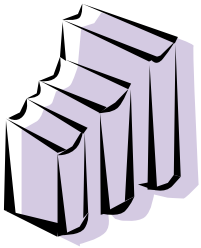
STRUCTURAL GEOLOGY AND TECTONICS DIVISION Newsletter

Volume 20, Number 2 September, 2001



CHAIRPERSON'S MESSAGE

Hello all: I want to share with you some thoughts about field geology, especially since I am currently teaching a field camp course in the mountains of SW Montana. Whenever I am in the field, whether it be for research or teaching, I am reminded of the importance of field work in the geosciences. It is very clear to me that structural geology is the subdiscipline that has the strongest roots in field geology, and that it is likely to remain that way for quite some time. Therefore, this discussion is appropriate in the columns of our Newsletter.

At the University of Minnesota, we have opted to divide our field instruction into two summer courses, each three weeks long. The introductory field course is taught at the sophomore level, and the advanced field course (advanced mapping or hydrogeology) is taken in the junior or senior years. I am currently teaching the intro course, which means that my students have not had structural geology in the classroom yet. This may seem odd to many of you who know the classic field areas of SW Montana, such as Block Mountain, where the students are structurally challenged. However, what I have noticed over the years is that, with a minimum of guidance in the form of evening lectures, the vast majority of these "structureless" students move, within two days, from a state of deep confusion to a sense of comfort in the field. Within a week, they reach the glorious joy of producing their first geologic map and cross section. They also begin to think about process: How did this system work? How do you go from horizontal strata to such a complex geometry? What came first, folding or thrusting? etc. I am always amazed at the rapidity with which students learn in the field, in comparison to the classroom. What is critical here is that the students make the ideas their own through hard work, they internalize the concepts. Some schools have recognized this and integrate much field work into their curriculum, which I believe is a great idea. In the Midwest, we are at a relative disadvantage to adopt this type of format, but I still feel we could do more of this type of instruction. I encourage you to use the Newsletter columns to share your ideas and experiences with field curricula. We can all benefit from the sum of experiences that are out there.

Table of Contents

Now to some business: First I'd like to thank very much the people who "volunteered' to be on the ballot for Division officers. With the possibility of electronic ballots offered by the Division (see GSA webpage), it is easy and fast to vote. Please take a moment before the September 15 deadline to complete this important task. Second, the Boston meeting promises to be an exciting forum to present and exchange ideas in Structure and Tectonics. Laurel Goodwin and I will organize the technical sessions this year and attempt to minimize the overlap between sessions, which is always an impossible task. Now you know whom to blame for it! Students should be aware that the Division offers scholarships to help them attend GSA field trips and short courses. Finally, I'd like to thank all Division and committee members for their fantastic job in selecting this year's Division awards recipients.

Christian Teyssier

In the energy crisis of the mid 1970's I had the occasion to listen to a crusty manager of a large coal mine in Pennsylvania while on a field trip. He had just been asked by the government to double his production of coal, and do it right now..... please He said he was willing to do his patriotic duty, but if he could even come close to that, he should be fired on the spot. He went on to explain that his job for the past few decades had been to downsize the operation and carefully control efficiency by matching his capacity to produce coal to the existing demand for coal. He would have been a failure and his company should be bankrupt if now, all of a sudden, he could double production. There are parallels in this story to one of the subjects I will discuss this time, that is how are program budgets set at NSF, and how fast can they be changed. This choice of topic was prompted by the number and strength of the proposals the Tectonics program received for the June 1 deadline, their cumulative dollar request, and the uncertain prognosis for funding for the next several years. My motivation is to avoid the hapless plight of that mine manager.

One of the on-going jobs at NSF is to try and anticipate what the research community will be up to in a few years time. We need as much lead time as possible to activate the creaky budgetary process when it looks like your new ideas are going to be both very important and exciting but frightfully expensive. We also need to make sure our present internal organization into programs and our staffing of program directors etc. is going to be competent and adequate to manage the new situation. Failure to do either of these things well results in circumstances that no one is happy about, that is a serious mismatch between money and resources, and scientific opportunity, and worse, no one can do much about in the short time scale that commonly seems required. This article will review some of the factors involved to help the research community better understand where the opportunities lie.

OK, what is the intended goal underlying our budget decision? Our goal is to try and achieve a level of research support that is commensurate with what the science (in this case, Tectonics) potentially offers towards increasing scientific knowledge, which ultimately builds a knowledgeable, informed and responsible society. How is the Tectonics Program budget set each year, and how long does it take to arrive at that figure? The full answer is daunting, but for the present purpose, the annual budget is affected by 1) history, 2) overall funding level for NSF, and 3) management perception of the relative importance of the subject, especially the newly emerged aspects, and the capacity of the research community to deliver on the promise. History and the fact that at any one time NSF managers are working on at least four future annual budgets effectively limits the realistic rate of budget change, whereas the annual overall NSF budget level more or less modulates the year to year variations in a program's actual budget. The last part is where the danger and opportunity for real budget change lies, and is the target. NSF managers are either planning what our budget request should be or responding to the administration's and congressional views and concerns about our proposed budgets within the context of their agendas. The product of their work must be acceptable to the administration and to the keepers of the nation's pursestrings, and should be responsive to the research community.

