



PEER ADDS NEW ASSOCIATE DIRECTOR BOZORGNIA TO MANAGE LIFELINES, SPONSORED PROJECTS

The Pacific Earthquake Engineering Research (PEER) Center recently made a major announcement and named Dr. **Yousef Bozorgnia** as new Associate Director for Sponsored Projects and Technology Transfer. He joins PEER from Applied Technology & Science, and fills a vital role in PEER's strategic plan. In his capacity at PEER, Dr. Bozorgnia will manage PEER's Lifelines Research Program, and also serve as liaison with PEER's Business and Industry Partners.

Dr. Bozorgnia received his Ph.D. in civil engineering from the University of California, Berkeley in 1981. He has 25 years of experience in research and consulting in earthquake engineering and has been principal engineer and managing engineer in engineering organizations in northern California. His experience encompasses two areas of earthquake engineering: structural earthquake engineering and engineering characterization of strong ground motions. He is author and co-author of numerous research publications on various issues in earthquake engineering.

Dr. Bozorgnia and Professor Emeritus **Vitelmo V. Bertero** (UC Berkeley) have recently edited a 952-page comprehensive book titled "*Earthquake Engineering: From Engineering Seismology to Performance-Based Engineering.*" The book has just been released by CRC Press.



In 1995, the Earthquake Engineering Research Institute (EERI) awarded Dr. Bozorgnia the U.S. National Earthquake Hazard Reduction Program (NEHRP) Professional Fellowship. He is a member of various scientific and professional organizations, and a Fellow of the American Society of Civil Engineers (ASCE). ●●●

2004 PEER ANNUAL MEETING RECAP

Spending February in Palm Springs sounded perfect — a visit to warm desert climes in the middle of winter. Alas, this time the weather did not cooperate, sprinkling attendees to the **2004 PEER Annual Meeting** with occasional rain and depriving them of sunshine with continually overcast skies.

Fortunately, the sub-par weather helped contribute to another successful and productive Annual Meeting. With a format that included plenary, breakout, and student



Wassim Ghanoum (UCB) describes his research to fellow GSR Arash Altoontash (Stanford) during the Annual Meeting.



poster sessions, the meeting provided many ways for each attendee to fully participate.

The presentations which were made over the course of the two-day meeting, such as the one containing the slide shown above, are available for download in PDF format from the PEER website at: http://peer.berkeley.edu/AM04/public_presentations.html

PEER is in the process of identifying a date and venue for the 2005 Annual Meeting. Preliminary indications point toward a summertime meeting in Northern California, but stay tuned for more news and details. ●●●



the PEER review

NOTES ON PEER'S YEAR 7 SITE VISIT BY THE NATIONAL SCIENCE FOUNDATION

After months of preparation but only weeks following completion of the Annual Report, PEER hosted a delegation sent by the National Science Foundation (NSF) to review the PEER program on May 11–13, 2004, at headquarters. The **Year 7 Renewal Review and Site Visit** was the most recent of the annual visits by NSF and reviewers to gauge the effectiveness of the PEER program and to make recommendations to NSF about continued funding to PEER.



Graduate student researchers Tony Yang and Andreas Schellenberg (UCB) make a presentation to the Site Visit Team during the poster session.

TREMORS IN RICHMOND PEER SEISMIC DESIGN COMPETITION



Dismissed by some as being an overly ambitious plan, the PEER Student Leadership Council (SLC) scored a big hit with the successful staging of the **2004 Undergraduate Seismic Design Competition** at PEER headquarters during the Year 7 Renewal Review and Site Visit.

In what may become an annual event, 5 teams of undergraduate Civil Engineering students traveled to PEER on May 12, 2004, with



Seismic Design Competition teams pose with their models.



The Site Visit Team (SVT) comprised 7 reviewers and 2 NSF staff, including PEER's NSF Program Manager, Dr. **Vilas Mujumdar**. The SVT heard presentations on research achievements from Years 1–7, Education Program highlights, Industry/Tech Transfer accomplishments, and future research plans for Years 8–10. The SVT also had separate private meetings with representatives of PEER's Implementation Advisory Board (comprising of PEER's Business and Industry Partners) and Student Leadership Council, as well as a breakfast with university officials from UC Berkeley, PEER's lead institution.

