Dear Colleagues:

The Lowell Program in Economic Geology announces the opening of registration for our first Short Course on Structural Analysis of Systems of Structures, which will take place from Saturday, March 14th to Sunday, March 22nd, 2015. The nine-day, field-based course will be led by Professors George H. Davis and Stephen J. Reynolds and will be based in Tucson, Arizona. World renown exploration geologist J. David Lowell, benefactor of the Lowell Program in Economic Geology and Lowell Institute for Mineral Resources, is also planning to make an appearance during the course. A tentative outline of the short course is given below.

West-vergent Laramide reverse fault, looking north, Huachuca Mountains, southern Arizona. Slope-forming Cambrian Abrigo Formation overlies cliffs of Bolsa Quartzite. In hanging wall of fault, Bolsa Quartzite is internally shortened via giant, extremely angular kink folds.

The Lowell Program in Economic Geology appreciates the financial support of Newmont Mining Company for our short courses in recent years.

Course Details for Short Course on Structural Analysis of Systems of Structures

The main emphasis of this short course is to provide participants with additional grounding in and experiences in describing and interpreting geologic structures, fault rocks, 3-D geometries, and fabrics associated with deformation. The instructors for this short course are Professors George H. Davis, University of Arizona, Tucson, and Stephen J. Reynolds, Arizona State University, Tempe.
The course will be based in Tucson, Arizona, with easy access to first-class geological exposures, and (normally) pleasant spring weather conditions. There will be 9 days of engagement, with 1.5 days of classroom presentations and 7.5 days in the field. The course will focus not only on individual geologic structures, but systems of structures. Field examples and exposures will highlight both extensional and contractional systems, and in each case examples range from shallow to deep expressions. Some of the field exercises are held in mining districts. Topics covered in the short course include fault and shear zone analysis, metamorphic core complexes and associated faults, breccia pipes and related igneous systems, fold analysis, folds in thrust duplexes, jointing, and evaluating complex geologic map relationships.

Some of the field work will engage participants in evaluating outcrop relationships and deciding (1) what needs to be mapped, measured, recorded, sketched, and photographed; (2) how best to go about it; and (3) how to interpret the geological significance of key relationships. Some of the fieldwork will engage participants in tracking and mapping geological contacts (such as faults, shear zones, igneous contacts). The overall objective is to stimulate greater efficiencies and competencies in deciphering challenging structural geological relationships and histories. Knowledge gained will be applicable to most aspects of empirical geological inquiry, no matter whether the data sources are outcrops, geologic maps, cross sections, thin sections, seismic reflection profiles, pit slopes, or drill hole data.

Participants should plan to arrive in Tucson no later than Friday evening 13 March and depart from Tucson no earlier than the morning of Monday, 23 March 2015. **The Marriott Hotel**, which borders the University of Arizona campus, will be the base of operations.

The early registration cost of the short course for non-university participants is US$3,200, which includes ground transportation, all lunches in the field, and a final dinner. Breakfasts and all other dinners are the responsibility of participants. Industry participants also will need to provide their own transportation to and from Tucson as well as their accommodations. Please respond via e-mail to [brambila@email.arizona.edu](mailto:brambila@email.arizona.edu) for reservations, registration, and questions. Register soon!

Please find attached to this letter all registration materials (registration and foreign visitor statement forms in English and in Spanish, as well as the documentation required for foreign nationals (non-US citizens) so that you can forward this information to your co-workers and friends).

Visit our webpage: [http://lpeg.geo.arizona.edu/](http://lpeg.geo.arizona.edu/) to learn more about our program and short courses.

Sincerely,

**Rocio Brambila**

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