CALL FOR PROPOSALS: FY2004 PITA PROJECTS

ICES is now soliciting proposals for FY2004 PITA projects that focus on research, education or outreach. Proposed projects are limited to three pages in length, and those with strong technical content and interaction with Pennsylvania companies, students and Lehigh researchers have the best chance of being selected. Please note that revised program guidelines established by the Pennsylvania Department of Community and Economic Development (DCED) state that both Interim Progress Reports and Final Project Reports are now required for continued funding of approved projects.

Proposals are due on August 29, 2003 and approval memos for selected projects are expected to be issued by September 30, 2003. Please direct all questions regarding proposal content to Cristina Amon at camon@cmu.edu. Please contact Rich Hoff at rhoff@andrew.cmu.edu for questions about the proposal form and Dana Hilinski at hilinski@andrew.cmu.edu for questions regarding proposal budget preparation.

SURE THING PROGRAM PROVIDES UNDERGRADUATES WITH RESEARCH EXPERIENCE

This summer, ICES hosted a ten-week undergraduate research program called A SURE Thing: Summer Undergraduate Research Experience. Sponsored by the Pennsylvania Infrastructure Technology Alliance (PITA), this program selected five undergraduate engineering students from various Pennsylvania colleges to work with ICES research faculty and students on ICES and PITA projects.

Five students participated in this year's program: Erica Harvey, a junior computer engineering major at Villanova University, worked with Dr. Phil Campbell on a project called "Tissue Engineering."
Message from the Director

I am happy to announce that ICES is soliciting ICES-PITA proposals for FY2004 projects.

As many of you already know, this has been a very challenging budget year for the Commonwealth of Pennsylvania. We are pleased that PITA funding was approved at a reduced level of $2.5 million. I would like to extend my thanks to all who have contributed to PITA. As we embark on the program’s seventh year, I wholeheartedly credit its success to your efforts and collaborations.

Proposals are due on August 29, 2003. If you would like a copy of the FY2004 Request for Proposals, the PITA Mission Statement, or the ICES-PITA Proposal Form, please visit our web site at www.ices.cmu.edu.

Feel free to contact us if you have any questions about the PITA program or for other information about ICES activities. I hope to see you at our Open House event on October 29 and 30. In the meantime, I wish you an enjoyable and fruitful rest of the summer.

Cristina Amon
ICES Director, Raymond J. Lane Distinguished Professor of Mechanical Engineering

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GIRL SCOUTS LEARN ABOUT BONE TISSUE ENGINEERING AT ICES

On July 2, ten girl scouts visited ICES for a lesson in bone tissue engineering with Research Associate Professor Phil Campbell. The visit was arranged as part of the “Girl Scouts Discover Biotech Pittsburgh” program and included girls from the Belle Vernon, Steel Valley, Bethel Park and McMurray areas, among others. The 13 to 15-year-old girls were introduced to the basic concepts behind bone tissue engineering with an activity called “Build a Bone,” in which they constructed bone-like structures from simple materials such as paper and tape, and then tested their structures for strength. This activity not only demonstrated the importance of strong bones to the human body, but also posed the challenges of bone substitute fabrication in terms the girls could easily understand.

ICES INITIATES SYSTEMS ANALYSIS & SENSOR NETWORKS COURSE

This fall, ICES will sponsor Systems Analysis & Design of Sensor Networks (39-605), a new course instructed by Project Scientist Mike Bigrigg, Research Professor Eswaran Subrahmanian, and Civil and Environmental Engineering Assistant Professor H. Scott Matthews. Major topics in this course will include problem definition, requirements analysis, design, and deployment. The class is available to any student at Carnegie Mellon, the University of Pittsburgh, Carlow College, Chatham College or Duquesne University, but participation requires special permission from one of the instructors. Students will be evaluated on their proposals, prototype designs, and deployment of their prototypes. For more information, please visit the course web site at www.ices.cmu.edu/sensornets/class.html.

SURE Thing Program... (continued from cover)

Aaron Benedict, a junior mechanical engineering major at Gannon University, worked with Dr. Ender Finol on a project called “Reconstruction of CT Scans.”

