The University of Michigan has been a world leader in education for well over a century. According to the U-M International Institute there are more than 400 faculty affiliates from 37 U-M colleges, schools, and departments; $3 million in funds distributed annually to 375 U-M faculty and staff for international research and study; and U-M has more Fulbright student awards than any other U.S. university in 2005, 2007, and 2008.

“The world is today’s college campus. Never before have we had so much to learn from other nations and cultures. Students look to the university to take advantage of its global connections to expose them to a broad, international perspective,” says Mary Sue Coleman, president of the University of Michigan in a video address on the U-M Global Engagement Web site.
I have been honored to assume the Chairmanship of the Nuclear Engineering and Radiological Sciences Department since September 1, 2010. I appreciate the support of UM faculty, staff, students and alumni that led to this appointment.

There are several reasons that NERS is the exceptional department that it is today: our dedicated faculty, our commitment to educating the next generation of leaders in the nuclear engineering field and our outstanding students and alumni.

This department attained its top ranking by excellence in teaching and research programs founded on the shoulders of giants such as the late Bill Kerr, John King, Chihiro Kikuchi, Richard Osborn, Louis Hamilton and George Summerfield, as well as Emeritus faculty Glenn Knoll, Terry Kammash, Ziya Aksasu and Dieter Vincent. With the nuclear renaissance underway in the US and abroad, I am pleased to report that the department is still growing, with 20 tenure track faculty members as well as a new faculty position in fission science. The undergraduate enrollment has reached an all-time high of some 140 students. Graduate enrollment is at an excellent level of some 120 students. NERS faculty research expenditures now approach some $3 million dollars annually.

We can boast a successful and loyal body of alumni who have been very supportive to the NERS department in a variety of ways. Their continued support is crucial. We will continue to rely on the expertise of these dedicated alumni for advice and assistance in navigating this new era of nuclear power development and homeland security challenges.

Finally, I wish to thank Professor Bill Martin for his service to the NERS Department over many years. In closing, I look forward to meeting and working with our students and loyal alumni during the next five years.

Go Blue!

Ron Gilgenbach Chair and Chihiro Kikuchi Collegiate Professor

The Nuclear Engineering and Radiological Sciences (NERS) department also recognizes the importance of an international perspective for their students. Nine summer professor Lumen Wang will take up to 15 undergraduate students to China for a one-month exposure to China’s nuclear power development. Partially funded through a grant from the Global Intercultural Experience for Undergraduate Program, the students will explore the nuclear power renaissance that China is experiencing through site tours, lectures, as well as interaction with local Chinese. Dr. Wang is partnering with Xiamen University in China.

The U.S. has the largest nuclear power plant fleet in the world but they are all second generation, mostly built over 30 years ago. Currently, China has the largest developing nuclear program in the world, with 25 nuclear power plant construction sites underway. Four of them are that generation U.S.-designed plants. I want to give our students an opportunity to witness firsthand all the facets of planning, building and securing a nuclear power plant,” says Wang.

The “Summer School on Nuclear Power Development in China” was conceived primarily for NERS students but is open to undergraduates campus wide. Wang can see value to students interested in such disciplines as public policy, journalism, natural resources and environmental studies. Students will join with Chinese students from Xiamen University for a one-month exposure to China’s nuclear power development. Partially funded through a grant from the Global Intercultural Experience for Undergraduate Program, the students will explore the nuclear power renaissance that China is experiencing through site tours, lectures, as well as interaction with local Chinese. Dr. Wang is partnering with Xiamen University in China.

The tours will be followed by lectures to explain the challenges encountered in the nuclear power plant construction including site selection and integration, political and public resistance, environmental impact, manufacturing of huge parts of the main reactor components and long term safe operation and lifetime management of nuclear power plants. When asked why China, Wang points to their incredible growth in the last few decades. ‘China is growing and the U.S. is standing still. Our students need to not assume that the U.S. will always be the only superpower. They need to know what’s happening in the rest of the world and know their future competitors. U-M NERS students need to be prepared for the global energy market and this trip is a valuable introduction,” says Wang.

Other examples of NERS students taking advantage of U-M global reach:
Abraham Lin, Atomic Research Facility, Taiwan
Megan Brown, Hitachi-GE, Japan
Brian Linn, Hitachi-GE, Japan
Jacob Levy, University of Salamanca, Spain
Drew Johnson, Technical University of Berlin, Germany
Archis Joglkar, Institute of Nuclear Physics, Serbia

The Steps Bay Nuclear Power Plant (NPP) with the then president of American Nuclear Society (ANS) Dr. William Burchill (center) and Lumin Wang (second from right) in May, 2009.

Continued from cover
Nuclear Engineering and Radiological Sciences at the University of Michigan is playing a key role in a new national initiative in nuclear reactor modeling and simulation: the Consortium for Advanced Simulation of Light Water Reactors (CASL). CASL, a ten-institution partnership (http://www.casl.gov/) including the University of Michigan (UM), was chosen in May 2010 by the Department of Energy to develop, operate, and sustain an “Energy Innovation Hub” focusing on modeling and simulation for nuclear energy. CASL is the first of three DOE energy hubs (http://www.ne.doe.gov/AdvModelingSimulation/energyinnovations.html) that consist of multi-disciplinary teams to address the nation’s energy challenges. The CASL Hub will augment existing modeling and simulation (M&S) reactor analysis tools with advanced capabilities to create a robust and user-friendly environment for predictive simulation of light water reactors (LWRs). This M&S environment is designated the Virtual Reactor (VR) and will be based on state-of-the-art computational models for modeling coupled physical phenomena in a nuclear reactor, including neutronics, thermal-hydraulics, structural mechanics, and materials performance.