Often when I start to explain the budget process in this way, the response is "Yes, I understand the general scheme, but you haven't answered my question, that is , what exactly can I do to accomplish anything? If you mentally put yourself in your target's shoes, it would seem reasonable for a (program director, Division Director, upper manager...you pick one) to say to their higher ups: "We have a real problem in our group, there are lots of great science being proposed that really demand funding, but our budget is simply inadequate to support more than the few very best, and we're missing the boat on what can be accomplished. You can solve this by increasing our funding, and we can guarantee that the results will be wonderful, thank you." While true, this is an ineffective tactic when contemplated from the manager's viewpoint, because every single supplicant says the same thing! The NSF program managers and Division Directors must look at times like so many vaguely unseemly hungry nestlings, all with open mouths, all screeching away, and all totally concerned with only "number 1" getting the grub that the momma bird was able to bring at the moment. If you can figure out what would impress that manager and cause her to 1) listen to your pitch, 2) buy into it, and 3) carry the ball for you through the several-year budget hurdles, then you are on the right track. What do they need from you in order to do their job? What sorts of things do you guess would be attractive to their higher ups? (I know I still haven't answered the question, but some things should be apparent.

The fact that you are hungry isn't impressive, silence is not a very effective tactic for a nestling, and the further up the line your target is, the less they will know or care about the actual science involved).

Program directors learn about what is coming from reading your proposals, talking to you about your new ideas at conferences, field trips and the like, and the more instructive you are the better informed they will be. Rotators certainly bring to NSF knowledge of new developments too. Program directors take these ideas to the Division Director on any opportunity to advance the case for their program, of course, but hearing the same thing from the outside community commonly carries more clout. Hearing it twice is better than once. Written statements of goals and opportunities are appreciated. All these things are fed into the budget preparation hopper that results in the pitch made up the line. This is the real opportunity, not the later part of the process where the overall budget is finally distributed to the programs, although some budget changes occur at this stage too. However, the budget input part occurs three or four years before the final budget allocation changes are made.

In past years the review process used by the Tectonics program has been discussed in detail in the Newsletter, and despite the advent of electronic proposal submission and other changes, the process is much the same. After proposals are received, the program director reads each one, thinking about possible reviewers. This task is very similar to what an editor does when your manuscript is received. We generally ask 6 or more reviewers for their comments. These reviews are read as they are returned. Meanwhile, copies of all received proposals have been sent to a six-member panel. Panel meetings are scheduled so that there should be at least three returned reviews for each proposal. The panel meets for three days and leaves behind a prioritized list of the proposals, based on their reading of the proposals, what the mail reviews said, and the deliberations of the panel during the meeting itself. This input, along with the set of mail reviews and the Program Director's own analysis is the basis for the final recommendation of the program director on which proposals are to receive funding and which not. There are many variations on how each of these steps are done in the different programs in the Earth Sciences Division, and these are frequently examined to see if improvements can be made within the resources available. Of all the steps, the operation of and the role of the panel in the review process is the least understood by the research community, judging by the questions and comments I hear. Sarah Roeske has written her observations and views on the form and function of the panel from her perspective of a "retiring" member of the panel.

Tom Wright
Program Director, Tectonics

The second part of this note from NSF aims to explain and demystify the panel review process and to encourage those of you who are cynics to become more positive about the overall NSF review process. I am stepping down from the panel, after the normal 3-year tour. I came in as an outsider, not having any experience with NSF other than being a mail reviewer and having had proposals accepted and declined. I leave with more insight, and optimism, about the Structure and Tectonics community. I also am optimistic that the NSF process, at the program level, is fundamentally as objective as one can hope for. Above that level it clearly does become more political in how funding decision are made. Ideally our community will become more adept at playing the political game at the upper levels and continue to support our science in a non-political manner through thorough and fair mail and panel reviews at the proposal level.

Tom has given a brief overview of the entire proposal review procedure used in the Tectonics program, but in case some of you are unaware of the panel process, I will start with the beginning, namely, who we are and how we (the panel) operate. "We" is a group of six that meet twice a year for 2 1/2-3 days. "We" are you, the community, in a microcosm, with a slant toward those individuals who are more generalists, less specialists. The aim is to have a diverse enough group that we can evaluate all of the proposals in our field of structure and tectonics, but clearly we will fall short of having expertise for all proposals. This means we rely GREATLY on mail reviews.

First, we work independently until the panel meeting by receiving a box or two of

proposals and reading as fast as we can. We typically have 6-8 weeks to read anywhere from 55-80 separate projects (note: projects can equal a number of proposals, unless they are collaborative). There is frequently debate whether this method of everyone reading all proposals is good, or whether it wouldn't be better to adopt the method of other Earth Science panels where one person is the chief reader and discussion leader with others assigned to also contribute to the discussion. Not everyone has to read all proposals. The obvious advantage is that a panelist can spend more time on each proposal, which are normally close to one's field of specialty. In reality our panel achieves this in that a panel reviewer reads those proposals in their own field more thoroughly than those outside one's field. I (and others on the panel) will admit to skimming through some proposals that are so far from my expertise that I know I will be relying on my fellow panel members and mail reviews to form an opinion. The advantage I see to the current system is that we can expect input from all 6 members of the panel for every proposal we discuss. This makes for a lively and diverse discussion and keeps the process from being ingrown, where the only people voting on a proposal know the field (and perhaps the PI(s)) well.

