

CREATE
INTEGRATE
ADVANCE

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Professor and Dean
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University of Idaho
College of Engineering

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Dear Idaho Engineering and Computer Science Alumni and Friends,

Last Friday at the UI Boise Water Center, a group of Idaho engineering academic leaders, the **Joint Engineering Advisory Board**, and industry representatives assembled to discuss how Idaho universities, state government and industry can benefit by increased collaboration to help facilitate the transfer of knowledge of university research into economic development for the betterment of the state.

Cheryl Schrader, dean, Boise State University College of Engineering, **George Imel**, dean, Idaho State University College of Science and Engineering and I hope to form a greater collaboration between higher education (innovation) and industry, putting academic minds together with industry to develop and commercialize new technologies. The model for this partnership is found in the USTAR program, a joint venture between Utah State University and University of Utah Researchers. The Utah Science Technology and Research initiative (USTAR) is a successful long-term, state-funded investment to strengthen Utah's "knowledge economy." This revolutionary initiative invests in world-class innovation teams and research facilities at the University of Utah and Utah State University, to create novel technologies that are subsequently commercialized through new business ventures.

To grow Idaho's technology economy, we know that universities will need to continue to build research and development capability in strategic areas that advance the state's resources. Building strong university research programs in Idaho will broaden the state's economic base by developing new industries, increase federal funds flowing to Idaho, and create a mechanism to provide for ongoing meaningful collaboration among higher education institutions, economic development, and the private sector in the promotion of science, engineering and technology in Idaho.

As Idaho's leadership—political, academic, and business—come together and commit to facing these challenges and investing in the future, Idaho's economy will not only provide high-skilled, high paying jobs for its citizens, but Idaho will become an even better place to live.

Deans Schrader, Imel and I would like to extend a special thank you to our individual college advisory board members, conference participants **Jay Larsen**, President/CEO, Idaho Technology Council, Vice Presidents of Research **John McIver**, UI, **Mark Rudin**, BSU, and Technology Transfer Officer **Richard Jacobsen**, ISU, for taking time out of their busy schedules to join us. We also sincerely appreciate the attendance of our knowledge transfer panelists **David Alexander**, IVUS Energy, **Tom Harrison**, The Harrison Group, LLC, **Michael Altree**, President, Convergent-Digital Corporation and **Ray Sasso**, C.S. Corporation. With special recognition, we extend our gratitude to honorary guest speaker **State of Idaho Lieutenant Governor Brad Little**.

A successful collaboration that does exist today in Idaho is the **Center for Advanced Energy Studies (CAES)**, a public-private partnership that coordinates representatives from Idaho National Laboratory, private industry, and students and faculty from Idaho's three research universities -- Idaho State University, Boise State University and the University of

Idaho. The majority of the center's regular funding comes from Battelle Energy Alliance, which manages INL for the U.S. Department of Energy. At this year's legislative budget session Governor Butch Otter suggested that he would maintain state funding for Idaho Falls' CAES, headed by UI Engineering Advisory Board member **Harold Blackman**, at \$1.6 million, the same amount as last year. Dr. Blackman called Governor Otter's request for CAES "a vote of confidence in what we're doing." He said people at the center are "excited" and "really grateful" that, in the middle of one of Idaho's toughest budget years, Governor Otter deems CAES' mission a worthy investment and demonstrates his commitment to nuclear energy research and development.

This week higher education leaders in Idaho spoke of a pressing need in American education—to improve education in the areas of science, technology, engineering, and math. **University of Idaho President Duane Nellis** expressed to lawmakers that improving STEM education was essential for gaining profitable new industry and jobs in the state.

"We're hampered as we move forward because our nation now ranks twenty seven—twenty seven—among developed nations in the proportion of our students who receive undergraduate degrees in science or engineering." Dr. Nellis said. "STEM is a strategic imperative for the state and for the country; the issue is clearly about Idaho's competitiveness."

The College of Engineering continues to support STEM activities throughout Idaho including this month's **7th Idaho Regional Future City Competition** that occurred on January 22nd at Boise State University. Twenty-five teams from 17 different schools presented their unique visions for cities of the future. The UI College of Engineering was a Platinum Sponsor for this event as well as sponsoring the **Special Award for Multidisciplinary Solutions**. The student team from **Falcon Ridge Public Charter School** won the UI award for their future city "Tesville." I extend a special thank you to UI College of Engineering alumni **Tim Haener, Riley Mahaffey, Jeff Connor** and **Kurt Norrell** who volunteered at the event, we couldn't participate in the Future City Competition without you!

Please save the date for February 22, 2011 at 6:00 p.m. at the Moscow Best Western University Inn for this year's **UI Chapter of the National Society of Black Engineers Distinguished Lecture Series**. The presenter will be **Dr. Kambiz Vafai**, Professor of Mechanical Engineering, Bourns College of Engineering, University of California, Riverside. Dr. Vafai received his B.S. in Mechanical Engineering from the University of Minnesota at Minneapolis in 1975, a M.S. in 1977 and a Ph.D. in 1980 in Mechanical Engineering from the University of California at Berkeley. Dr. Vafai is a Presidential Chair at UC Riverside, a Fellow of the American Association for Advancement of Science, the American Society of Mechanical Engineers, the World Innovation Foundation and an Associate Fellow of the American Institute of Aeronautics and Astronautics. Dr. Vafai's research interests include transport through porous media, multiphase transport, natural convection in complex configurations, heat flux applications, free surface flows, unconventional heat pipes, and power electronics. For more information, please email Rachel Bonas at bona9788@vandals.uidaho.edu.

We look forward to celebrating **National Engineers Week** this month on campus. The purpose of this celebration is to highlight contributions that engineers make to society and emphasize to young students the importance of learning math, science, and engineering skills.



Sincerely,

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Biological and Agricultural Engineering, Chemical Engineering, Civil Engineering, Computer Science, Electrical and Computer Engineering, Materials Science Engineering and Mechanical Engineering. Additional graduate degrees: Nuclear Engineering, Geological Engineering, Environmental Engineering and Engineering Management