

University of Idaho

A LEGACY OF LEADING

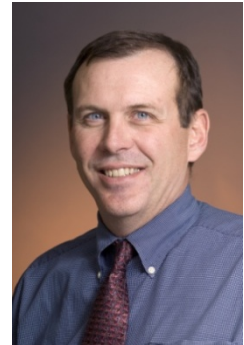
A LETTER FROM THE DEAN OF THE COLLEGE OF ENGINEERING

Biological and Agricultural Engineering
Chemical Engineering
Civil Engineering
Computer Science
Electrical and Computer Engineering
Materials Science and Engineering
Mechanical Engineering

July 14, 2009

Dear Idaho Engineering and Computer Science Alumni and Friends,

It's wonderful that so many of you visited with **President M. Duane Nellis** during last week's listening tour. Receptions began in Idaho Falls, continued through Southern Idaho to the Parma Research Center, then to Coeur d'Alene on Thursday and concluded at a social at the University Inn in Moscow Friday afternoon. President Nellis will be in Lewiston at the Red Lion Hotel at 11:30 a.m. on Wednesday, July 15.



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The President's office is maintaining a blog during the tour. It can be accessed at <http://www.uidahoblogs.com/tour/>.

Dr. Steven Daley-Laursen has served the university very effectively as interim president over the past year and effective July 1, 2009, Dr. Daley-Laursen began a new, one-year position as senior executive to the University President with a particular focus on special federal initiatives. He will assist Vice President Jack McIver to shape some of the university's priority multi-disciplinary research areas and promote opportunities for federal agency funding.

The University of Idaho is a founding partner in the new **Legislative Energy Horizon Institute (LEHI)** which will be announced today at a news conference in Boise with Governor Otter and President Nellis. The University's five-decade strong Utility Executive Course, a distinctive industry-specific executive education program designed for utility leaders, served as the model for this new policy educational course in energy and utility issues. The LEHI will give legislators an understanding of how the energy infrastructure operates; about the regulatory, financial and planning challenges associated with the new energy infrastructure; and how policy impacts business decisions. More than 30 legislatures from the U.S. and Canada make up the Institute's inaugural cohort this week. The new Institute shines a light on the entire state of Idaho for leadership in bringing critical energy issue education to state, regional and national policymakers. Partners include Pacific NW Economic Region, U.S. Dept. of Energy and the National Conference of State Legislatures.

The University of Idaho will receive \$177,000 for nuclear research infrastructure and \$20,000 in student scholarships, thanks to continuing support from the Department of Energy. The funds come from the **Nuclear Energy University Program (NEUP)** awards, which distributed approximately \$44 million nationally for research and development in May. The second round of grants supports students and the purchasing of laboratory equipment. The grant will enable the purchase of equipment to study graphite and other new materials for use in the next generation of nuclear reactors. The student scholarships will be given to four undergraduates in the College of Engineering, \$5,000 each, to conduct research in the same field.

“These awards represent the recognition of these students’ outstanding scholarly performance while underscoring the strong tradition in nuclear engineering at the University of Idaho,” said Gabriel Potirniche, assistant professor of mechanical engineering, who will work directly with three of the students. “Without a doubt, we will hear about these students and their academic performances in the future.”

“The world is undergoing a nuclear renaissance, spurred by the growing demand for energy and the desire to reduce greenhouse gas emissions,” said Fred Gunnerson, director of the University of Idaho’s nuclear engineering program. “Students, such as those selected for this scholarship, are needed by the nation to join the future technical workforce and help address our energy challenges of the 21st century. I’m very proud of them.”

NASA robots, equipped with cameras and 3-D laser scanners, recently explored the rough terrain of a desert in Arizona while being carefully monitored by two engineering graduate students. The test of the exploration robots occurred in June at Black Point Lava Flow, Arizona which was chosen as the test location due to the wide variety of surfaces. The terrain resembles that of the moon, which will help NASA engineers prepare for future lunar missions.

“It was our duty to ensure the robots didn’t get stuck or fall off a cliff,” explained Armen Dibble, one of the graduate students involved in the tests. “We were in charge of the remote emergency stop as well as watching the vehicle to make sure all of the systems were functioning properly.”

Dibble and fellow robot observer John Porter are currently serving as fellows of the **Idaho Space Grant Robotic Lunar Exploration Program**. Porter, a graduate student in computer engineering from Lewiston, and Dibble, a graduate student in mechanical engineering from Moscow, are working for NASA Ames this summer and participated in the field test.

