative studies.

T225. Tectonics of North American Cordillera and the Alps: Celebrating the Telling-It-Like-It-Is Scientific Career of Tim Wawrzyniec. Advocates: Basil Tikoff, J.W. Geissman. Description: This session is dedicated to tectonic studies of the U.S. Cordillera and Alps. Work associated or inspired by Tim Wawrzyniec is particularly appreciated. Following Wawrzyniec’s approach to science, controversial and non- paradigm conforming ideas are welcome.

T226. The Rest of the Story! Late Paleozoic Assembly of and Tectonics in the Western U.S. to Canada Using Structural Geology, Sedimentology, Biochronology, and Geochronology. Advocates: Wanda J. Taylor, Patricia H. Cashman, James H. Trexler Jr., Daniel M. Sturmer. Description: New evidence from western North America suggests that tectonism occurred during the 100 m.y. between two recognized Late Paleozoic orogenies: the Antler and Sonoma. This session promotes information exchange and discussion of Late Paleozoic tectonism.

T227. Time Matters: Celebrating the Scientific Legacy of Samuel A. Bowring. Advocates: Robert S. Hildebrand, Anke Friedrich, Gregory Dumond, Marion E. Bickford. Description: In his EarthTime program and throughout his career, Samuel A. Bowring made a reality of the vision that precise U-Pb geochronology could elucidate the processes responsible for crustal development and faunal evolution.

FIELD TRIP

402. A Visit to the Regional Aluminum Silicate Triple-Point Metamorphic Rocks of Northern New Mexico: A Field Trip to Honor the Career Contributions of Lincoln Hollister to Petrology and Tectonics. Wed.–Sat., 21–24 Sept. Leaders: Christopher G. Daniel, Christopher L. Andronicos, Ruth Aronoff. Description: This field trip will examine Proterozoic regional metamorphic rocks in northern New Mexico in honor of the career contributions to petrology and tectonics of Lincoln Hollister. Lincoln's career began with studies of compositional zoning in garnet and staurolite (Hollister, 1966, 1967) and interpreting the occurrence of coexisting Al2SiO5 polymorphs (Hollister, 1969). Northern New Mexico preserves a wide variety of bulk compositions that experienced regional metamorphism at P-T conditions near the Al2SiO5 triple point. Many of these rocks were described in classic studies by Jeff Grambling (Grambling, 1981, 1984, Grambling & Williams, 1985), one of Lincoln's graduate students. Garnet bearing rocks from northern New Mexico were also the basis for garnet nucleation, zoning and growth studies by Bill Carlson and his research group (Carlson, 1989, 1991; Carlson & Denison, 1992; Chernoff & Carlson, 1999). Field stops in the Tusas Mountains will examine relatively higher pressure rocks with kyanite and sillimanite bearing assemblages. Field stops in the Picuris Mountains will examine generally lower pressure rocks with andalusite-cordierite bearing assemblages and kyanite-andalusite-sillimanite bearing assemblages. Garnet-biotite-staurolite bearing rocks are common in both areas. Metamorphic P-T paths proposed for the area will be reviewed. The trip will provide an informal setting to discuss the application and limitations of modern petrologic tools and thermodynamic databases while examining outstanding metamorphic rocks in the field. The Proterozoic tectonic history of the area will also be discussed.

SHORT COURSE

507. Digital Technology across the Earth Science Curriculum—A Short Course for Preservice and In-service Teachers and Undergraduate Instructors. Sat., 24 Sept. Instructors: Declan De Paor, Steve Whitmeyer, Callan Bentley, Bill Richards, Kristen St. John, Barb Tewksbury. Description: To attract students into earth science, we must spark interest at second level. Teachers are critical to that effort. This course (and associated digital poster session) focuses on helping preservice and in-service teachers to make effective use of technology. Topics include virtual field and lab experiences; Google Earth and Cesium; GigaPans, Photo Spheres, and GIGAmacro; virtual rocks and outcrops; technology for students with disabilities and non-traditional students; virtual reality and augmented reality. Professional development support will be provided to school teachers and undergraduate instructors to cover registration, travel, accommodation, and meals.

THE 4TH BIENNIAL STRUCTURAL GEOLOGY AND TECTONICS FORUM AT SONOMA STATE UNIVERSITY

The SGTF will be held August 1st through 3rd, with field trips and short courses two days before and after, at Sonoma State University (about an hour north of San Francisco). There are no registration costs for attending this meeting or for participating in any of the field trips or short courses (a really good deal!) thanks to sponsorship by NSF and the Structural Geology and Tectonics Division of GSA.