After reading all of the proposals, we (individually) send in our preliminary (and non-binding) scores to the program director(s). This happens right before the meeting and also promotes objectivity, as this is each person's opinion, prior to reading or hearing mail reviews and prior to any discussion. At the panel meeting we get two lists for all of the proposals: one ranking each proposal based on the average panel review scores and one based on average mail review scores. Surprise always await us! Comments such as "the mail reviewers sure rank that one high (low) compared to us!" are heard, and we marvel at the range of opinion among ourselves and mail reviews. A small cluster of proposals will clearly rise to the top of both rankings, and a small cluster will sink to the bottom. Probably 75% or more will fall in between these two categories, and that is where we will spend much of our time, discussing those that have a wide range of opinion and/or were highly recommended but didn't have scores that would automatically put them in the top 10%. We go through the proposals in batches of 6, alternating between the mail and panel review lists, discussing mostly the science, to some extent the budget and feasibility. We rotate being "scribe", summarizing the comments of the panel, which get distilled at the end of each batch into "the panel review".

We hear the mail reviews summarized by Tom Wright, after our discussion and then discuss them. We also frequently read the full mail reviews. Aspects of proposals that appeal to the panel are often different from what appeals to the mail reviewer, and ideally the two are complimentary. The panel is looking at the big picture, and comparing many proposals. We need to have the topic sold to us, because we see so many proposals that are worthy of funding and know that there isn't enough money to go around. We also rely on the mail reviewer to catch problems with proposals that we may have missed. Thus, to reemphasize, we rely greatly on thorough, fair, specific mail reviews. We are counting on you, the mail reviewer, to point out fatal flaws or to promote a proposal with specific points. We usually don't get through more than 42 proposals per three day panel meeting. So some proposals inevitably don't get discussed. Though this has been seen as a problem by some oversight committees, to discuss all proposals in the allotted time would force us to cut discussion short on some, and we all know that no more than 35% (at best) are going to get funded. The (in)famous "grey zone" is very real, and very hard to define. We do our best to convey to the program director which ones we would put in that category, and why we would rank them as we do in that category. The hard decisions are still made at the program director and higher levels, namely where the funding line is drawn. In closing, I would like to comment on some frequently heard statements: "the same people get funded again and again" - yes, in part this is true. One reason is that many of the same people apply again and again. After 6 panel meetings and 3 years I feel I can guess over 2/3 of the people who will be in the next round. Is the lack of representation from many members of our community due to cynicism? Fear of rejection? What is it that prevents many in our community from applying to NSF? Yes, those who have been successful in the past tend to be successful again. These individuals have clearly learned to write good proposals. That doesn't mean that newcomers can't break into the system, though. "only safe science gets funded" - Not true! Certainly the panel doesn't lean toward safe science. Some of the more creative proposals were the ones the panel put at the top. The mail reviewers didn't necessarily agree with us, and we had much discussion over whether we (the panel) were being hoodwinked and missing some fatal flaw. For the most part we concluded we weren't; in a few we were wrong. These types of proposals were a great example of how the panel and mail reviews can work as complimentary processes. "only international projects/U.S. projects get funded" - yes, I've heard both statements. Obviously there is a perception problem. The bottom line is good

science gets funded. Lower budgets do help, so in that sense U.S. projects could be seen to have an advantage. But exciting science always gets top priority, and the place is secondary.

Should one be pessimistic about the future? Only in that we have far more good proposals each time than we ever have funds for. Rather than using that as a sign of what is wrong with the system, we could use it as an indication of what is working, namely that researchers, young and old, are still enthusiastic and coming up with exciting research topics. If the community can combine forces to tap into more funds, we will all benefit.

Sarah Roeske
University of California, Davis

Tectonics Awards for January 1- July 1, 2001

Award#	PI	Institution	Title
0003740	Dixon	U of Miami	Collaborative Research: Geodynamics of the Eastern California Shear Zone
0003396	Furlong	PA St U	Collaborative Research: Geodynamics of the Eastern California Shear Zone
0117242	Burbank	UC Santa Barbara	Collaborative Research: Scaling and Displacement Relationships for Thrust Faults
0003356	Fisher	Penn State U.	Collaborative Research: Scaling and Displacement Relationships for Thrust Faults
0087650	Connelly	U of Texas Austin	Neoproterozoic-Early Paleozoic History of the Scottish Promontory of Laurentia
0106806	Zeitler	Lehigh University	Incision History of the Middle Indus River from (U-Th)/He Dating of Apatite
0107078	Newman	Texas A&M	Experimental Deformation of Dolomite and Mechanisms of Flow in the Calcium-Magnesium Carbonate System
0107123	Wernicke	Cal. Inst of Tech	Structural and Geochronological Investigations of Neoproterozoic Rifting in Southwestern Laurentia
0107065	Pederson	Utah State U.	Collaborative Research: Tectonic Geomorphology of Grand Canyon--Testing a Hypothesis for Differential Incision Due to Quaternary Slip on the Hurricane-Toroweap Fault System
0107117	Karlstrom	Univ. of NM	Collaborative Research: Tectonic Geomorphology of Grand Canyon--Testing a Hypothesis for Differential Incision Due to Quaternary Slip on the Hurricane-Toroweap Fault System
0118939	Furlong	PA St U	Geodynamics and Active Tectonics of Fiordland, New Zealand: Workshop
0106772	Klemperer	Stanford U.	Crustal Structure of an Ultra-High Pressure (UHP) Metamorphic Belt: Integrated Reflection, Refraction and Gravity Modelling of the Dabie Shan, China

