\$420 Million PACE (In-Kind) Contribution is Largest in UC's History

A select group of high-status international firms today announced that the University of Cincinnati is receiving a highly competitive, in-kind contribution commercially valued at \$420,687,132. UC is the first school in Ohio to ever receive this prestigious award which will further design and engineering education.

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The latest versions of multimillion dollar software that created such special effects as the Flying Dutchman ship and its tentacle-faced captain, Davy Jones, in the "Pirates of the Caribbean" movies is now to be found at the University of Cincinnati.

That software, part of an entire package of high-end design and engineering computer tools (both hardware and software), will have a real-world impact at UC by advancing classroom curricula within various internationally and nationally recognized programs at UC. It will make a difference to students and to various Ohio and national industries because the contribution allows students to gain experience with state-of-the-art software that has practical applications far beyond movie special effects. For example, uses for this software include accident and safety testing via computer simulations or medical testing (say of blood flow passing through artificial heart valves) via simulations.

The \$420,687,132 in-kind contribution comes from PACE, Partners for the Advancement of Collaborative Engineering Education, which is comprised of a consortium of international companies:

- General Motors, Inc.
- EDS
- Hewlett-Packard Co.
- Siemens PLM Software
- Sun Microsystems

The \$420,687,132 in-kind contribution represents the largest ever given the university, and UC is the first (and only) educational institution in Ohio to receive such recognition, which is only presented to strategically selected academic institutions worldwide. UC was selected to receive this in-kind contribution on the strength of its internationally recognized design programs as well as its nationally ranked programs in engineering, along with its research expertise, which places the university among the top 25 public research universities in the United States.

<u>UC is one of only 21 U.S. universities to receive such software and hardware from PACE in the last eight years – and thus, to receive the prestigious designation as a PACE institution</u>. Other schools which have received similar recognition and in-kind contributions are the Massachusetts Institute of Technology, the University of Michigan and Virginia Tech. The more than \$420 million value of the in-kind contribution to UC is

the second-largest PACE has ever provided a U.S. school and the third-largest to any school in the world.

UC President Nancy Zimpher said the in-kind contribution represents an investment in future innovation in Ohio and the U.S. "Innovation is the lifeblood of success. Our growth and greatness as a university, as a state and as a nation hinges on this very important ability to continually create, improvise and discover. This contribution feeds into UC's strengths in research, tools, processes, working relationships, dynamic collaborations and people in order to grow a creative economy for all."

David Lyon, executive director of North American Interior Design for GM, agreed. He said, "Today, increased productivity demands in a globally competitive environment like the auto industry means a product may be designed in Australia, engineered in Detroit and manufactured in China. We need people who can step into those integrated roles, and that's what the collaboration between UC and PACE is about. It's about improving research, work-force skills, technical stature and innovation abilities. This is an investment in our future and in UC's internationally renowned programs in design and nationally ranked engineering programs."

The contribution to UC makes business sense, according to Dave Shirk, executive vice president, Global Marketing, Siemens PLM Software: "Today's leading manufacturing and technology companies compete on the basis of time to market, product cost, quality and innovation. It's quite clear that today's best students in top programs like those at UC must have the opportunity to gain experience with technology that supports these objectives."

"We know students at the University of Cincinnati are already being prepared for the global economy," said John Nielsen of GM Global Manufacturing & Quality for EDS. "By integrating the PACE tool box throughout its curriculum, the UC College of Engineering is upgrading its ability to train a new generation of engineers well versed in today's technology and ready to hit the ground running when they join the workforce."

According to Brigid O'Kane, former auto designer and now UC associate professor of design, the advantages of this in-kind contribution to students is hard for those outside of the field to imagine. "Between the professional-level hardware, software and facilities that our students will now have along with their ongoing cooperative-education work experiences in industry, the UC students in our world-class programs will be the most experienced and highly skilled of any graduates in the country," she explained, adding, "Companies will very much continue to seek these students out for innovative ideas and know-how to deliver excellent products."

Sam Anand, professor of mechanical engineering, said, "The software and hardware will help UC teach and train our students in product lifecycle management methods in a collaborative environment using state-of-the-art tools. In addition to promoting creativity, this will further opportunities for students to work in multi-disciplinary teams similar to

what they will encounter in industry and help them hit the ground running when they graduate."

He added that UC students will not only gain experience with the latest versions of software but will also, via an expanded curricula, be challenged to use it within collaborative projects with fellow students from other elite programs worldwide. In turn, these same students at strategic selected institutions like UC will "reverse mentor" industry professionals.

Anand and O'Kane spearheaded UC's PACE application effort. Because of UC's established international reputation in design (ranked among the nation's and even the *world's* best), that application became the benchmark used by GM and PACE for review of other applicant schools.

The PACE software that UC is receiving includes Siemens' NX, Teamcenter Engineering, Teamcenter Community and Tecnomatix; Autodesk's AutoStudio and Maya; MSC. Adams and MD Nastran; Altair HyperWorks; FLUENT/GAMBIT; iSIGHT; and LS-DYNA. As part of the contribution agreement, UC will continue to receive the latest versions of all the provided software as newer versions become available and accepted within industry.

In addition to the educational in-kind contributions made by the five PACE partners, several additional PACE contributors and supporters have embraced the PACE mission and contribute valuable products and services to the PACE institutions. They are 3Dconnexion, Altair Engineering, Autodesk, Autoweb, Engineous, Fluent, Inc., Gamma Technologies, Livermore Software Technology Corporation, MSC.Software and Wacom.

For more information on PACE, visit www.pacepartners.org

- Review of today's announcement and celebratory events
- What the technology coming to UC can do
- Course and curriculum changes accompany the PACE contribution
- The UC programs and colleges to benefit from the in-kind contribution
- The companies that comprise PACE
- PACE Web site
- PACE fact sheet