The registration deadline has been extended to May 30th. For more information go to the SGTF webpage: http://serc.carleton.edu/NAGTWorkshops/structure/2016-Forum/index.html or contact Matty Mookerjee: matty.mookerjee@sonoma.edu.

REPORT ON THE "FUTURE DIRECTIONS IN TECTONICS" WORKSHOP THE UNIVERSITY OF WISCONSIN – MADISON, MAY 20-22, 2016

Synopsis

This NSF-sponsored workshop assembled over 90 Earth scientists to discuss a broad range of topics, including: (1) identifying grand challenges and opportunities for significant advances in the field of Tectonics today; (2) defining and prioritizing the types of resources, technologies, partnerships, and infrastructure our community needs to make scientific progress; and (3) developing a vision to build and strengthen our community, including finding new ways to maximize the educational and societal benefits of our work and to communicate and enhance our impact. The overarching goal of the workshop was to begin a community-wide conversation on these issues that will continue in public forums throughout the year. The results of this discussion ultimately will be captured in a white paper that will communicate the goals, needs, and relevance of Tectonics research to funding agencies, other scientists, and non-specialist audiences.

The Process

The Workshop Organizing Committee (Basil Tikoff and Laurel Goodwin, University of Wisconsin-Madison; Yvette Kuiper, Colorado School of Mines) obtained the funding (NSF-EAR-1542001), designated the Writing Committee chairs (Kate Huntington, University of Washington; Keith Klepeis, University of Vermont) and handled logistics in Madison. The Workshop Planning Committee, composed of volunteers and individuals recruited to represent the diversity of the Tectonics community (Rick Allmendinger, Cornell University; Marin Clark, University of Michigan; Eric Cowgill, University of California-Davis; Becky Dorsey, University of Oregon; Kevin Mahan, University of Colorado; Jim Spotila, Virginia Tech) managed participant application and selection, and worked with the Writing Chairs and Organizing Committee to design and lead the workshop. Workshop participants represented a broad range of disciplines, institutions, backgrounds and career stages; a full list of participants is available on the workshop website (link provided below). The workshop was structured around five breakout sessions, which led to very exciting, animated discussions and numerous ideas to move our community forward. Short white papers (also posted on the website) solicited from each participant and presented as brief pop-ups at the start of the workshop also helped shape the discussions. Themes that emerged from the discussions are forming the basis for the white paper.

Getting Involved

Broad input from the SG&T community, including those who could not attend the workshop, is critical to the success of this endeavor, from defining our vision for the white paper to realizing that vision in the decades to come. Work to synthesize the major themes and ideas that emerged from workshop discussions is underway—please stay tuned for regular updates and for opportunities to contribute your ideas. You are also invited to subscribe to the workshop listserv (sgt-workshop@lists.wisc.edu) and visit our website (https://sgtfuturedirections.wordpress.com/). Town Hall discussions are planned for GSA and AGU in autumn,

2016. The target date for the white paper is May, 2017. We encourage you to be part of this opportunity to shape our future!

Acknowledgments

We thank the NSF for sponsoring the workshop and David Fountain and Stephen Harlan for valuable insights and feedback. We thank the University of Wisconsin-Madison for hosting the event. Randy Williams provided outstanding logistical and technical support prior to and during the workshop.

—**Kate Huntington, Keith Klepeis,** and the 'Future Directions in Tectonics' Workshop team**.**

Left, participants at the workshop icebreaker. Right, mapping out Future Directions in Tectonics.

NSF NEWS

New Dear Colleague Letter from Geosciences Directorate
NSF 16-083: Dear Colleague Letter: Reproducibility and Robustness of Results (for Geosciences Directorate)
http://www.nsf.gov/pubs/2016/nsf16083/nsf16083.jsp?WT.mc_id=USNSF_25&WT.mc_ev=click

Keeping up with NSF Opportunities

1. To get alerts about NSF funding opportunities, go to the NSF web site (www.nsf.gov) and go to the funding page (http://www.nsf.gov/funding/). At the top you will see where you can sign up for email or RSS alerts. You can also search funding opportunities from that page.
2. You can also do the same for NSF publications, which will include solicitations and Dear Colleague Letters (DCLs announce special opportunities).