ANNOUNCEMENTS:

EDUCATIONAL VIDEO OF 'A COMPLETE SUITE' NOW AVAILABLE

Described as a musical allegory of the application of continuum mechanics to structural geology and tectonics, the one act play called 'A Complete Suite' was presented at the GSA Hot Topics Session on November 12, 2000 in Reno Nevada. This session, sponsored by the Structural Geology and Tectonics Division of the GSA, addressed the question "Kinematics vs. Mechanics: Are only one or both useful rationales for understanding rock deformation?" Bill Dunne organized the session as a debate which was moderated by Jim Evans. As part of their contribution David Pollard and Ray Fletcher offered the play, which has now been edited into a twenty minute video suitable for classroom viewing and designed to stimulate discussion of the debate topic and other questions related to the practice and scientific methodology of structural geology.

'A Complete Suite' features Stanford students Lans Taylor as George Frederick Handel, Simon Kattenhorn as Sir Isaac Newton, Kurt Sternlof as Mr. Robert Hooke and Eric Hand as William Hopkins. David Pollard and Ray Fletcher perform the parts of two Muses who provide a Prologue and Epilogue in the Shakespearean tradition. The drama is set in 1717, a year when both Handel and Newton lived in London and is based on the premise that Handel has lost his compositional ability by neglecting note duration (kinematics), note intensity (dynamics), and tonal relations (constitutive laws). A mysterious storm blows Hopkins from the future and Hooke from the past to join Newton in Handel's studio. Using the analogy between music and mechanics they help Handel regain his muse, and conclude that only by virtue of a complete suite of relationships will either discipline produce pleasing results.

Inspired by the nights events (a dream?) William Hopkins returns to the 19th century and writes his famous monograph of 1835 'Researches in Physical Geology' in which he lays down the foundations of structural geology. Hopkins' methodology begins with a geometric and kinematic description of the geological structure; then postulates a general force to drive the deformation; and finally derives the motions of the evolving structure according to the constitutive laws and the equations of motion - i.e. a complete mechanics.

The video, taped before a live audience at the Hot Topics Session and edited at Stanford University Media Solutions, is available for a nominal fee to cover reproduction costs and mailing. To order a copy or receive more information please send your request to:

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Email: dpollard@pangea.stanford.edu

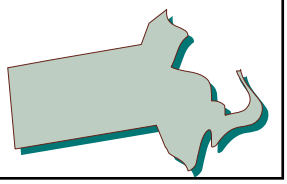
NEW GSA SPECIAL PUBLICATION

Ophiolites and Oceanic Crust: New Insights from Field Studies and the Ocean Drilling Program
Edited by Yildirim Dilek, Eldridge M. Moores, Don Elthon, and Adolphe Nicolas
Geological Society of America SPE 349, 556p.

STUDENT GRANT OPPORTUNITY

Grants are available to undergraduate or graduate students for geological field work in New England. Awards are made by the Marland Pratt Billings and Katharine Fowler-Billings Fund, typically for $500-$1000. The deadline is March 1st of each year. Details are available at: http://neigc.org/NEIGC/BillingsFund.html

Boston: 2001
A Geo-Odyssey
November 1-10



The 2001 GSA Annual Meeting (Geo-Odyssey) will be held November 1-10 in Boston, Massachusetts. Sessions, symposia, and short courses of possible interest to members of the SG&T Division are listed below. Some of these are Division-sponsored and others are on topics related to structure and tectonics. The April and June issues of GSA today have complete listings of sessions, as does the GSA website. Organizers for Division-sponsored or co-sponsored symposia or theme sessions should submit reviews of their sessions to Barbara or Mary for inclusion in the March 2002 Newsletter.

