

SYSTEMS

Fall 2001

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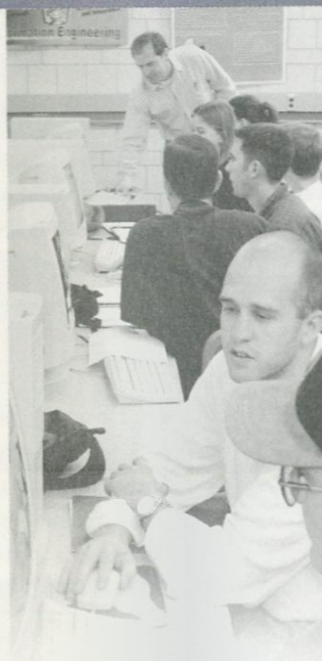
New e-learning lab created

Spurred by last fall's ABET visit, the IMSE department now has an e-learning lab to its credit.

In preparation for the visit, the department underwent an extensive self-evaluation to improve the contents and methods used in the IE program. They polled their advisory group, students, and companies that hire their students to determine what areas needed improvement.

One result was the e-learning lab, a new facility in Black Engineering that allows faculty members to use computer-based learning tools in their classes, as well as broadcast their classes over the Internet. The benefits don't stop there. Currently in the experimental stages, students in co-op positions will find it particularly useful since they will be able to take classes from their off-campus locations at times that fit their schedules. The advantage of pulling up streaming video at midnight for a class that would otherwise only be available on campus is obvious!

IMSE is currently running a pilot lab with hopes of having it up and running next spring. John Jackman, IMSE associate professor, is in charge of the project.



Regents Excellence Award

Congratulations to IMSE Professor **Stephen Vardeman**, a recipient of the Iowa State Board of Regents' 2000 Faculty Excellence Award. Vardeman, who holds a dual appointment with ISU's Department of Statistics, was recognized for his commitment to excellence and continued professional development. Vardeman's research is in engineering applications of statistics, statistical education for engineers, and the development of new statistical theory and methods. He is the author of *Statistics for Engineering Problem Solving*, which received the 1994 ASEE Meriam-Wiley Distinguished Author Award for an outstanding new engineering textbook. A Fellow of the American Statistical Association and an elected member of the International Statistical Institute, Vardeman served as former chair of the ASA's section on physical and engineering sciences.

IIE regional conference

Iowa State University and its IIE chapter will be hosting the 2003 IIE Regional Conference for Regions 8 and 11 from February 28th through March 3rd. Over 20 college chapters and approximately 200 students, faculty, and members will get together to interact and learn more about industrial engineering. The conference will include speakers, tours, workshops, a technical paper competition, and an awards banquet. The planning stages for this occasion are just getting underway. If you would like to participate in this exciting event, please contact IIE Regional Conference Coordinator Jeff Matthias at jeffreym@iastate.edu or 515/572-8129.



Recycling Computers

As businesses increasingly rely on Internet technology, recycling outdated computer equipment is fast becoming an environmental concern. IMSE Associate Professor **Sarah Ryan** is leading a team of researchers to design Internet resources to make recycling electronic equipment easier and more efficient.

With support from a \$180,000 National Science Foundation grant, Ryan is designing a scalable enterprise resource (SER) planning system that will keep high-tech manufacturers informed about which materials to use and allow recyclers to develop a product collection network over the Internet. "We're trying to get the whole system put together more rationally so companies don't have to hire armies of consultants," said Ryan.

Ryan hopes the information and contact available through the network will minimize the impact of discarded electronic equipment. The project is in collaboration with IMSE faculty, Associate Professor **Jo Min**, Assistant Professor **Sigurdur Olafsson**, and Associate Professor **Douglas Gemmill**, as well as faculty from ISU's mechanical engineering and electrical and computer engineering departments.