3. From the NSF home page, go to About NSF to navigate to Organization List where you can find the Earth Sciences Division (http://www.nsf.gov/div/index.jsp?div=ear) where funding opportunities in EAR are listed.
4. Also, from the EAR page you can sign up for the EAR Newsletter, a quarterly publication listing news about the Division and other useful information.
5. Don't forget to carefully read the most recent versions of the NSF Grant Proposal Guide (current version NSF 16-1) and the relevant program solicitation (the most current Tectonics solicitation is NSF 16-556). Understand that these are dynamic documents with significant changes in each new version.

Tectonics Program: The latest program guidelines are available at the following link:

Solicitation 16-556

Due Dates:

1. Full Proposal Target Date: July 8, 2016; 2nd Friday in July, Annually Thereafter
2. Full Proposal Target Date: January 13, 2017; 2nd Friday in January, Annually Thereafter

NSF Grant Proposal Guide

The new NSF Proposal and Award Policies and Procedures Guide (PAPPG) 16-1 can be downloaded here. Effective for proposals submitted, or due, on or after January 5, 2016, it includes the Grant Proposal Guide and the Award and Administration Guide.

NSF Presentations Available on SGT Website

David Fountain and Stephen Harlan (Program Directors, Tectonics) gave a summary at the GSA 2015 SG&T Business Meeting and Award Ceremony of new important points to consider when submitting a proposal – a copy of their presentation is available on the SGT division website.

Lina Patino (Program Director, Division of Earth Sciences) gave a presentation on Workforce Development Programs at the GSA 2015 SG&T Business Meeting and Award Ceremony – a copy of her presentation is available on the SGT division website.

Recent Awards from the NSF Tectonics Program

Collaborative Research: Geological Evolution of the Midcontinent Rift as a Hybrid Rift and Large Igneous Province
Award #: 1549764 Tyrone Rooney (Michigan State University)
Award #: 1550108 Seth Stein (Northwestern University)
Award #: 1549920 Carol Stein (University of Illinois at Chicago)
Award #: 1549676 Robert Moucha (Syracuse University)

Collaborative Research: Quantifying Paleotopography and Paleoclimate to Test Geodynamic Models in the Peruvian Andes
Award #: 1550147 Daniel Breecker (University of Texas at Austin)
Award #: 1550101 Christopher Poulsen (University of Michigan Ann Arbor)
Award #: 1550134 Elizabeth Cassel (University of Idaho)

Global Eustasy or Tectonic Subsidence? Investigating Controls on Basin Evolution During Cenozoic Plate Reorganization, Magallanes Basin, Patagonia
Award #: 1550091 Julie Fosdick (Indiana University)

Support for 2016 Gordon Research Conference and Gordon Research Seminar on Rock Deformation
Award #: 1620010 Julia Morgan (Gordon Research Conferences)

Structural Geology and Tectonics Forum at Sonoma State University, Rohnert Park, CA, August 1st - 3rd, 2016
Award #: 1632674 Matty Mookerjee (Sonoma State University)

Collaborative Research: Origin of Long-lived Crustal Shear Zones as Transforms or Subduction Zones?
Award #: 1550114 Sarah Roeske (University of California-Davis)
Award #: 1550110 Sean Mulcahy (Western Washington University)
Award #: 1549902 William McClelland (University of Iowa)

Seismotectonics of the Zagros (Iran) From Orogen-wide Earthquake Relocations
Award #: 1524815 Edwin Nissen (Colorado School of Mines)

Physical and Numerical Experiments of Slip Partitioning under Oblique Strike-slip
Award #: 1550133 Michele Cooke (University of Massachusetts Amherst)

Cenozoic Basin Development and Environmental Change in the Peruvian Altiplano and Implications for Uplift Mechanisms
Award #: 1550097 Joel Saylor (University of Houston)

Collaborative Research: Unraveling Protracted Tectonic Reactivation in Cordilleran Metamorphic Core Complexes: Funeral Mountains, California
Award #: 1550158 Michael Wells (University of Nevada Las Vegas)
Award #: 1550154 Thomas Hoisch (Northern Arizona University)

Collaborative Research: The Record of Early Cretaceous Growth of the Nevadaplano From Syn-orogenic Deposits of the Sevier Hinterland
Award #: 1524853 Joshua Bonde (University of Nevada Las Vegas)
Award #: 1524785 Kathryn Snell (University of Colorado at Boulder)
Award #: 1524765 Sean Long (Washington State University)

Laramide Relamination of Mantle Lithosphere Beneath the Colorado Plateau: A Xenolith Study
Award #: 1524768 Alan Chapman (Macalester College)

Collaborative Research: Deformation-induced Hydration of Peridotite Mylonites in Nature and Experiments
Award #: 1619880 Jessica Warren (University of Delaware)