Pardee Keynote Sessions

K2 **Melt in the Crust and Upper Mantle: How Much, Where, for How Long, and What Significance for Geodynamics?**
Tracy Rushmer, Michael Brown, George Bergantz, and Greg Hirth

K4 **Ophiolites as Problem and Solution in the Evolution of Geological Thinking**
GSA Structural Geology and Tectonics Division co-sponsored Sally Newcomb, Yildirim Diliek

Topical Sessions

T1 **Arc Terranes in the Appalachians and Caledonides and Their Role in Paleozoic Orogenesis**
Paul Karabinos, James Hibbard, Anke Friedrich

T2 **Proterozoic Tectonic Evolution of the Grenville Orogen in Eastern North America**
Richard Tollo, Louise Corriveau, M.J. Bartholomew

T3 **Focus on IGCP: Modern and Ancient Plate Boundaries and Orogens**
Suzanne Kay, Eldridge Moores, Mark Cloos

T4 **Crustal Architecture of Rifted Continental Margins**
Webster Mohriak, Bruce Rosendahl

T5 **Melt in the Crust and Upper Mantle: How Much, Where, for How Long, and What Significance for Geodynamics?**
Tracy Rushmer, Greg Hirth, Michael Brown, and George Bergantz

T6 **Evolution of the Precambrian Earth**
GSA Structural Geology and Tectonics Division co-sponsored Walter Mooney, Herwart Helmstaedt, Desmond Moser, and Irina Artemieva

T7 **The Proterozoic of the Eastern Midcontinent and Beyond**
James Drahovzal, John McBride

T59 **Rheological Effects of Fluid-Rock Interactions at Depth: From Experimental Constraints to Interpretations of Field Observations**
GSA Structural Geology and Tectonics Division co-sponsored Tim Wawrzyniec, Jane Selverstone

T63 **Contributions of High-Resolution Geophysics to Understanding Neotectonics and Seismic Hazard**
John McBride, William Stephenson

T70 **Ophiolites as Problem and Solution in the Evolution of Geological Thinking**
GSA Structural Geology and Tectonics Division co-sponsored Yildirim Dilek, Sally Newcomb

T74 **Geoinformatics: Extracting Knowledge from the Rock Record Through Construction of Disciplinary Databases and Information Networks**
A.K.Sinha

T75 **Applications and New Opportunities in Geologic Remote Sensing**
Randy Keller, Simon Hook

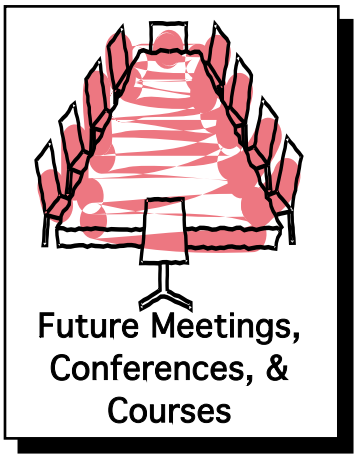
T76 **Geology in the National Parks: Research, Mapping, Education, and Interpretation**
Bruce Heise, James Wood

T88 **New Topics in Grenville Tectonics: A New Look at Some Old Rocks**
Eric Johnson, Philip Whitney, David Valentino

Short Courses

1. **Applications of Thermochronometry to Tectonics**
Saturday and Sunday, Nov. 3-4, *Cosponsored by GSA Structural Geology and Tectonics Division*: Mark Harrison-UCLA; Marty Grove-UCLA; Oscar Lovera-UCLA; Peter Zeitler-Lehigh University; Limit: 30, Fee:$435, students $415.

8. **Tectonics and Topography: Crustal Deformation, Surficial Processes, and Landforms**
Sunday Nov. 4, *Cosponsored by GSA Structural Geology and Tectonics Division*: Dorothy Merritts-Franklin and Marshall College; Roland Burgmann-U.C. Berkeley; Limit 30, Fee: $385, students $365.



(Notices of future meetings, conferences, and short courses of interest to Division members are welcomed by the editors. Further information can also be found on the Society Web page.)

2001

September 24-28 **International Archean Symposium**, University of Western Australia, Perth, Western Australia, Australia, by the Geological Society of Australia, Society for Geology Applied to Mineral Deposites and the Society of Economic Geologists. Contact Dr. Susan Ho, P.O. Box 80 Bullcreek, WA 6149 Australia, phone: 618-9332-7350, email: susanho@geol.uwa.edu.au, WWW: http://www.geol.uwa.edu.au/~ias.

October 01 **Structural Traps and Fractured Reservoirs of the Rocky Mountain Region**, Marriott City Center, Denver, CO, USA, by the Rocky Mountain Association of Geologists and the Petroleum Technology Transfer Council. Contact Sandi Pellissier, 820 16th Street, Suite 505, Denver, CO 80202, phone: 303-573-8621, email: RMAGdenver@aol.com, WWW: http://www.rmag.org.

October 22-24 **Land Surface Mapping and Characterization Using Laser Altimetry**, Annapolis, Maryland, USA, by the ISPRS, University of Maryland, NASA Goddard Space Flight Center, Ohio State University. Contact M. Hofton, Department of Geography, University of Maryland, College Park, MD 20742, phone: 301-405-8543, email: mhofton@geog.umd.edu, WWW: http://lvis.gsfc.nasa.gov/laserworkshop.html.

November 5-8 **Geological Society of America Annual Meeting**, Boston, MA, USA, by the Geological Society of America. Contact GSA Meetings, Boulder, CO 80201-9140, phone: 303-447-2020, email: meetings@geosociety.org, WWW: http://www.geosociety.org.

