



SEDIMENTARY GEOLOGY DIVISION

Fall 2019 Newsletter



Spectacular marine and deltaic capped sequences of the Eocene Coledo Formation near Coos Bay Oregon. Dr. Marjorie Chan, this year's winner of the Sloss Award, described these beautiful exposures with her mentor, and previous Sloss Award recipient, Robert H. Dott Jr.

The upcoming year has many opportunities for you to present your latest research in sedimentology, stratigraphy, and the many other areas which integrate with our field. First, the earlier than usual annual GSA meeting will bring us together in late September (22-25) in wonderfully sunny Phoenix! Many of the events for that meeting are described in this newsletter. Second, the SEPM International Sedimentary Geosciences Congress 2020- with a fast-approaching abstract deadline (Sept 30th) is also sponsored by the Sedimentary Geology Division of GSA, and IAS. It will be in Flagstaff Arizona April 26-29, 2020: <https://sepm.org/SEPM2020>.

There are seven proposed field trips ranging from carbonate cyclicity, eolian bedforms to stratigraphy and sequence stratigraphy in the Grand Canyon.

These meetings in particular demonstrate that The Geological Society of America, and specifically the Sedimentary Geology Division in collaboration with our partner societies like SEPM, provide the best new science, in an exciting forum for professionals and students.

GSA Annual Meeting

Be a part of your home for exciting discourse this year at the GSA annual meeting, where the Sedimentary Geology Division has sponsored or co-sponsored 17 Topical Sessions and the "Understanding the Neoproterozoic Earth-Life System" Pardee Symposium!



Sedimentary Geology Division shared reception with Limnology Division

Join us Tuesday evening, September 24 from 6:00 - 8:00pm at the Phoenix Convention Center, North Ballroom 120A, North Building, for a stimulating evening of networking & awards announcement. We will recognize the winners of the Sloss, Laubach, and Student Research awards as well as give away door prizes. Catch up with your SGD and Limnology colleagues and meet new connections! Drinks and snacks will be provided.

Sedimentary Geology Division/SEPM Student Research Competition: Dynamics of Stratigraphy and Sedimentation (Posters)

On Monday, September 23rd, in Halls A/B of the Phoenix Convention Center North Building,

come see the brilliant science that 27 students are pursuing in sedimentary science at the SEPM/ SGD Poster Session! Thanks to the generosity of SEPM and SGD, student authors of the top four ranked posters will be awarded \$500! If you are interested in being a judge, and don't have a student in the session, please e-mail SGD Vice Chair, Dr. Amy Weislogel: Amy.Weislogel@mail.wvu.edu

See titles and abstracts at:

<https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Session/47878>

Sedimentary Geology Division Awards

The **Laurence L. Sloss Award** for Sedimentary Geology is given annually to a sedimentary geologist whose lifetime achievements best exemplify those of Larry Sloss—i.e., achievements that contribute widely to the field of sedimentary geology and service to the Geological Society of America.

The Sedimentary Geology Division is pleased to announce **Dr. Marjorie Chan** (University of Utah) as the 2019 Laurence L. Sloss Award and the 20th recipient. Dr. Chan is a Distinguished Professor at the University of Utah, where she has been since completing her doctorate at the University of Wisconsin. Her work, carried out during nearly four decades, has had a major impact on the field of sedimentary geology.



Dr. Marjorie Chan by some of her favorite Jurassic rocks with hematite cementation and bleaching .

Margie's field-based research expertise ranges from basic sedimentology and stratigraphy to diagenesis (nodule formation, etc.). Her focus has been on Colorado Plateau geology (Precambrian to Pleistocene) and like Laurence Sloss, Margie spent her career unraveling the complexities of continental sedimentary rocks. She has been one of the trailblazers studying eolian and dry-land sedimentary records, and was one of the first groups of geologists to apply principles of sedimentary geology gleaned from planet Earth to interpret sedimentary records on planet Mars. Particularly noteworthy is her work on the formation of post-depositional concretions. These diagenetic processes related to fluid flow in sedimentary basins resulted in a spectrum of concretion chemistries (iron oxide, iron sulfide, carbonate, hematite, even azurite and malachite).