Gaurav Bazaz, a junior computer and telecommunications engineering major at the University of Pennsylvania, worked with Dr. Asim Smailagic on a project called “Wearable Computers for Medical Applications.”

Nicholas DiSaia, a junior electrical engineering major at the University of Pittsburgh, worked with Project Scientist Mike Bigrigg on a project called “Sensor Deployment and Networking.”

Robert Rencewicz, a senior electrical engineering major at the University of Pittsburgh, worked with Professor Michael McHenry on a project called “Nanocrystalline Inductive Devices.”

The SURE Thing program helped students gain valuable experience on real-world engineering projects and exposed them to research careers in a unique multidisciplinary setting. It also included weekly seminars that covered topics of particular interest to undergraduates, such as pursuing graduate school, interviewing tips and resume building.

On Wednesday, July 30, the students showcased their research with the ICES community during a final poster presentation. Each student gave a brief talk about their research, their poster and their overall experience with the SURE Thing program. A reception followed, during which attendees were able to further discuss the research presented with the program participants.

The university community’s response to the SURE Thing program has been positive, and meetings have been scheduled to discuss its continuation for next summer. “All in all, the program has allowed me to delve into other aspects of the field of engineering that I may not have had the chance to pursue otherwise,” says Aaron Benedict. “I think it’s given all of us a better understanding of the technology of the future.”

PHIL CAMPBELL WELCOMES NEW BABY

ICES Research Associate Professor Phil Campbell recently welcomed a new addition to his family. Connor Duncan Campbell was born on March 15, 2003, weighing 7 lbs and 14 oz. Congratulations, Phil!
“THE POWER OF ICES” FEATURED IN TEQ MAGAZINE

The multidisciplinary research and technology transfer initiatives of ICES were recently featured in an article called “The Power of ICES” in the May 2003 issue of TEQ, the official news magazine of the Pittsburgh Technology Council. In the article, ICES Director Cristina Amon and Industrial Liaison Rich Hoff were quoted extensively on the role of ICES in the economic development of Southwestern Pennsylvania’s high tech industries, as well as the ICES mission of fostering relationships between industry, researchers, and students. The article can be viewed at www.pghtech.org/news/teq/teqstory.cfm?ID=1007.

MKIDS RESEARCH HIGHLIGHTED IN NSF PRESS RELEASE

The research of Social and Decision Sciences Professor Kathleen Carley was featured in a recent National Science Foundation (NSF) press release on the benefits of new technologies for organizations that must rapidly respond to incoming information. Professor Carley is one of the leaders of two new NSF projects that are part of the Management of Knowledge-Intensive Dynamic Systems (MKIDS) program, which was initiated to help management teams quickly process large amounts of data in complex decision-making situations. The press release can be viewed at www.nsf.gov/od/lpa/news/03/pr0342.htm.

ASIM SMAILAGIC FEATURED IN NEW YORK TIMES

ICES Research Professor Asim Smailagic was recently featured in a New York Times article entitled “Where is Everybody? The Wireless Network May Know.” The article explores the development of wireless networks that can track computer users and adjust computer actions to accommodate varying circumstances. Dr. Smailagic’s work on people location systems and context aware computing is also referenced, specifically his development of a system that maps computer locations. The article can be viewed at www.nytimes.com/2003/06/19/technology/circuits/19next.html.

CHRISTINA COWAN TO TAKE TEMPORARY LEAVE

Christina Cowan, the executive assistant to ICES Director Cristina Amon, will be temporarily leaving Carnegie Mellon on August 22. Christina and her husband, Computer Science Professor Christos Faloutsos, will be taking a sabbatical leave in San Jose, California, where Christos will be working at IBM on data mining issues. They will return to Pittsburgh in June of 2004. Norma Allen from Carnegie Mellon’s Temporary Employment Services has been hired to cover Christina’s major responsibilities.

Christina plans to continue pursuing her master’s studies in history and may possibly take up temporary employment while in California. Although she is looking forward to the trip, Christina says she will miss ICES and encourages everyone to keep in touch. We wish Christina the best of luck while in California and extend our warmest welcome to Norma.

iNews is the official publication of the Institute for Complex Engineered Systems (ICES). To submit information for the next edition of iNews or to join our mailing list, please contact Emily Nicholson at ekn@andrew.cmu.edu.