Scholarships Awarded at Spring 2001 Banquet

David C. Lovell
Matthew
Tobelman

Deere & Company
Joshua Anderson
Jeanne Boutott
Kara Johnson
Tiffany Raisch
Jennifer Simpson

Don Grant
Incentive Award
Joel Guerra-Arauz

Geraldine M.
Montag Scholar
Ross Finnestad
Benjamin
Mussmann

Hempstead-Walkup
Silvia De La Cruz

Herald Jacob
Reihman
Scott Adams
David Englund

Herb Erbe
Casey Kann

IME Central Iowa
Chapter
Matthew
Tobelman

IMSE General
Scholarship
Kyan Heck
Stephan Zalesky

Joseph & Frances
Nelson
Peter Hoekstra

Keith L. & Helen F.
McRoberts Health
Care Scholarship in
Industrial
Engineering
Erika Helgren

Lane Wells
Erin Broadston

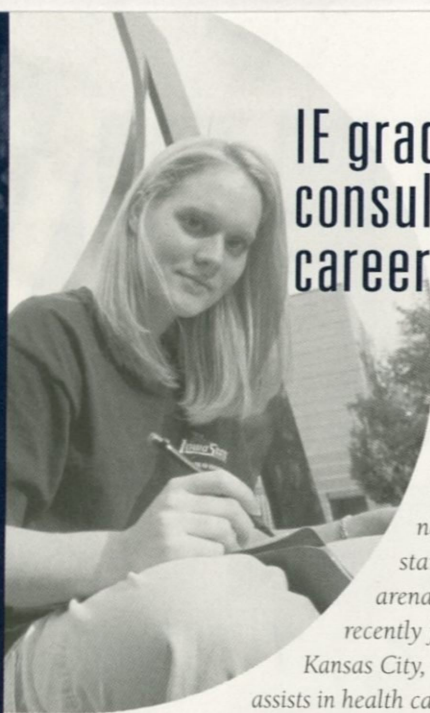
Roderick Seward,
Flossie Ratcliffe &
Helen Galloway
Jeffrey Matthias
Clinton Pecenka

Stanley Howe/Pella
Erin Neumann

Walt Lyons
Brian Jensen

Webster
Manufacturing
Kristi Rea

IE grad chooses consulting career



Karla Abrahamson's undergraduate years in the IMSE department have included academic recognition, international travel, and now a promising career start in the consulting arena. Abrahamson (IE '01) recently joined Cerner Inc.,

Kansas City, where she analyzes and assists in health care software applications.

As an industrial engineering student, Abrahamson gained both research and international experience. She won top honors at the IIE Midwest Regional Conference for her technical paper, "Barilla Farfalle Quality Improvement Project." The paper was later presented at the National IIE Conference held in Dallas. She also participated in a three-week international marketing course, visiting companies in London, Rome, and Paris.

"I considered other companies, but chose Cerner for its challenges and rewards," said Abrahamson, who was determined to put to the test well-honed skills acquired in IMSE. Abrahamson hopes to own her own business in the future and work on problem-solving issues in the consulting field, which she acknowledges is a good "fit" for her at this point in her life. Meanwhile, she is excited about the "opportunity to save lives by implementing software systems that help health care professionals make better decisions."

IMSE's first endowed professorship

As a result of **Rudy and Deb Herrmann's** challenge pledge, the College of Engineering is launching a campaign for the first endowed professorship in the IMSE department. The Herrmanns started off the campaign, and now the ISU Foundation has begun to work with IMSE to identify donors for the remaining money.

Rudy Herrmann, currently the president of Dover Resources in Tulsa, Oklahoma, graduated from Iowa State in industrial engineering in 1973 and went on to receive an M.B.A. from Harvard two years later. He is the chair of ISU's Engineering College Industrial Advisory Council and a member of the ISU Foundation Board of Governors.

This endowed professorship is exciting for IMSE. According to Pat Patterson, chair of the department, IMSE "has recently begun to move in new directions in both our academics and our research. This professorship will allow us to kick start this process by bringing in a high-profile individual to provide expertise and guidance for our faculty as we begin the process of developing a national reputation in these areas."