Among the highlights of the 3-day activities were the student poster session and the student organized Seismic Design Competition (see related story below). The poster session proved to be a great opportunity for students to describe their research to both members of the SVT and also to fellow student researchers

and faculty from other PEER schools. We have set up a webgallery with the research posters presented in addition to other photos taken during the poster session: <http://peer.berkeley.edu/Outreach/WebGallery/04SVPosters/>

The 7th Year Site Visit represents a "major" review in the 10-year funding cycle of an NSF Engineering Research Center. NSF will use the recommendations from the SVT to help make decisions on PEER's funding for Years 8–10. NSF's recommendations are expected in late summer/early fall. ●●●

- *Economics*
- *Architecture*
- *Performance Evaluation*
- *Workmanship*
- *Construction Cost*
- *Presentation*

Each model was subjected to heavy shaking using the El Centro, Northridge, and Kobe earthquake ground motions on a mini-shake table. Following the shaking, calculations were made, and the winning team was determined to be UC Irvine Team 1: **Rebecca Chadwick, Julie Manson, and Gloria Shin**.



Student researchers participating in the poster session.

and faculty from other PEER schools. We have set up a webgallery with the research posters presented in addition to other photos taken during the poster session: <http://peer.berkeley.edu/Outreach/WebGallery/04SVPosters/>

The other teams finished in the following order: UCI Team 2 & UC San Diego (tie), UC Davis, and Oregon State University.

PEER wishes to thank **Scott Brandenburg, Dawn Cheng, and Martin Walker** of the SLC for their hard work in staging this event.

For more information about the competition, including detailed rules, testing criteria, model specifications, testing results including plots of acceleration and displacement vs. time, and scoring summaries, please visit: <http://peer.berkeley.edu/students/Seismic.html> ●●●

The UCSD model is prepared for testing on the mini-shaker.



The UCSD model is prepared for testing on the mini-shaker.

EARTHQUAKE ENGINEERING SCHOLARS COURSE FALL 2004 OFFERINGS

The PEER Education Program recently announced the course offerings for the 2004 PEER **Earthquake Engineering Scholars Course** (EESC), being held during fall 2004. The EESC is aimed at graduating senior engineering students who have demonstrated a sincere interest in earthquake engineering or an earthquake-related field and have achieved a high level of scholarship.

The course is held over the course of 4 weekend retreats hosted by PEER Core Institutions during the academic term. Each host school is responsible for presenting a specified base level of course content in a pre-defined topic area. Each school also gives the students



EESC students attending a lab tour at Stanford University.

tours of testing facilities in order to reinforce the topic being taught.

The 9 Core Institutions of PEER take turns hosting EESC retreats, since only 4 retreats are available per year. The 2004 EESC host schools, their topics, and dates are:

- o **California Institute of Technology:**
Engineering Seismology; September 17-19
- o **University of California, San Diego:**
Geotechnical Earthquake Engineering; October 8-10
- o **University of California, Irvine:**
Structural Dynamics; October 22-24
- o **University of California, Los Angeles:**
Public Policy; November 5-7

Each weekend retreat begins with a Friday evening reception by the host school followed by dinner. Lectures, tours, and other activities ensue from Saturday morning through Sunday at noon.

More details on the 2004 EESC are found at: http://peer.ucsd.edu/eesc_2004.htm ●●●

ED PROGRAM NEWS NELSON JOINS STAFF

The PEER Education Program announced a staffing change at their UC San Diego offices. Ms. **Linda Nelson** has stepped into the role of Education Program Manager and is working directly with Professor **Scott Ashford**, PEER's Assistant Director for Education. She takes over for Ms. **Rena Rowe**, who left the PEER program last fall.



The Education Program is designed to introduce, stimulate, cultivate, and educate undergraduate and graduate students to enable them to contribute to the earthquake-engineering profession from a variety of disciplines and perspectives. The Program attracts students dedicated to earthquake engineering early in their academic career and, ideally, retains them through their course of graduate study. While the principal audience and focus of the Education Program is undergraduate and graduate students, K-12 students benefit indirectly from some of the Education Program's activities, such as the Research Education for Teachers (RET) efforts. <http://peer.ucsd.edu/> ●●●

AWARDS AND HONORS

Scientific Advisory Committee (SAC) member **Roger Borchardt** (USGS) was awarded the *Outstanding Paper* in Volume 18 of *Earthquake Spectra* for his paper titled "Empirical Evidence for Site Coefficients in Building Code Provisions."

On February 7, 2004, Lifelines Program Joint Management Committee member **Lloyd Cluff** (PG&E) gave the *First Annual William B. Joyner Memorial Lecture*, which was co-sponsored by the Earthquake Engineering Research Institute (EERI) and the Seismological Society of America (SSA).

