**Dowd Fellowship Recipient Named**

Left: Mechanical Engineering Assistant Professor Mehdi Asheghi  
Right: Dowd-ICES Fellow Amrinder Nain

The first Dowd Engineering Seed Fund Fellowship was awarded to Amrinder S. Nain, a second year doctoral student in mechanical engineering, and Mehdi Asheghi, Assistant Professor of mechanical engineering, for their proposal entitled “OUM – Nonvolatile Memory of the Future.” The goal of this research project is to pioneer a simulation tool that gives a measure of the electrical resistivity of Ovonic Unified Memory (OUM) cell elements by analyzing heat transfer mechanisms and crystallization kinetics during read/write strategies.

The next call for proposals for the Dowd Fellowship will occur in early 2003 and interested students and faculty are encouraged to begin thinking about research projects that focus on cutting edge areas, such as nanotechnology, biotechnology or information technology, for which traditional sources of funding are not readily available.

**ERIS Lab’s Software Reliability Workshop**

ICES Project Scientist Mike Bigrigg took his ERIS Lab’s Software Reliability Workshop to several local companies this past August. The focus of the all-day event was debugging and code maintenance, with major topics including program compilation, memory management, and I/O interfacing. Because of the overall success of the program, there is a possibility it will be offered again this fall based on company interest. Please contact Dana Hilinski at hilinski@andrew.cmu.edu for more information on offering the workshop to individual companies or visit the ERIS Lab’s website at www.ices.cmu.edu/eris/seminar.html

**ICES Hosts an Open House on October 16-17**

ICES will sponsor an Open House on October 16 and 17, 2002. This event is intended to allow industry participants, faculty and students to informally learn about various research, education and outreach initiatives sponsored by ICES. The Open House will be held in the Singleton Room in Roberts Hall at 4:00pm. Participants will be able to learn about new technologies and technology applications by talking to researchers and students who are developing the complex systems of tomorrow. If you are interested in attending the Open House, please click on the ICES Online Registration Form on the ICES homepage or contact Dana Hilinski, special projects coordinator, at hilinski@andrew.cmu.edu or 412-268-5227.

**PITA Grant Awarded for 6th Consecutive Year**

The Pennsylvania Infrastructure Technology Alliance (PITA) was reauthorized for fiscal year 2003 by the PA Department of Community and Economic Development (DCED) and funded by the legislature at $4 million. The PITA program is a collaboration between ICES, the Center for Advanced Technology for Large Structural Systems (ATLSS) at Lehigh University and the PA DCED. This program aims to build a highly educated human resource base in science and technology for emerging and baseline industries in Pennsylvania. For more information on PITA, please contact Rhonda Moyer, ICES Administrative and Financial Manager, at rm7q@andrew.cmu.edu, or Rich Hoff, Industrial Liaison, at rhoff@andrew.cmu.edu.

**PITA Project Courses for Fall 2002**

The fall semester has begun and again many ICES faculty members are teaching PITA-sponsored engineering courses. Through these courses, industry and academia join together to bring real-world engineering problems to the classroom. The fall 2002 PITA courses include Course 39-405 Design Problem Formulation, Course 39-605 Engineering Design Project Course, and Course 39-646 Independent Study in Interactive Design.
ICES STRATEGIC PLANNING PROCESS

The ICES strategic planning process continues to move forward. It's been nearly one year since the process began, and there have been many unrelated changes to ICES over this time period. New research faculty members and students have joined ICES, while others have moved on to challenging new opportunities. As the mix of people changes, so does the research focus, and to a certain extent, the resource needs of ICES. In addition to these changes, there are also demands on faculty members by departments and the university that make meeting on a regular basis a significant challenge.

Conducting a planning process in this dynamic environment isn't an easy task, but progress has been made on many of the important components of the plan, including an environmental assessment, a strengths, weaknesses, opportunities, and threats analysis, and the establishment of a sustainable focus for ICES education. A new organizational concept has also been implemented that retains the strengths of the existing lab structure and provides greater flexibility for mature labs to participate and establish new thrust areas. We are indeed making progress.

However, there is significant work to be done on a new intellectual theme, the mission statement and the vision statement. These items will determine how new research thrusts will emerge from existing labs and core competencies. More importantly, the new theme, mission and vision statements must be crafted to invigorate and challenge our long-standing members while attracting new people and ideas from across all colleges at Carnegie Mellon. This will be no small feat, and we will need your input in order for the process to be successful.

What will remain the same in ICES is our dedication to engineering design research and education, our desire to connect people to people and people to information through technology, and our pursuit of research that, to quote Herbert Simon, “makes the wonderful and complex understandable and simple – but not less wonderful.”

A town meeting will be held in the near future to discuss the progress on the strategic plan and to solicit opinions. No plan will be finalized until everyone from ICES has had a voice. Until then, a refined strategic plan will be drafted and distributed for review and prepared for the upcoming President's Advisory Board Meeting.

ICES/MECHE SEMINAR

Bora Mikic from MIT will give a joint ICES/MechE seminar on November 15th at 2:45pm in Scaife Hall 125. The talk is titled “The Role of the Pressure Field in Vorticity Dynamics and its Implication to Maintenance of Turbulence.” Refreshments will follow in room 301.