Thank you, Herrmanns, for making the first step possible!

McRoberts health care scholarship

Thanks to **Keith and Helen McRoberts** and several IMSE alumni, the IMSE department now has an endowed scholarship fund to provide financial assistance to IE majors interested in a career in the health care provider field.

McRoberts has sponsored a health care management scholarship since 1990—just a year after his retirement from ISU. His tenure with the IMSE department included 17 years on the faculty and 15 years as chair of the Department of Industrial Engineering. From Iowa State, he moved to Iowa Methodist Health Systems where he was the director of the Research and Innovation Center until 1996.

Qualifications for the Keith L. and Helen F. McRoberts Health Care Scholarship in Industrial Engineering include (1) majoring in industrial engineering; (2) 3.0 or higher GPA; (3) membership in The Healthcare Information and Management Systems Society, work experience in a health care field, or an expressed interest in pursuing a career in the health care field.

Alumni may help build this fund by sending a check, payable to *ISU Foundation*, to the *ISU Foundation, Memorial Union Alumni Suite, 2229 Lincoln Way, Ames, IA 50014*. Please include a note stating your gift is designated for the Keith L. and Helen F. McRoberts Health Care Scholarship in Industrial Engineering.

Alum's gift helps labs

Sybase Inc. in Emeryville, California, made a generous contribution in software technology to the IMSE department. Valued at \$18,000, Sybase Power J software will support IMSE's efforts to develop its Enterprise Computing and Scalable Systems labs.

Raj Nathan (PhD IE'81), senior vice-president and general manager, Internet division at Sybase, made the presentation. Students will use the software for research and class projects in the areas of e-commerce systems engineering, data mining, and enterprise modeling and integration.

In memoriam

IMSE lost a true friend in Don Grant, faculty member and student advisor (1968–1988), who died recently. Donations can be made to the Don Grant Incentive Award through the Iowa State University Foundation (see above for address).



BS 11/9/02
IMSE

Newsletter

2006-2007

HONORS

Alumni

Gene Haas (BSIE '70) received the SME Albert M. Sargent Progress Award. Mr. Haas is President of Haas Automation, Inc., Oxnard, California.

Rudy Herrmann (BSIE '73) became Fellow of the Institute of Industrial Engineers. Mr. Herrmann is President and CEO of Dover Resources, Inc., Tulsa, Oklahoma.

Vernon L. Schatz (GenE '49) received the Computer Pioneer Award established by the Board of Governors of IEEE Computer Society. Mr. Schatz initiated the concept of electronic fund transfers and the popular "smart card" technology, for which he holds several expired as well as one pending patent.

IMSE Faculty

R. Berger. New award created in Berger's name recognizing his long-term dedication and service to the Quality Management Division, American Society for Quality; Berger was the first recipient

C. Cruz-Neira. Boeing A. D. Welliver Award

J. Jackman. Director, Manufacturing Division, Institute of Industrial Engineers; Editor, Institute of Industrial Engineers, *IEE Transactions*, Editorial Board

P. Patterson. Vice President, Rocky Mountain Bioengineering Society; Principal Member, Technical Committee on Carbon Monoxide and Fuel Gas Detectors, National Fire Protection Association; Secretary, Society for Work Science; Outstanding IMSE Professor, Engineering Student Council, ISU

S. Ryan. Editor, *The Engineering Economist*

S. Vardeman. Regents Faculty Award, ISU; Teacher of the Year, Department of Statistics, Graduate Student Organization (Stat-ers), ISU

