

**AHOYA!  
Engineers**

NEWS FROM **YOUR**  
COLLEGE OF ENGINEERING

Volume 1 Number 2

MARQUETTE  
UNIVERSITY

**We Open Your  
New Discovery  
Learning Center!**

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**Welcome** to *Ahoya! Engineers*– Marquette University’s College of Engineering electronic newsletter for alumni, students and their families, faculty, staff, and MU friends. We want you to know what’s happening in *your* College of Engineering and so this newsletter will be published periodically, sharing our accomplishments, milestones, and activities.

**Please Note:** If this newsletter was forwarded to you by a fellow alumni and you want to receive future editions *directly*, please note at the end of this newsletter how you can sign up on the list serve.



***Kern Foundation TLC Launches DLC.*** On Tuesday, November 30, 2004, the College of Engineering dedicated the newly relocated and renovated Discovery Learning Center (DLC), made possible by the generous funding of the ***the Kern Family Foundation*** under the leadership of ***Bob and Pat Kern***. This facility enables our students to explore their ideas and gives them a platform for discovery learning that provides them with the ability to design, analyze, fabricate and test projects; they can now take a concept from a computer generated design to a hand-held prototype. Presently, the DLC is used in the freshman and senior design courses as well as a number of other required engineering courses. ***Dr. Stan Jaskolski***, Dean of our college, served as Master of Ceremonies for the occasion and guests included ***Fr. Robert Wild, S.J.***, President of

Marquette University; Mr. and Mrs. Kern; their daughters, **Marsha Peterson** and **Deborah Kern**; **Provost Madeline Wake**; other university officials, and Engineering faculty, staff, and students. Highlights of the dedication included remarks by **Dr. Otto Widera**, Senior Associate Dean and Director of the DLC; Fr. Wild, S.J.; and Bob Kern. This was followed by a demonstration of the rapid prototyping machine by **Tom Silman**, Facilities Manager, who was assisted by graduate student **Casey Loughrin** and undergraduate students **Shea Olewinski** and **Tanya Onushko**. **Fr. Ed Mathie S.J.**, Director of University Ministry and chaplain to our College, offered a blessing and invited Dean Jaskolski and Mr. and Mrs. Kern to join him in sprinkling holy water on the DLC. Upon conclusion of the dedication ceremony, our students offered tours of the facility to guests. Our College of Engineering is grateful to the Kern Family Foundation for its generosity and commitment to the education of our students.



*Dean Jaskolski hands Bob Kern the container of holy water to participate in the blessing of the new DLC while Fr. Wild chats with Pat Kern. Looking on is Fr. Ed Mathie and in the background is Tom Silman.*



*Joanna Erlandson, Biomedical Engineering student, discusses with John Zeidler, Mechanical Engineering, the materials test they will do on the Rockwell Hardness Tester. They're using the DLC for their senior design project, an improved low cost wheelchair design for Latin America.*



*New prototyping machinery in the DLC includes the Birmingham Lathe. The Center is capable of taking a concept to hand-held product prototype, which is important in today's business to quickly envision and sell new product concepts.*



*Students Kyle Rehm and Phil Spangler discuss a prototype dye. Mike Greenheck, in the background, is working on the Birmingham Lathe. The DLC has plenty of worktables and space for students to work on several project simultaneously.*



***COE Hosts sySTEM Now!*** More than 130 educators, elected officials, and employers came to campus November 9th for a one-day inaugural conference on improving the quality, quantity, and diversity of youth entering the fields of Science, Technology, Engineering and Mathematics (STEM). Your College of Engineering (***Dr. Jon Jensen***, Associate Dean for Enrollment Management) and the ***Engineers & Scientists of Milwaukee*** (ESM) co-hosted the kick-off meeting to bring together NOW - a real sense of urgency underscores this program - a group of people with a common interest in STEM-related educational initiatives.

The idea for this conference evolved along two parallel paths; one originated by ***Dean Stan Jaskolski*** and the other by ***Mr. Van Walling***, Vice President and Area Manager for CH2M Hill, a multinational firm that provides engineering, construction and related services to public and private clients. Both were concerned about the projected decline in

university enrollment in STEM-related curricula, the challenge of attracting (and maintaining) under-represented populations to careers in these areas, and the general lack of awareness of existing educational outreach activities. Participants lauded the meeting a great start - discussions focused on best practices and lessons learned - and planned several next steps: 1) to formally establish a full time, "one call" organization to act as a clearinghouse for STEM-related information, resources and initiatives; 2) to form an Advisory Council; and 3) to develop and implement an aggressive campaign to motivate youth about STEM. A Business Partnership Team is already in formation with the Milwaukee Public Schools and will hold its first meeting on January 27, 2005. Additional businesses are encouraged to join this effort; please call 414/288-6720 or contact [jon.jensen@marquette.edu](mailto:jon.jensen@marquette.edu) for information about becoming a member of this Business Partnership Team. Stay tuned, as your College is proud to take a leadership position in attracting our youth to the unlimited potential of engineering.