The Idealink project of Asim Smailagic and Dan Siewiorek was recently featured in a profile of futuristic PDAs created by tech companies and universities in Forbes Magazine. According to the article, the ICES-designed Idealink “transforms the handheld into a communal Etch-A-Sketch.” Its small PDA screen is a “digital whiteboard,” allowing multiple users to communicate verbally, create design sketches over the network, and engage in real-time remote collaboration. Idealink features a virtual design and collaboration environment, optimized for the small screens found on PDAs, as well as a digital whiteboard that is shared among users of CMU’s wireless network. Idealink also allows colleagues to enhance their collaboration and interaction, including a wealth of additional benefits, such as image storage and selective drawing replay for users unable to attend the original design meeting.

I’M WORKING ON THAT, AUGUST 2002, BY WILLIAM SHATNER

The “ICES gang” is mentioned in former Star Trek star William Shatner’s new book I’m Working on That, a non-fiction work about the impact the popular television show has had on modern scientists. To get an in-depth look at the many new technologies once believed to be possible only in science fiction, Shatner toured the nation’s top laboratories and institutes, including a stop at ICES. Research staff member Francine Gemperle is quoted in the book. For more information go to, www.amazon.com/exec/obidos/search-handl

PITTSBURGH MAGAZINE, AUGUST 2002, “TO BOLDLY GO TO CMU,” BY CHIP WALTER, WWW.WQED.ORG/MAG/FEA

The inclusion of the interaction design studio in William Shatner’s book, I’m Working on That, is highlighted in an article in Pittsburgh Magazine written by Shatner’s co-author for the book, Chip Walter.

IEEE MICRO, JULY/AUGUST 2002, HTTP://COMPUTER.ORG/MICRO/

Professor Phil Koopman was the guest editor of the July/August 2002 issue of IEEE Micro, which focused on safety critical embedded networks for automotive applications.
BIG BROTHER CHARLIE

It’s obvious that Computer Facilities Manager Charlie Matous enjoys helping people. Always available to solve our computing problems here at ICES, Charlie is also involved in an organization that seeks to provide positive role models for youth. For the past three years, Charlie has served as a Big Brother to 12-year-old Corey, with whom he thoroughly enjoys eating pizza, going to ball games, and….being in weddings? That’s right – when Charlie got married this past March, Corey was his best man! Indeed, Corey and Charlie make such a good team, they were recently showcased on the Big Brothers Big Sisters of Greater Pittsburgh website as their Featured Match. “Last year there were over 800 matches between Bigs and Littles, so this was very flattering to Corey and I,” Charlie says of this honor. For more information on Big Brothers Big Sisters of Greater Pittsburgh, or to learn of the many ways you can have a positive impact on a young person’s life through this organization, contact Charlie at crm@andrew.cmu.edu or visit their website at www.bbbspittsburgh.org.

NEW FACE AT ICES

Emily Nicholson joined ICES in August 2002 in the position of administrative assistant. She is currently responsible for a variety of duties, all of which help to ensure the efficient running of the ICES administrative office and provide support to the administrative staff, faculty, and students. A recent graduate from the University of Pittsburgh with a B.A. in Communication, Emily previously worked as an administrative assistant for an executive search firm for the construction industry. She hopes to pursue graduate studies here at Carnegie Mellon and enjoys reading and writing in her spare time.

30 DAY TRAVEL EXPENSE REIMBURSEMENT POLICY NOW IN EFFECT

Travelers should spend university funds prudently. Business travel expenses will be paid by Carnegie Mellon only if they are reasonable, necessary and in accordance with this policy. Individuals who incur business travel expenses should neither gain nor lose personal funds as a result of their travel. The traveler is responsible for submitting all forms related to his/her travel within 30 days of returning to campus. This 30-day policy will be strongly enforced by the university accounting department and all Carnegie Mellon employees should take action to follow this rule.

DO YOU PURCHASE FROM MCMASTER-CARR?

Do you purchase from McMaster-Carr? If you do and you use the Tartan Trust Card, please remember to specify that the shipping and handling should be charged directly to the credit card that you are using. Accounting has notified ICES that McMaster-Carr has been sending a bill for all shipping and handling charges directly to the university. It would be greatly appreciated by both ICES and the Carnegie Mellon accounting department if all shipping and handling can be expensed at the time of purchase. If you have any questions, please contact Rhonda Moyer, Administrative & Financial Manager, at rm7q@andrew.cmu.edu.

Visit ICES on the Web at www.ices.cmu.edu
PROFESSOR CRISTINA AMON RECEIVES THE RALPH COATS ROE AWARD
Professor Cristina Amon received the Ralph Coats Roe Award from the Mechanical Engineering Division of the American Society for Engineering Education (ASEE). The award recognizes mechanical engineering educators who have demonstrated excellence in teaching for the last decade and made notable professional contributions.

KENJI SHIMADA WINS BEST PAPER AWARD
Mechanical Engineering Professor Kenji Shimada won the Best Paper Award from the Information Processing Society of Japan for a paper he co-authored with IBM researcher Keisuke Inoue, entitled “Surface Model Reconstruction from Wire-Frame CAD Models.”

SARAH PETRICCA RECEIVES GRADUATE STUDENT ASSOCIATION CONFERENCE FUNDING
Sarah Petricca recently received Graduate Student Association Conference Funding (GSACF), which enables more graduate students to attend and make presentations at key conferences in their fields. Sarah is a graduate student in Biomedical Engineering working with Professors Kacey Marra and Prashant Kumta.

JUSTIN KULLA IS RECOGNIZED AS ONE OF THE STUDENT EMPLOYEES OF THE YEAR
Justin Kulla was recently recognized as one of the Student Employees of the Year here on campus. This award was sponsored by the Career Center for student employees. Justin was nominated due to his support of our department and for creating the online database, IRIS, which is now a vital tool for the ICES community.