Collaborative Research: Thrust Belt Response to Rapid Surface Uplift of the Altiplano: A Field Test of Cordilleran Cyclicity in Southern Bolivia
Award #: 1550155 Sean Long (Washington State University)

Collaborative Research: Fold Form, Strain, and Mechanics at the Whaleback Anticline: New Approaches to a Classic Field Locality
Award #: 1523958 Mary Beth Gray (Bucknell University)
Award #: 1523955 Arlo Weil (Bryn Mawr College)
Award #: 1523909 Juliet Crider (University of Washington)

Collaborative Research: Did Miocene Core Complexes in Western Arizona Initiate as Late Cretaceous Extensional Shear Zones?
Award #: 1557265 John Singleton (Colorado State University)

Collaborative Research: Thermal Structure of Continental Lithosphere Through Time
Award #: 1524796 Alan Whittington (University of Missouri-Columbia)
Award #: 1524495 Anne Hofmeister (Washington University)

Collaborative Research: A Structural, Thermochronologic, and Provenance Investigation of a Hypothesized Transition From Subduction to Slab Breakoff in the Greater Caucasus
Award #: 1524631 Eric Cowgill (University of California-Davis)
Award #: 1524304 Nathan Niemi (University of Michigan Ann Arbor)

Surface Elevation History of the Northern North America Cordillera as Constraint for Eocene Tectonic and Climatic Boundary Conditions
Award #: 1450357 C. Page Chamberlain (Stanford University)

Deciphering the Role of Deformation in Orogenic Evolution Through Multi-scale Structural Studies in a "Crustal Laboratory", Central Sierra Nevada, California
Award #: 1524798 Scott Paterson (University of Southern California)

Collaborative Research: Utilizing Cooling Histories to Determine the Sequence and Rates of Thrusting
Award #: 1524320 Delores Robinson (University of Alabama Tuscaloosa)
Award #: 1524277 Nadine McQuarrie (University of Pittsburgh)

RUI: Modes of Dome Formation in the Southern Appalachians
Award #: 1524191 Gabriele Casale (Appalachian State University)

Stress localization, fault activation, and earthquake migration in central and eastern US: A systematic numerical study
Award #: 1519980 Mian Liu (University of Missouri-Columbia)

Investigating the Partitioning of Vertical Strength within the India-Eurasia Lithosphere using Surface Observations: A Numerical Modeling Approach
Award #: 1447100 Lucy Flesch (Purdue University)

Collaborative Research: Earthquake Gates: Linking Earthquake Rupture Length to the Dynamics of Restraining Double Bends on the Altyn Tagh Fault
Award #: 1524734 Michael Oskin (University of California-Davis)
Award #: 1524743 Benchun Duan (Texas A&M University Main Campus)

Using the World's Fastest Slipping Normal Fault to Understand the Mechanics of Low-angle Normal Faults
Award #: 1524729 Laura Wallace (University of Texas at Austin)

Stress History of the Alpine Fault Using Rock Deformation Experiments and Numerical Modeling
Award #: 1524602 Steven Kidder (CUNY City College)

Development of Microstructure and Creep Strength of Marble
Award #: 1451022 Brian Evans (Massachusetts Institute of Technology)

New GPS Constraints on Africa-Arabia-Eurasia Plate Kinematics
Award #: 1450922 Robert Reilinger (Massachusetts Institute of Technology)

Collaborative Research: Tectonic Significance of Long Run-Out Coarse-Grained Facies in the Cordilleran Foreland Basin
Award #: 1524578 John Geissman (University of Texas at Dallas)
Award #: 1524151 Peter DeCelles (University of Arizona)

Role of Silica Redistribution in the Evolution of Subduction Megathrusts, Shimanto Belt Japan
Award #: 1524530 Donald Fisher (Pennsylvania State Univ University Park)

Support for a workshop and related activities aimed at exploring and facilitating scientific frontiers, infrastructure, and educational needs in Tectonics
Award #: 1542001 Basil Tikoff (University of Wisconsin-Madison)

Collaborative Research: Exhumation History of the Indian Lesser Himalaya: Discriminating Tectonic Models with Implications for the Neogene Isotopic Composition of Seawater
Award #: 1450976 Neil 'Ryan' McKenzie (University of Texas at Austin)

Collaborative Research: Deformation Thermometry and Water Weakening of Quartz Tectonites - Case Studies from the Himalaya and the Caledonides of NW Scotland
Award #: 1543627 Jay Thomas (Syracuse University)