December 10-14 **American Geophysical Union Fall Meeting**, San Francisco, CA, USA, by the American Geophysical Union (AGU). Contact AGU Meetings Dept., 2000 Florida Avenue NW, Washington, DC 20009, phone: 202-462-6900, email: meetings@agu.org, WWW: http://www.agu.org/meetings/.

2002

March 10-13 **AAPG Annual Convention and Exhibition**, George R. Brown Convention Center, Houston, Texas, USA by the American Association of Petroleum Geologists. Contact AAPG Convention Dept., 1444 S. Boulder Ave., Tulsa, OK 74119, phone:800-364-2274, email: convenc@aapg.org, WWW: http://www.aapg.org.

March 24-27 **Northeastern Section Meeting of the GSA**, Sprinfield Massachusetts, by the

GSA. Contact: Sheila Seaman, University of Massachusetts, WWW:http://www.geosociety.org.

March 27-30 **National Earth Science Teachers Association Annual Meeting**, San Diego CO, USA, Contact NESTA Meetings, Florida Ave. N.W., Washington DC, USA 20009, phone: 202-462-6910, email: fireton@kosmos.agu.org.

April 3-5 **North-Central/Southeastern Section Meeting of the GSA**, Lexington, Kentucky, by the GSA. Contact John Kiefer or Thomas Sowll, University of Kentucky, WWW: http://www.geosociety.org.

April 11-12 **South-Central Section Meeting of the GSA**, Alpin, Texas, USA, by the GSA. Contact Kevin Urbanczyk, Sul Ross State University, WWW: http://www.geosociety.org.

April 22-26 **European Geophysical Society (EGS) XXVII General Assembly**, Nice, France, by the EGS and the AGU, contact EGS Office, Max-Planck-Str. 13, 37191 Katlenburg-Lindau, Germany, phone 49-5556-1440, email: egs@copernicus.org, WWW: http://www.copernicus.org/EGS/.

May 7-8 **Rocky Mountain Section Meeting of the GSA**, Cedar City, Utah, USA, by the GSA. Contact Robert Eves Southern Utah University, WWW: http://www.geosociety.org.

May 13-15 **Cordilleran Section Meeting of the GSA**, Corvallis, Oregon, USA, by the GSA. Contact Robert S. Yeats, Oregon State University, WWW: http://www.geosociety.org.

May 19-24 **Basement-Cover Connections**, University of Missouri-Rolla, Department of Geology & Geophysics, Rolla, Missouri, USA, by the International Basement Tectonics Association. Contact: John Hogan, Dept. of Geology and Geophysics, University of Missouri-Rolla, Rolla, MO 65409-0410, phone: 573-341-4618, email: jhogan@umr.edu.

May 28-June 1 **AGU Spring Meeting**, Washington, DC, USA. Contact AGU Meetings Dept., 2000 Florida Ave., NW, Washington, DC 20009, phone: 202-462-6900, email: meetinginfo@agu.org, WWW: http://www.agu.org/meetings.

July 9-12 **Western Pacific Geophysics Meeting**, Wellington, New Zealand, by the American Geophysical Union (AGU). Contact: AGU Meetings Dept., 2000 Florida Ave., NW, Washington, DC 20009, phone: 202-462-6900, email: meetinginfo@agu.org, WWW: http://www.agu.org/meetings.

July 22-27 **Sedimentary and magmatic responses to extensional and compressional tectonics and the associated ore-forming processes, with a focus on Africa**, Safari Hotel, Windhoek, Namibia, by the IAGOD, Geological Societies of South Africa, Namibia and Zambia. Contact Ger Kegge, phone: 264-61-234121, email: kegge@iafrica.com.na.

ATTENTION GRADUATE STUDENTS:

The Structure and Tectonics Division of GSA will provide a few awards of $100 each to help subsidize the cost of Division-sponsored field trips at GSA meetings. If you are interested, send your name, your advisor's name, your institution, what year you are in school, and the title and leader of the field trip that you are interested in attending to Dr. Christian Teyssier via email, by September 15, 2001: teyssier@tc.unm.edu.

VOTE FOR OFFICERS ON-LINE

If you haven't already voted please visit the web site (address will come via group email from GSA) or use the paper ballot to vote for the 2nd Vice- Chairperson. Brief biographies are presented below.

Candidates for 2nd Vice-Chair:

Elizabeth Schermer (schermer@cc.wwu.edu)

Elizabeth Schermer is currently Associate Professor in the Geology Department at Western Washington University. She obtained a B.S. at Stanford (1982) and a Ph.D. at MIT. (1989), and worked at the U.S. Geological Survey for two years. She did post-doc research at U.C. Santa Barbara for two years before joining the faculty at WWU. She teaches classes in introductory geology, structural geology, tectonics of mountain building, and field camp, and a field version of introductory structural geology. She served on the editorial board of Geology from 1996-98. Her research interests include the application of structural geology, metamorphic petrology, and geochronology to the tectonics of plate margins and the relations between magmatism and tectonics. She has worked on Alpine tectonics and extension in Greece, strike-slip faulting in Chile and the Mojave desert, Mesozoic magmatism and deformation in the Mojave desert, and Cretaceous and younger deformation in the Pacific Northwest. Recent interests include paleoseismology and active faulting in the Mojave desert and New Zealand, and the quantification of different styles of deformation at oblique subduction margins.

