**College Highlights**

**Message FROM THE DEAN**

I hope you find this, our third installment of an annual report in this format, useful. It has been referred to as a “drive-by” statistical glance at the College. This is an apt description, actually, as our goal is to provide a comprehensive summary of faculty and student metrics to a wide range of constituents.

You will note the continued scholarship of COE faculty, including a research expenditure ranked amongst the upper echelon nationally on a per capita basis. This and similar metrics reflect MSU’s now ranking in the nation’s top tier of universities (research extensive) by the Carnegie Foundation. These tremendous successes by our faculty are benefiting our principal audience, the undergraduate student. MSU remains one of a handful of research universities with a student population comprised of more than 80% undergraduates.

MSU has also established noteworthy goals related to increasing undergraduate students with meaningful research and creative experiences. COE faculty are now leading their peers in designing new curricula to support not only this goal but to facilitate cross-disciplinary and leadership experiences for undergraduates. These efforts will be featured in future College publications.

Lastly, I am proud of our faculty and staff who have helped us achieve goals related to recruiting and retaining Native American students. Note the growing number of PCE students reported here and you will see that the MSU-COE is well on its way to being a national leader for Native American engineering and computer science education.

Please visit our Web site (www.coe.montana.edu) for the latest data and news.

—Robert Mulley, Dean of the College of Engineering

**Making A DIFFERENCE**

In February 2006, after three years of planning and fundraising, Students for a Sustainable Future (SSF), MSU’s chapter of Engineers Without Borders, celebrated having a drinking water well drilled for an impoverished school district in western Kenya. Because of unexpected delays, the well yielding 44 gallons of water per minute for the Kihoroto School was drilled after the SSF group left Kenya. Before the well, the 400-student elementary school had no potable water. Children—mostly girls—walked three miles to haul water. An architect living in Nairobi, Kenya, who grew up in the Kihoroto district, requested the project. The SSF group of students and recent graduates raised $25,000 to provide potable water to two schools and sanitary latrines at one of these schools. To learn how you can support future phases for 54 other schools, visit the SSF Web site (www.ewb-ssf.org) or send an e-mail to ewbmsu@hotmail.com.

**TRENDS IN GIVING**

-- Bizjournals.com, August 2006

**AUSTRALIA**

**MESSAGE**

I found that when I got into the workforce as an engineer my education was as good or better than those of other new graduates from the top tier schools—MIT, Stanford, Purdue, Minnesota, Michigan, etc.

—Steven M. Quist ’68 ME
Blackmore Peak Partners

**AWARDS & RECOGNITION**

**FACULTY & STAFF**

2006 NSF Career Award
Dr. Steven Shaw, CCE – $400,000

2006 Fulbright Scholar Fellowship
Dr. John Paxton, CS

**Boeing Professorship**
Dr. Durward Sobek, M&IE

**Special Interest Group in Algorithms and Computation Theory (SIGACT)**
Distinguished Service Award
Rockford “Rocky” Ross, CS

**National Institute of Standards & Technology**
Unsung Hero Award
Marge Jensen, Deborah Nash, and Stacey Scott home office team for Montana Manufacturing Extension Center

2006 Best Paper Award—Management Track
Institute of Industrial Engineers
Dr. Durward Sobek, assistant professor, and Maninviy Ghosh, doctoral candidate, M&IE

2005 Young Professional Best Paper Award
Institute of Transportation Engineers—District 6
Chris Strong, Western Transportation Institute

**STUDENTS & ALUMNI**

2005-06 Tau Beta Pi Record Scholarship
national engineering honor society
E. Hubble Werre, CBE

2006 United Parcel Service Scholarship for Female Students
Amanda Andrikopoulos, IE

**MSU Alumni Achievement Award (posthumously)**
Thomas Sparling, ’39 Eng.

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**CBE $3.1 million annual research expenditures**

MSU is licensing five new inventions from Center for Biofilm Engineering (CBE) researchers: a coating to inhibit biofilm growth on medical implants; two compounds to help antibiotics kill infections; a molecule to inhibit biofilm growth on medical implants; a coating to inhibit biofilm growth on medical implants; and a molecule to inhibit biofilm growth on medical implants.

**COE National**

MSU College of Engineering’s 10-year overall pass rate is 90.0%.

**COE Research Expenditures**

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College of Engineering (COE)

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Chemical & Biological Engineering (ChBE)
Civil Engineering (CE)
• Local Technical Assistance Program (LTAP)
Computer Science (CS)
Electrical & Computer Engineering (ECE)
Mechanical & Industrial Engineering (M&IE)
Air Force ROTC
Army ROTC

COE Degree Programs
Chemical Engineering (B.S., M.S.)
Civil Engineering (B.S., M.S.)
• Option in Bio-Resources Engineering
Construction Engineering Technology (B.S.)
Construction Engineering Management (M.)
Computer Science (B.S., M.S.)
Computer Engineering (B.S.)
Electrical Engineering (B.S., M.S.)
Environmental Engineering (M.S.)
Industrial Engineering (B.S.)
Industrial & Management Engineering (M.S.)
Mechanical Engineering (B.S., M.S.)
Mechanical Engineering Technology (B.S.)

COE Ph.D. Programs
Ph.D. in Computer Science
Ph.D. in Engineering with options in
• Applied Mechanics
• Chemical Engineering
• Civil Engineering
• Electrical & Computer Engineering
• Environmental Engineering
• Industrial Engineering
• Mechanical Engineering

COE Research & Outreach Centers
Center for Biofilm Engineering (CBE)
Montana Manufacturing Extension Center (MMEC)
Western Transportation Institute (WTI)

cover photo: courtesy of Ed Adams, Ph.D.