Third Annual Arizona Geological Society Doug Shakel Memorial Student Poster Event

Saturday, April 18, 2015

The AGS will host a special meeting on **Saturday, April 18, 2015** at the Interdisciplinary Science and Technology Building #4 (ISTB-4) on the Arizona State University campus (781 South Terrace Road, Tempe, Arizona 85281).

Prizes to be awarded:

First Prize: \$500; Second Prize \$250; Third Prize \$150; Three honorable mentions at \$50.

Special geological gifts will be given to each entrant.

Schedule

8:00 AM: Students arrive at the Interdisciplinary Science and Technology Building #4 and mount their posters on poster boards. The event will be held in the third floor lobby, better known as the Crater Carpet. Appropriate tacks will be provided. (No more taped posters falling off the walls!) Parking is free on Saturdays in the big parking garage next door. (See Google map)

8:30 AM - 9:30 AM: Viewing of posters and beginning of judging by Carl Bowser, Professor Emeritus, University of Wisconsin, Madison; Nyal Niemuth, Economic Geology Section Chief, Arizona Geological Survey, Phoenix; and Gordon Haxel. Scientist Emeritus, U.S. Geological Survey, Flagstaff.

9:30 AM - 10:00 AM: Coffee break

10:00 AM - 12:00 Noon: 3-minute oral summaries of each poster by each presenter.

12:00 Noon - 1:15 PM: Buffet Lunch (free for students with Student ID, whether or not they present a poster).

Everyone attending the Buffet Lunch must make reservations no later than 2:00 PM on Saturday, April 11, 2015.

1:15 PM - 2:15 PM: Tour of the Interdisciplinary Science and Technology Building.

2:15 PM - 3:15 PM: Showing of some nifty science films at the IMAX-like, Marston Theater (located on first floor).

3:15 PM - 4:00 PM: Presentation of awards for the best posters.

Please call or email Bob Kamilli if you have any questions:

Office Phone: <u>520-670-5576</u>;

Cell phone: 520-349-9336

E-mail: <u>bkamilli@usgs.gov</u>

Important Details for Students Who Participate in this Event

Posters in all fields of the Earth Sciences are welcome, including environmental geology, archaeological geology, geological education, hydrogeology, etc. Posters must be submitted as PDFs to Bob Kamilli (bkamilli@usgs.gov) for distribution to our distinguished panel of judges as soon as possible and no later than 5:00 PM, Monday April 13. Those who fail meet this deadline may bring and hang their poster, but it will not be judged or be eligible for any prizes. This is because the judges will need several days in advance to properly evaluate the posters. All entrants will receive constructive feedback compiled from the judges' written comments via email soon after the event. Please keep the size of your posters to less than 25 MB.

When submitting the PDFs of your posters, please be sure to include the poster title, your name, names of co-authors, your email address, phone number(s), and school affiliation.

Poster presenters should have their posters hung up no later than 8:30 AM on April 18. (Earlier is preferable). Only one poster per first author, please.

The event is open to both graduate and undergraduate students. You are welcome to submit a poster that you have presented in another venue or a class, e.g. Geodaze at the University of Arizona.

Poster presenters will be required to give a **three-minute** summary of their poster. A PDF of their poster will be projected during this summary. The ability to summarize one's poster concisely and clearly will be an important

factor in judging the posters. Due to the number of presenters expected, this three minute limit will be strictly enforced. Because of this, we will need to limit the entrants to 24. However, last year, there was a total of only 18 entrants, so please do not assume that all spaces will be filled!

Making an Effective Presentation

Don't forget that creating an effective poster is considerably different from writing a manuscript for publication. The most common mistakes are too much text in too small a font and a confusing layout. The presentation should have a logical, easy-to-follow flow that the eye can easily follow. Please see http://www.pitt.edu/~etbell/upj-space/PosterGuide.htm and http://www.ncsu.edu/project/posters/ for helpful hints for designing a good poster.

Student poster presenters may find useful the following editorial from Marcia McNutt, Editor-in-Chief of the Journal, Science:

Science 6 March 2015: Vol. 347 no. 6226 p. 1047 DOI: 10.1126/science.aab0014 Editorial

It starts with a poster

Scientists frequently lament the scarcity of effective scientific communicators — those who can explain complex concepts to the public, present scientifically sound alternatives to policy-makers, and make cogent arguments for the value of science to society. A few stellar programs are designed to select and train elite articulators, but some simple steps can improve the communication skills of all scientists. Most researchers learn how to talk about science at meetings. If scientists cannot explain their work clearly and succinctly to their peers, it is highly unlikely that they can explain it effectively to nonspecialists. I recently helped to judge student papers at a large scientific meeting, an experience that brought to my attention the importance of such communication early in one's career. I offer a few tips on how to make the most of this invaluable training.

"Training the next generation of scientists to communicate well should be a priority."

I encourage students to request a poster presentation at a large meeting. This format can be less stressful than speaking in front of a large audience. Furthermore, the student personally converses with members of the scientific community who share an interest in his or her research. The backand-forth is good training and a reminder to students that discussing their research with experts or non-experts should be a two-way conversation. Another advantage of presenting a poster is that the student can tailor the narrative to the interests of whoever stops by, in a Q&A exchange. I recall years ago when a graduate student was disappointed that her research would be described "only" in this format, until one of the giants in her field spent considerable time at her poster to discuss the work. As he left, he said, "I wish I had thought of that." She was later hired into his department.

To be effective, posters need to be eye-catching as well as informative. In a convention hall lined with poster boards, scientists will bypass those with large blocks of texts and tables of impenetrable numbers. A cartoon that summarizes the model or findings, attractive displays of data, and photos that illustrate the experiment are good ways to grab attention. Creative ways to display pertinent information are a definite plus. I personally like posters that begin with the motivation for the work and end with the findings, areas for follow up, and broader implications of the results.

A 10-minute talk at a major conference is more difficult to organize and effectively deliver than an hour-long seminar. Mistakes that students often commit in preparing slides for a brief presentation are to show the same intricate multipart figures that they used in a research paper, have too much text (and in a font size too small), choose colors with insufficient contrast against the background, and use blurry images copied from the Internet. The delivery is also critical. Enthusiasm is one of the very best elements of any talk. Students should never merely recite from their slides and should never ever go over time. Recognizing who the audience is and pitching the talk appropriately are essential. Many years ago, if a scientist used unfamiliar jargon and aimed the presentation over the heads of the audience, the speaker might just have been considered smart. No longer.

Today, such a speaker is viewed as a poor communicator.

Training the next generation of scientists to communicate well should be a priority. Departments could arrange for students to hold mock presentations for other faculty, researchers, and students in advance of their presentations at conferences—a dress rehearsal before the main event. And researchers attending meetings should take some time to judge a few student papers, visit student posters, or attend student talks. This feedback to young

scientists is invaluable, and the great communicators that will emerge may well trace their sharpened skills back to a moment at their poster or at the podium.