Business and Industry Partner **Craig Comartin** (Comartin-Reis) was elected to a two-year term to serve as *President-Elect of EERI* for 2004, and to serve as *President* for one year beginning in early 2005.

Professors **Armen Der Kiureghian** and **James Kelly** (UC Berkeley) each received a plaque from the Armenian Association of Earthquake Engineering, reading: "*In recogni-*

tion of his significant contribution to the development of seismic isolation technologies in Armenia." Thanks in part to their efforts, Armenia now has the largest number of base-isolated buildings per capita in the world.

SAC Chair **Ronald Hamburger** (Simpson Gumpertz & Heger Inc.) was recently elected as *President-Elect of the National Council of Structural Engineering Associations* (NCSEA), and will serve as President in 2004.

Implementation Advisory Board Chair **James Malley** (Degenkolb Engineers) was elected *President of the Structural Engineers Association of California* (SEAOC) for 2003-2004.

Former PEER graduate student **Ryan Smith** (M. Arch., UCB) was selected as a *Visiting Assistant Professor in Structures and Design* for a one-year teaching fellowship at the University of Oregon, Eugene, for the 2003-04 academic year.

Ph.D. candidate **John Stallmeyer** (UCB) won a *Fullbright Scholarship* in India for the 2002-03 academic year.

The **State of California's Seismic Safety Commission** won the *2003 Excellence for Mitigation Efforts* award from the Western States Seismic Policy Council for its report "Improving Natural Gas Safety in Earthquakes."

Professor **Jonathan Stewart** (UCLA) received the *Northrop-Grumman Excellence in Teaching Award* from the UCLA Henry Samueli School of Engineering and Applied Science in 2003, becoming the first Civil Engineering faculty to receive the award.

Lifelines Program researcher Professor **Kenneth Stokoe II** (Univ. of Texas at Austin) was named the *EERI Distinguished Lecturer for 2004*. His Lifelines project at PEER was titled "Site Characterization at Selected Strong-Motion Stations and Liquefaction Sites in Turkey." ●●●

ADDRESS SERVICE REQUESTED



WEB SPOTLIGHT: PEER WEBSITE REDESIGN

We are pleased to feature the recent redesign and reorganization of the PEER website for this month's **Web Spotlight**.

After much planning and preparation, PEER unveiled a new look and feel to the center website. The former frames-based site was taken down and replaced with one that was more compliant with current web practices. The new site is based on XHTML templates and CSS 2.0 style sheets, which will improve stylistic consistency and also make more bandwidth available to serve visitors.

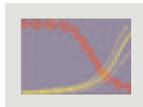
Much of the credit for the new site goes to PEER's Web Specialist, Ms. **Ingrid Berg**. Ingrid joined PEER in April 2003.

To experience the new website, please navigate to:
<http://peer.berkeley.edu> •••



NEWS DIGEST

On March 18–19, 2004 the PEER Lifelines Program and the National Science Foundation hosted the **International Workshop on Uncertainties in Nonlinear Soil Properties and Their Impact on Modeling Dynamic Soil Response** at PEER Headquarters in Richmond, California. Visit <http://peer.berkeley.edu/lifelines/Workshop304/> for information on the workshop and its goals.



PEER was an exhibitor at the **2004 EERI Annual Meeting** (inset photo) held in February 4–7 in Los Angeles. PEER will also be exhibiting at the **13th World Conference on Earthquake Engineering** this August 1–5 in Vancouver, BC. PEER's conference exhibit schedule for the remainder of 2004 will be released soon at <http://peer.berkeley.edu/Outreach/outreach.html>.



December 11–12, 2003 **Tri-Center Researchers' Meeting on Geographically Distributed Systems** was held in Las Vegas. The meeting is part of an initiative to foster research collaboration among the three EERC's (MAE, MCEER and PEER).

An **OpenSees User Workshop** was held at PEER Headquarters in



Richmond, California, on August 21–22, 2003. For more on upcoming workshops or information about OpenSees, please visit: <http://opensees.berkeley.edu/>.

PEER sponsored the participation of the U.S. delegation to the **Fifth US-Japan Workshop on Performance-Based Earthquake Engineering Methodology for Reinforced Concrete Structures**, held September 10–11, 2003, in Hakone, Japan. The workshop proceedings were published as *PEER Technical Report 2003/11*:
<http://peer.berkeley.edu/Products/PEERReports/reports.html> •••

THE PEER REVIEW

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