J. Douglas Walker (jdwalker@ku.edu)

Doug Walker is a Professor of Geology at the University of Kansas. He received B.S., M.S. and Ph.D. degrees from MIT in 1980, 1981, and 1985, respectively. Doug's current research interests are in the area of tectonics. He has mostly worked in the western United States on problems from Mesozoic contractile deformation to Cenozoic extension and transcurrent deformation. In this work, he has used tools of field geology, structural geology, isotope geochemistry, geochronology and thermochronology, and more recently, GIS and remote sensing. He has also been actively involved in working with GIS for geologic mapping (direct data capture in the field) and with efforts at GSA to make it much easier to publish geologic maps. Doug has also chaired the GSA committee on Long Range planning for publications, chaired the GSA Penrose Conferences committee, and served on long-range planning for GSA.

Michael L. Williams (mlw@geo.umass.edu)

Mike Williams is a Professor of Geology at the University of Massachusetts. He received his M.S. at the University of Arizona and his Ph.D. from the University of New Mexico. Mike’s research involves the interaction between deformation and metamorphism at all scales, and the nature of tectonic processes within the middle and lower crust. His field research has been focused on regions that have evolved at some specific depth in the crust for an extended period of time, such as the middle crustal rocks of the southwestern U.S.A. or the deep crustal rocks of the Canadian Shield. Microstructural geology has played an important role in Mike’s research, providing a link between deformation and metamorphic processes. He has recently been investigating the use of in-situ microprobe monazite geochronology to constrain the timing of textures and fabrics, particularly in multiply deformed and metamorphosed rocks. He has also investigated the interaction between crenulation cleavage development and metamorphic reactions, and the use of microstructural relationships to build more robust P-T-t-D paths. In addition to illuminating mid- and deep-crustal processes, these data have provided new constraints on the tectonic setting and history of Precambrian blocks with the Laurentian continent. Mike has taught courses in structural geology, tectonics, strain and fabric analysis, structural analysis of metamorphic rocks, and field geology. He has served on the Best Paper Committee of the Structural Geology and Tectonics Division, as an Associate Editor of the Journal of Metamorphic Geology, and as a Special Issue Editor of the Journal of Structural Geology.

BALLOT

Election of Officers for the Structural Geology & Tectonics Division

There is an online ballot available the address of which will come via group email from GSA. Contact mhub@ksu.edu if you need this online link.

To Fellows and Members of the Division:

The slate of officers of the Division presented by the Nominating Committee is submitted herewith. Please vote by checking the appropriate box or by typing in the name of your nominee in the space provided. Biographical data for the nominees can be found on the previous two pages. This ballot (or the electronic version) must be received no later than September 15, 2001. The election results will be announced at the business meeting of the Division in Boston, MA, in November.

SECOND VICE-CHAIR

Elizabeth Schermer ☐

Douglas Walker ☐

Michael Williams ☐

write in:_____

send to: Ballot Structural Geology and Tectonics Division
Geological Society of America
P.O. Box 9140
Boulder, CO 80301-9140

your GSA member number:_____

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For a legal vote, this ballot must be **signed**

Signature:________________________

print name:_______________________

Address:__________________________

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Geological Society of America
P.O. Box 9140
Boulder, CO 80301-9140

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Geological Society of America

Structural Geology and Tectonics Division

CAREER CONTRIBUTION AWARD NOMINATION

This award will be given for the fourteenth time in 2001. It is given to an individual who throughout his/her career has made numerous distinguished contributions that have clearly advanced the science of structural geology or tectonics. Nominees need not be citizens or residents of the United States, and membership in the Geological Society of America is not required. The Career Contribution Award cannot be given posthumously, unless the decision to give it was made before the death of the awardee. Past recipients are:

1988: John H. Handin
1989: John Rodgers
1990: John G. Ramsay
1991: Clint D.A. Dahlstrom
1992: John C. Crowell
1993: Benjamin M. Page
1994: Richard P. Nickelsen
1995: B. Clark Burchfiel
1996: Winthrop D. Means
1997: Hans Ramberg
1998: Albert W. Bally
1999: Hans Laubscher
2000: S.Warren Carey
2001: Don Wise

Name of nominee, present institutional affiliation and address:

Summary statement of nominee's major career contributions to the science of structural geology or tectonics (attach additional page if necessary):

Selected key published works of the nominee (attach additional page):

Name and address of nominator:

Mail (or fax) to: Margie Rusmore
Dept. of Geology
Occidental College
1600 Campus Road
Los Angeles, CA 90041 FAX: 213-259-2704

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Address:________________________

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Margie Rusmore
Dept. of Geology
Occidental College
1600 Campus Road
Los Angeles, CA 90041