***Commercializing Breakthroughs.*** Our *Department of Biomedical Engineering* is very involved in planning and launching networking events promoting technology initiatives for the region. Most recently, on November 18th, the department hosted the first-ever conference of the Biomedical Technology Alliance of Southeastern Wisconsin entitled, "Opportunities for Partnering in Rehabilitation and Imaging." Approximately 100 participants heard speakers and panel discussions focused on the clinical, scientific and business challenges of creating and commercializing scientific breakthroughs. Guest speakers included ***Dr. Stan Jaskolski***, Dean of COE, ***Mr. Tom Barrett***, Mayor of the City of Milwaukee, ***Dr. Carlos E. Santiago***, Chancellor of the University of Wisconsin-Milwaukee, ***T. Michael Bolger***, J.D., President and CEO of the Medical College of Wisconsin, and ***Dr. Madeline Wake***, Provost of Marquette University.



***Getting Innovative On Innovation.*** And the beat goes on. On October 25th, our *Department of Biomedical Engineering* helped launch the first of a planned monthly series of Innovation Mondays - an exciting new way for researchers, business managers, and potential investors to link up and launch synergistic high-tech opportunities. Kudos to the four principals behind this new exciting opportunity: ***Lisa Waples***, Associate Chair of the Department of Biomedical Engineering; the Medical College of Wisconsin; Chaz Mulcahy, an attorney with Whyte Hirschboeck Dudek S.C.; and Teresa Esser, author of *The Venture Café* and a native of Waukesha, WI. The monthly gatherings alternate between Caffery's Pub, located on 16th Street and Wisconsin Avenue, and the Medical

College of Wisconsin. If you would like to attend an upcoming Innovation Mondays, please contact Lisa Waples at [lisa.waples@marquette.edu](mailto:lisa.waples@marquette.edu)



***Eat, Cheer, Buy!*** The Marquette men's basketball team plays Arizona on Saturday, December 18th at 1:00 PM, and what better way to enjoy our victory than with fellow alumni at a great restaurant. Please plan to join us -- this is a truly fun event that just keeps getting better! The ***MU Engineering Alumni Association (MUEAA)*** is host, and the day begins with a Pre-Game Reception and Silent Auction at Maders Restaurant (yes, that great food) from 9:30 AM to 12:30 PM. All proceeds from the MUEAA Silent Auction go toward scholarships for our engineering students. Besides yourself, MUEAA asks that you encourage other alumni to attend; bring the gang - the goal this year is 400 alumni attendees. Now that's a party!

You should have received an invitation to this event, but if not or if you have questions, please contact Alumni Relations at [donna.key@marquette.edu](mailto:donna.key@marquette.edu) or phone 800-344-7544.



***Student Organization Competitions.*** The ***MUEAA*** is very supportive of our College throughout the year and one event in which they regularly participate is our Engineering Open House, serving as judges for the ***Student Organization Technical Display Contest.***

The ***American Society of Civil Engineers (ASCE)*** took the first place award (\$700) for their display "Engineering from Past to Present," with a unique video of various feats of engineering through the ages. The display also showed the various professional and social activities in which ASCE is involved and featured the concrete canoe, steel bridge, soils engineering and many other aspects of engineering as they relate to ASCE.

Second place (\$500) was awarded to the ***Institute of Electrical & Electronics Engineers (IEEE)*** for their "Super Computer." In this display, it was obvious that the members of IEEE are thinking "outside the box." Freshman ***Brandon Hahn*** redesigned his computer to run faster than any commercially available PC on the market. However, the amazing speed of the computer produced more heat than the computer could tolerate. How was this heat problem solved? By adding a cooling system that consisted of a small pump and a radiator, of course!