Throughout her 36-year career she has taken a leadership role in the field of siliciclastic sedimentology resulting in an impressive 140 peer-reviewed publications, 150 invited lectures and a remarkable record of public outreach such as videos/films on AAPG Search and Discovery, Discovery Channel and National Geographic, leading NASA HiRise fieldtrips, etc. She has published in wide range of leading journals, such as Nature, Science, GEOLOGY, GSA Bulletin, Paleo-cubed, Geophysical Research Letters and Astrobiology and has an international reputation has one of the top spokespersons for the discipline of sedimentary geology. As GSA's 2014 Distinguished International Lecturer she gave a stunning number (53) of lectures in 6 countries. Margie has been tireless in her service to scientific societies (GSA, AAPG, and SEPM). She was elected GSA fellow (1995), Chair of Sedimentary Geology Division (2013-2015) and GSA Council (2016-2000). She has served on numerous GSA committees (Doris Curtis awards, Sloss Awards, GSA Diversity in Geosciences, etc.), chaired numerous GSA technical sessions, including two very competitive Pardee Sessions (1999 & 2000). She has been active in promoting women in geology, founder of the AAPG PROWESS (Professional Women in Earth Sciences) Committee and increasing diversity in the geosciences.

The Stephen E. Laubach Structural Diagenesis Research Award promotes research combining structural geology and diagenesis, and curriculum development in structural diagenesis.

The Sedimentary Geology Division and the Structural Geology and Tectonics Division of GSA are pleased to announce **Kayla Smith** as the recipient of the 2019 Stephen E. Laubach Structural Diagenesis Research Award. She is a Masters student at Utah State University. She will use the \$2500 award to support her diagenesis focused research entitled “*Geologic Characterization of the Great Unconformity Injection Interface Region from Field and Drillcore Analog Studies: Implications for Midcontinent Induced Seismicity*”

Congratulations!



Kayla Smith, 2019 Laubach Research Award Recipient (top), Gunnison Gorge fieldwork with Kayla Smith (right), Field assistant Anna Paudling (center) and Dr. Katie Potter (left).

The Sedimentary Geology Division Student Research Award is given to an outstanding student grant proposal in the field of sedimentary geology and stratigraphy. **Eve Lalor**, has been selected as the **2019 SGD Student Research Grant Award** for her Masters research project entitled: “*Scaling of environmental responses to multiple Eocene global warming events*”. This \$1000 award will fund her research and travel to GSA.



Eve Lalor, 2019 Student Research Award winner (top), and a photograph of a paleosol with root traces, Eocene, Willwood Fm., Bighorn Basin Wyoming (bottom). Eve is studying these post PETM paleosols to extend this composite record of climate, sedimentation rate, and floodplain drainage after this significant event in Paleogene history.

SGD Vice Chair Candidate

Brian Hampton is running unopposed for the Vice Chair Position of the Sedimentary Geology Division of GSA. Ballots closed August 30th while “The Sedimentary Record” was in press, but we anticipate welcoming Brian as the new Vice Chair of SGD at the end of the Annual GSA meeting in Phoenix!



Brian Hampton, Candidate for the Vice Chair of the Sedimentary Geology Division of GSA.

Brian is an Associate Professor at New Mexico State University, and earned his doctorate at Purdue University in 2006. His research interests center on the interplay between erosion and sedimentation with particular emphasis on field-based studies that examine the stratigraphic history and tectonic evolution of sedimentary basins. The Basin Research Lab at NMSU applies the skill sets of sedimentology, stratigraphy, structure, petrology, geochronology, geochemistry, and geologic mapping to better understand the exhumation history of mountain belts as preserved in sedimentary basins.

Statement of interest: I am both excited and honored to be considered to serve as Vice Chair of GSA's Sedimentology Geology Division (SGD)! Throughout my career as a geologist (initially as a student and now as a professional) I have benefited from excellent

mentorship and support from GSA, the division, and a number of its members. I look forward to the opportunity to give back and serve the current SGD membership and am especially excited about welcoming and engaging the next generation of early-career sedimentologists to the division. Thank you for considering me for this position and if elected, I am committed to supporting the advancement of new and emerging research on any and all sedimentary-related topics.

SGD seeking new volunteers for the Joint Technical Program Committee for 2020

We thank Ryan Morgan for his long service working to organize SGD sponsored sessions for all of us who presented at the annual GSA meetings for the last 4 years! If you are interested in helping with this vital task, please contact Amy Weislogel (incoming Chair of SGD) Amy.Weislogel@mail.wvu.edu

2019 Sedimentary Geology Division Officers:

Chair – Gary Gianniny, gianniny_g@fortlewis.edu

Vice Chair – Amy Weislogel

Secretary-Treasurer – Brett McLaurin

Student Representative –Shannon Cofield

2nd Student Representative –(Ex officio) - nominations pending

Past Chair- Kate Giles

Sedimentary Geology Division Volunteers:

Representative to GSA Council – Marjorie Chan

Webmaster – Stefania Laronga

International Student Outreach Coordinator –

Angela Delaloye

Ex Officio Management Board Member –

Howard Harper, SEPM

2019 Joint Technical Program Committee –

Piret Plink-Bjorklund (Colorado School of Mines), Ryan Morgan (Tarleton University)



@GSA.SGD