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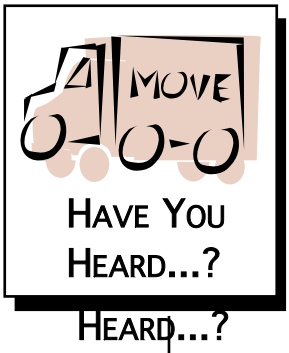

We are happy to report the continued flow of geoscientists through the job market. In the academic scene **Aurelia Hubert-Ferrari** is moving on from a post-doc with **John Suppe** to a faculty position at University of Neuchatel in Switzerland. **Luther Strayer**, formerly a U. Minnesota PhD student, began a tenure-track position at Cal State U., Hayward during the fall, 2000. **Meg Streepey**, who worked with **Ben van der Pluijm** at the University of Michigan on Late Proterozoic extension in eastern North America, has accepted an Assistant Professor position at Florida State University. Another U. Michigan student, **Arlo Wiel** is leaving his advisors **Rob Van der Voo** and **Ben van der Pluijm** to become an Assistant Professor at Bryn Mawr. **Brian Horton** (U. Arizona PhD) is moving from a faculty position at Louisiana State University to a faculty position at UCLA. Another U. Arizona graduate and student of **Peter DeCelles** and **George Davis**, **Nadine McQuarrie**, just moved to a postdoc at Cal Tech. With an opposite flow direction, **Paul Kapp,** is moving from UCLA where he worked on his PhD with **An Yin**, to a faculty position at U. Arizona. **Robert Brady**, former PhD student of **Brian Wernicke** at Cal Tech started a post-doc at Los Alamos last fall. **Nathan Niemi**, also a Wernicke student, will begin a postdoc at MIT with **Sam Bowring**. **Susanne Janecke** and **Jim Evans** from the University of Utah will be on sabbatical leave at the University of Oregon and look forward to working with **Rebecca Dorsey**, **John Logan**, **Martin Miller**, **Ray Weldon**, **Eugene Humphreys** and others. **Scott Patterson's** student, **Keegan Schmidt**, accepted a position at Lewis and Clark State College in Idaho. **Ron Vernon** has been appointed as a senior research professor at the University of Southern California. **Cinzia Cervato** is starting a faculty position at Iowa State University, following her industry experience at Saga Petroleum in Norway. Kansas State University welcomes **Kirsten Nicolaysen** to a geochemistry/tectonics position. Kirsten was a PhD student of **Fred Frey** at MIT and a Master's student of **Jim Myers** at U.Wyoming.

From the eastern states…. **Gary Solar** reports that he enjoyed his first year at SUNY Buffalo. **Jon Tomkin** was awarded a Damon-Wells Fellowship for a two-year post doc to work with **Mark Brandon** at Yale. Jon was a student of **Jean Braun** at the Australian National University. **Dave Evans** (PhD Cal Tech), **Peter Reiners** (PhD U. Washington), **David Bercovici** (formerly on the U. Hawaii faculty), and **Shun Karato** (formerly on the U. Minnesota faculty) join the faculty at Yale. **David Schneider** will begin a faculty position at Ohio University. David was a PhD student of **Peter Zeitler** and a Master's student of **Daniel Holm**. **Drew Coleman** will be leaving Boston University for a faculty position at the University of North Carolina, Chapel Hill. **Mike Krol** is leaving his post-doc position at BU to become a faculty member at Bridgewater State University (MA). Following a research assistant position with **Goram Ekstrom** at Harvard, **Rachel Abercrombie** will join the faculty at BU as a geodynamicist. **Al McGrew** was tenured and promoted to associate professor at the University of Dayton. Congratulations to all.

The transient population in industry and government positions includes: **Scott Young**, a Stanford PhD with **Dave Pollard**, who will begin at Anadarko Petroleum Corporation in Houston. Another Pollard student and post-doc from Stanford, **Taixu Bai**, will begin a job with Schlumberger, also in Houston. **Patricia Fiore** will leave Phillips Petroleum to become a PhD student with Dave Pollard. **Vince Matthews** has left his position as Professor of Geology and Director of the Center for Energy and Economic Diversification at the University of Texas to assume a shorter title as the Senior Science Advisor for the Colorado Geological Survey in Denver, CO. **Martha Gerdes** has left ExxonMobil to take a position working on fault seal research at Chevron. **Pilar Garcia** will also join Chevron. Pilar was a student of **George Davis** at the University of Arizona. A recent Penn State graduate, **Tim White**, will be moving to Anchorage to begin a post-doc with **Dwight Bradley** at the USGS. **Mike Hudec** moved from an assistant professor position at Baylor University to join the Applied Geodynamics Laboratory at the Bureau of Economic Geology in Austin, Texas. **Shangyou Nie**, formerly the China Editor from IHS Energy Group, is now a Business Development Advisor for Shell International E & P Inc. in Houston, Texas. Good luck to all in their new positions - from the editors of the SG&T Newsletter.

2000-2001 Structural Geology and Tectonics Division

This newsletter is published biannually by the Structural Geology & Tectonics Division of GSA

If you have any suggestions, ideas, professional and technical opinions, announcements, career changes, not-for profit offerings, and/or industry news, please send them to us! The deadline for inclusion of materials in the next issue will be January 15, 2002.

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