The ***American Society of Mechanical Engineers (ASME)*** was awarded third place (\$300) for their closed loop wind tunnel system. Since its installation in Haggerty Hall,

members of ASME have been busy developing and calibrating controls to make the wind tunnel useful and effective for numerous applications, e.g., radiator heat exchange and aerodynamics projects. It is anticipated that the students will work in conjunction with companies and industry to identify efficiencies and to help solve problems.

MUEAA and our College especially thank **Rockwell Automation** for supporting a very successful Engineering Open House and funding the cash awards for the technical display contest.

The next Open House and Scholarship Competition will be held on Saturday, February 26, 2005.



**NSBE Reactivated.** Our Marquette chapter of the *National Society of Black Engineers* has been reactivated and its members have already been involved in several projects. **Dr. Otto Widera**, Senior Associate Dean and advisor to NSBE, reports that the chapter now has a joint partnership with the Milwaukee Academy of Science at Discovery World, where they tutor students in math and science; they also plan to bring these students to Marquette to experience campus life with a view to where their academic efforts can lead them. On November 14th, NSBE had its first fund raising event, the Hip Hop Appreciation Night, with a deejay and several local talent acts - including our very own **Jason Robinson Mitchell**, a sophomore in Electrical Engineering. All proceeds from this and other planned fund raising events will provide scholarships for students of color in Milwaukee Public Schools who are interested in studying engineering at Marquette. **Latoya Freeman**, president, and her fellow members are also looking forward to attending the National NSBE conference in Boston next spring semester; Dan Ortego of INROADS is helping them prepare for their participation in this event, and Elizabeth Berte of Shur Line will be assisting them with resume preparation.



**E&C Funding At 10-year High!** **Dr. Edwin Yaz**, chairman of our *Department of Electrical & Computer Engineering*, is happy to report that external funding for the department is at a 10-year high. At the university level, the department has moved up to the 3rd position among departments with the highest research funding over the last five years and in terms of intellectual property, they are ranked #1 across campus. Total research funding for the department for 2003-04 was \$1,349,431.



***MU Connect.*** Marquette is offering a new service called ***MU Connect***, a free online alumni community where alumni can network, find old friends and make new connections. Features include: a searchable alumni directory; career networking opportunities; online event registration; FREE Marquette e-mail accounts; and alumni chapter pages. Alumni can register on ***MU Connect*** by visiting [www.marquette.edu/alumni](http://www.marquette.edu/alumni) . And once you're online, sign up to be an alumni volunteer for the *Career Alumni Network*, formerly known as MUSCAN, where our students and your fellow alumni can network with you for career and job search advice!



***"Backyard Learning."*** With the Marquette Interchange construction now under way literally in the University's "backyard," our Civil Engineering students will have multiple opportunities to observe applications of the construction theory they're learning in the classroom. The ***Institute of Transportation Engineers (ITE)*** recently enjoyed a field trip to the Milwaukee Transportation Partners, a consortium of civil engineering companies that designed the new Marquette Interchange, where they learned about the design and construction details of this complex undertaking. Visit ITE's web site at [www.eng.mu.edu/~drakopoa/ite/](http://www.eng.mu.edu/~drakopoa/ite/) to learn about the organization's other activities.



***We're Still Taking A Few Good Men and Women.*** Although the priority deadline for Fall 2005 freshman admission applications was December 1, 2004, applications received after this deadline date will be reviewed as space becomes available. Because the university has allowed the College of Engineering to increase its freshman class for next fall, we welcome these additional applications! If you know of any high school seniors who would like to apply for admission to our College - and haven't already done so - please encourage them to apply on line at [www.marquette.edu/student/apply](http://www.marquette.edu/student/apply) . If you have any questions about the admission process, please contact the Undergraduate Admission Office at 800-222-6544.



***Happy Holidays!*** Last but not least, all of us at your College of Engineering want to take this opportunity to wish you and your families a very Blessed and Happy Holiday Season!

***Help us spread the news!*** We realize that there are *many more* alumni e-mail addresses that we do *not* have, and so we're asking for your assistance. If you received this newsletter directly from Marquette, that means we already have your e-mail address on our newsletter. However, *we would highly appreciate it if you would forward this newsletter to your fellow alumni friends and other friends of the College and tell them they can subscribe to the newsletter to receive future editions of this newsletter.*

***To subscribe to or unsubscribe from this newsletter, please visit***  
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***Questions/comments?*** Please contact Sue Michaelson, Assistant Dean and Director of Cooperative Education, College of Engineering, at 414/288-7134 or [susan.michaelson@marquette.edu](mailto:susan.michaelson@marquette.edu).

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