Dr. Elowyn Yager, Assistant Professor in Civil Engineering at the Center for Ecohydraulics Research in Boise has just received a CAREER Award from the National Science Foundation. We knew that Dr. Yager is one of the rising stars in water research at the national and international level and I am delighted that she has been recognized so early in her career at the University of Idaho.

The early career development award is the most prestigious award offered by the National Science Foundation in support of junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent education and the integration of education and research. Dr. Yager studies fluvial geomorphology, the science of rivers in the landscape. Her research focuses on the measurement and prediction of turbulence and sediment transport of river systems in the field and laboratory. Applications of her research include sustaining and restoring spawning habitats of salmon and maintaining the quality of river environments. The \$455,000 award entitled “**A Mechanistic Understanding of Sediment Transport in Mountain Streams with Applications in River Restoration and Science Education**” will be used to better predict and understand sediment transport rates in mountain streams, which are typical of many Idaho rivers. Sediment fluxes are typically over-predicted in these streams by several orders of magnitude. Knowledge of sediment is particularly important in areas impacted by increased fire severity and human activities (logging, grazing, mining, dam removal, or construction), which can significantly increase the direct supply of sediment to mountain channels. The project will also fund new graduate courses, outreach activities for K-12 students, and the development of a new Women-in-Science camp to encourage female high school students to enter careers in math, science, and engineering.

“Dr. Yager has already made highly regarded fundamental contributions to the science of sediment transport in mountain rivers and is an inspirational teacher. This prestigious award will expand her research program and draw students and collaborators to Idaho from throughout the US and overseas,” said Peter Goodwin, Director of the Center for Ecohydraulics Research in Boise.

It is with deep sadness that I share with you the loss of two College of Engineering members, **Dr. Mark Manwaring** and **Jo Ann Rattey-Hicks**. **Mark Leonard Manwaring**, chair of our computer science department, passed away Thursday, June 11, 2009, at his home near Deary, Idaho. Mark was born on October 6, 1947, in Idaho Falls and received his B.S., M.S. and Ph.D. in electrical engineering from Utah State University. He entered the U.S. Air Force through the ROTC program and earned his wings as a pilot and served as a jet aircraft instructor pilot. Mark joined the Department of Electrical Engineering at Washington State University in Pullman, Washington as an assistant professor and then accepted a position as a professor at Brigham Young University in Provo, Utah. During this time, he co-founded and directed a major research facility called the Brain Instrumentation Laboratory. In 2006, he accepted the position of chair of the Department of Computer Science at the University of Idaho. In all of his extensive teaching, research, and electronic design, he advised 120 graduate students, published a textbook and more than 90 professional articles, and held five patents. Mark is survived by his wife, Loraine, of 41 years, five children, seven grandchildren, and siblings. In lieu of flowers, donations to the *Mark Manwaring Memorial Scholarship in Computer Science* may be made.

While the Search Committee is seeking candidates for a new Chair of Computer Science, I will provide guidance as acting chair.

Jo Ann Rattey-Hicks passed away June 26, 2009, at Gritman Medical Center in Moscow, Idaho, after a long battle with pancreatic cancer. Jo Ann has been the administrative assistant with the chemical engineering department for many years, and loved and lived for the chemical engineering students. She will be missed by all who knew her. Jo Ann was born on January 20, 1957, in Edmond, Washington and attended Washington State University. Jo Ann enjoyed writing poems and short stories and liked to camp and fish. Jo Ann was very dedicated to her children and their sports' activities. Jo Ann is survived by her husband, Bobby Hicks, and her daughters, Kara and Chrissy Hicks, of Moscow, and her son, Joel Rattey, of Dillon, Montana. Donations may be sent to the *Chrissy Hicks Scholarship Fund* in care of American West Bank.

It was a great pleasure to visit with electrical engineering alumni Bob Hanson ('61) (and Anita, his wife) and Harry Heath ('54) at the Sir Francis Drake Hotel luncheon in San Francisco on June 24. This month the Vandal Scholarship Fund will host one of its premiere events, the **Governor's Gala**, at the Boise Centre in Boise on July 23. Please join us.

In closing, I'd like to say that I am personally grateful to you for your dedication to the College of Engineering. It is my goal to help you stay connected with the College and each other. I look forward to seeing you soon.

Sincerely,



Donald M. Blacketter
Dean, College of Engineering