Support for Analog Modeling of Tectonic Processes Workshop
Award #: 1537902 Michele Cooke (University of Massachusetts Amherst)

Collaborative Research: RUI: Provenance and Paleomagnetic Analysis of the Ochoco Basin: A Window into Late Cretaceous Paleogeography
Award #: 1451035 Bernard Housen (Western Washington University)
Award #: 1450974 Kathleen Surpless (Trinity University)

Support for U.S.-Taiwan Workshop on Feedbacks and Coupling among Mountain Building, Surface Processes and Climate
Award #: 1522478 Timothy Byrne (University of Connecticut)

Reconciling Invariant Topography with Along-Strike Gradients in Climate and Tectonics in the Greater Caucasus Mountains
Award #: 1450970 Adam Forte (Arizona State University)

Thermal and Structural History of the Pennine-Austroalpine Transition Zone, Alps (Eastern Switzerland)
Award #: 1451055 Brian Wernicke (California Institute of Technology)

Collaborative Research: Paleogeographic Record of Contractional to Extensional Tectonics in the Cordilleran Hinterland, Nevada
Award #: 1535732 Michael Smith (Northern Arizona University)

Collaborative Research: Geological Constraints on ~25 Million Years of Magmatism Along an Arc-transform Junction, Wrangell Volcanic Belt, Alaska
Award #: 1450730 Jeff Benowitz (University of Alaska Fairbanks Campus)
Award #: 1450689 Matthew Brueseke (Kansas State University)
Award #: 1450687 Jeffrey Trop (Bucknell University)

Collaborative Research: Investigating Mesozoic Deformation in the Pamir: Implications for Crustal Thickening in the Pamir and the Evolution of the Tibetan Orogen
Award #: 1450917 Barbara Carrapa (University of Arizona)
Award #: 1450899 Alexander Robinson (University of Houston)

Collaborative Research: Characterizing the Regional Fluid Flow System of the Wyoming Salient, Sevier Fold-Thrust Belt: Implications for Orogenic Wedge Deformation and Propagation
Award #: 1450907 Gautam Mitra (University of Rochester)
Award #: 1450840 W.A. Yonkee (Weber State University)
Award #: 1450807 Mark Evans (Central Connecticut State University)

EAGER: Cosmogenic Nuclide Measurement of Surface Uplift Rate and Paleoelevation
Award #: 1463709 Gregory Hoke (Syracuse University)

35TH INTERNATIONAL GEOLOGICAL CONGRESS
CAPE TOWN, SOUTH AFRICA

The 35th International Geological Congress will take place in Capetown, S.A. August 27 through September 4. Visit their website for complete information.

THE GEOLOGICAL SOCIETY OF AMERICA®

TECHNICAL SESSION, FIELD TRIP, AND SHORT COURSE PROPOSALS FOR 2017 GSA SECTION MEETINGS

The organizers of next year's GSA Section Meetings are seeking proposals for symposia, theme sessions, field trips, and short courses. Meeting information and deadlines are below.

South Central
San Antonio, Texas
13–14 March 2017
Proposal Deadline: 15 June 2016
Meeting Website: http://www.geosociety.org/Sections/sc/2017mtg/
Meeting Flyer: http://www.geosociety.org/Sections/sc/2017mtg/documents/17_SCGSA_flyer.pdf

Joint Northeastern/North Central
Pittsburgh, Pennsylvania
19–21 March 2017
Proposal Deadline: 2 June 2016
Meeting Website: http://www.geosociety.org/Sections/ne/2017mtg/
Meeting Flyer: http://www.geosociety.org/Sections/ne/2017mtg/documents/NE_flyer.pdf

Southeastern
Richmond, Virginia
30–31 March 2017
Proposal Deadline: 3 June 2016
Meeting Website: http://www.geosociety.org/Sections/se/2017mtg/
Meeting Flyer: http://www.geosociety.org/Sections/se/2017mtg/documents/SEGSA2017_Flyer.pdf

Cordilleran
Honolulu, Hawaii
23–25 May 2017
Proposal Deadline: 1 July 2016
Meeting Website: http://www.geosociety.org/Sections/cord/2017mtg/
Meeting Flyer: http://www.geosociety.org/Sections/cord/2017mtg/documents/mtgFlyer.pdf

Rocky Mountain
Calgary, Alberta, Canada
7–9 June 2017
Proposal Deadline: TBA
Meeting Website: http://www.geosociety.org/Sections/rm/2017mtg/

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