Major IMSE Research Awards

J. Jackman, F. Peters with **K. Wang** and **Z Zhang.** Iowa Soybean Promotion Board

P. Patterson with **W. DeVries.** National Science Foundation

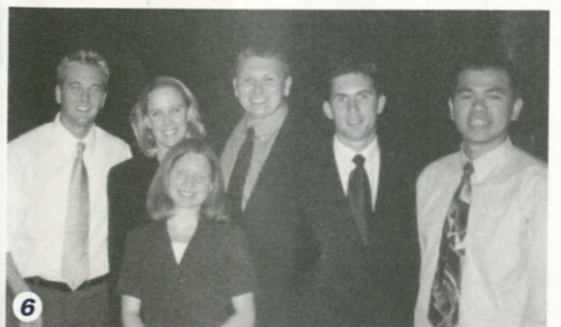
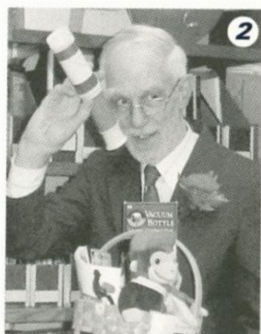
A. Sannier with **J. Bernard, C. Cruz-Neira.** Iowa Department of Public Defense

T. Van Voorhis with **J. McCalley.** Electric de France

Recognition Awards

The IMSE Industrial Advisory Council (IAC) is finalizing plans to establish a recognition awards program to honor IMSE alumni, faculty, and individuals affiliated with the IMSE department. Please watch for more information in the mail and on our Web site, www.imse.iastate.edu. Award winners will be honored Spring 2002.

RECOGNITION



Clockwise from top left: 1) From left, Justin Anderson, Scott Lau, Justin Kilker receive 1st place for their John Deere-sponsored IE 441 project. 2) Friends wish Dr. Roger Berger happy star-gazing with an astronomy kit during his retirement party! 3) From left, Dr. Jo Min presents grad student Chung-Hsiao Wang a University Research Excellence Award. 4) Scholarship recipient Erika Helgren with donors Keith and Helen McRoberts. 5) Silvia De La Cruz with scholarship donor Jean Hempstead 6) Students at the IIE National Conference in Dallas. 7) From left, Brad Russmann, Brian Rogers, Carl Hensley, Ryan Carstens receive 1st place for their HON Company-sponsored IE 441 project. 8) Berger-David Prize recipients (from left) Karla Abrahamson, (Dr. Berger), Kara Johnson, Erin Broadston, Laura Balza. 9) Co-op students at Dell in Ireland.

IOWA STATE UNIVERSITY

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What's happening in IMSE?

Visit our Web site at www.imse.iastate.edu or contact us at (515) 294-1682; Fax (515) 294-3524; imse@iastate.edu.

Share information with the department by sending it to Lynn Franco at mlfranco@iastate.edu or Industrial and Manufacturing Systems Engineering, Iowa State University, 2019 Black Engineering, Ames, IA 50011-2164. The department welcomes alumni donations. Your contributions help fund student facilities, lab equipment, faculty teaching and research, and department activities.

Patrick E. Patterson, Chair, IMSE
ppatters@iastate.edu

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In the news



Professor **Roger Berger** retired after 29 years of service. A founding member of the Iowa Quality Coalition, Berger received the Iowa Governor's Award for Quality Improvement in 1988. He is a Senior Member of IIE and a Fellow of the American Society for Quality.



Katherine Lyons joins the department as an academic advisor. Lyons will assist IMSE students with academic and personal issues. Previously she worked for 16 years at ISU as an instructor, student athlete counselor, and student services coordinator.



As the new administrative specialist, **Jeff Eichorn** will provide account tracking and budgetary guidance and serve as the department contact for proposal and grant submissions.



IMSE welcomes **Adrian Sannier**, Stanley Professor in interdisciplinary engineering. Sannier's research interests are in human/computer interface, Internet-based collaborations, and the implications of pervasive computing. Sannier also serves as an associate director for ISU's Virtual Reality Applications Center.



Welcome also to **Carolina Cruz-Neira**, associate professor in virtual reality technology. Cruz-Neira joins IMSE from ISU's electrical and computer engineering department. Her research focuses on the development of tools, such as distributed software models, immersive interfaces, and visualization techniques for scientific engineering and humanities applications. Cruz-Neira also serves as an associate director of ISU's Virtual Reality Applications Center.