The ten institutional partners in CASL include Oak Ridge National Laboratory as the lead institution, Los Alamos National Laboratory, Sandia National Laboratory, Idaho National Laboratory, University of Michigan, Massachusetts Institute of Technology, North Carolina State University, Westinghouse, Tennessee Valley Authority (TVA), and the Electric Power Research Institute (EPRI). In general, the universities are responsible for the research that underpins the development of advanced M&S capabilities; the national labs are responsible for the applied research and development and deployment of the computational tools; and the industrial partners (Westinghouse, a nuclear reactor vendor, TVA, an owner-operator of 4 nuclear reactors, and EPRI, the research arm of the nuclear utility industry) will ensure that the VR is a useful tool for “real world” design, analysis, and operation of nuclear reactors.

Professor Bill Martin led the UM portion of the CASL initiative that competed successfully for the $122M (over 5 years) M&S Hub. The UM’s share of the funding is about $11.7M/year and consists of faculty, staff, and students from four departments in the College of Engineering—NERS, Mechanical Engineering, Materials Science and Engineering, and Aerospace Engineering. Below is a list of the NERS faculty and their technical roles:

- Professor Tom Downar is contributing his state-of-the-art 3D nuclear analysis code DeCART and will be leading research efforts to further develop its capabilities for LWR simulation;
- Professor Mike Hartman is examining the feasibility of using university research facilities to contribute fundamental data to assist in the UQ (uncertainty quantification) and validation efforts for fundamental neutronics and thermal-hydraulics;
- Professor Ed Larsen is engaged in improving the axial model for DeCART and is looking at advanced “hybrid” methods, combining deterministic and Monte Carlo techniques;
- Professor John Lee is examining advanced discretization methods for time-dependent transport methods;
- Professor Bill Martin is contributing to Monte Carlo methods development;
- Professor Gary Was is examining the effect of radiation on materials performance in nuclear reactors.

There will also be 6-8 graduate students and two postdoctoral scholars from NERS involved in the project. Bill Martin also has a major leadership role in CASL as the Head of the Modeling and Numerical Methods (MNM) Focus Area, one of three technical focus areas of CASL.

The College of Engineering and the UM demonstrated their commitment to the UM CASL effort by contributing funding and contiguous office and conference room space, including state-of-the-art videoconference facilities. CASL is half-way through its first year of funding and Michigan has already contributed to the Virtual Reactor by implementing the DeCART nuclear analysis code into the CASL M&S environment and coupling it with a state-of-the-art thermal-hydraulics code (Star). In the coming months, CASL-UM faculty and students will be focusing on topics in neutron transport, materials simulation, and uncertainty quantification of Star, with the assistance of colleagues in the MSE, ME, and Aerospace departments.
On May 28, 2010 NERS lost one of its most respected and beloved faculty. Professor William Kerr was a founding member of the Department of Nuclear Engineering in 1958, establishing an outstanding curriculum and faculty in this new discipline of nuclear science and engineering. For two decades beginning in 1972, Professor Kerr served as a member, and often as the Chairman, of the Advisory Committee on Reactor Safeguards of the U.S. Nuclear Regulatory Commission. For all his contributions to the field he received a number of awards including the Arthur Holly Compton Award of the American Nuclear Society, and was elected a Fellow of the American Nuclear Society and the American Association for the Advancement of Science.

Through all his activities as a dedicated teacher and national leader in nuclear reactor safety, Professor Kerr was always a gentleman with an abundant sense of humor and a caring heart for his colleagues and students alike. He will be sorely missed.

William Kerr Scholarship Fund Established

In memory of Professor William Kerr, his sons, Scott, William and John have made a major contribution to establish the William Kerr Scholarship Fund. Their donation will provide a challenge gift on a dollar-for-dollar basis up to $50,000. This scholarship will support undergraduate students enrolled full-time in the Nuclear Engineering and Radiological Sciences Department, based on need. Recipients may utilize the Scholarship for tuition, fees, books and other educational expenses related to obtaining an undergraduate degree. Contributions to this fund can be made in the attached envelope or using the “Giving” button on the NERS website: http://www-ners.engin.umich.edu/
A generous gift from Professor Sidney Yip has endowed the Richard K. Osborn Memorial Lectureship in the Nuclear Engineering and Radiological Sciences Department. This lectureship will be a fitting tribute to honor Professor Osborn’s unwavering dedication to educating students in fundamental science. It is expected that these annual lectures will provide a dynamic, living forum for inspiring future generations of students in nuclear theory and simulation.

Professor Osborn was a faculty member in the Nuclear Engineering department from 1957 until 1986. He was the recipient of the 1965 Western Electric Fund of the American Society for Engineering Education and the holder of the 1972 Goebel Chair of the College of Engineering. Professor Osborn was a Fellow of the American Physical Society and the American Nuclear Society. Under the supervision of Professor Osborn, Professor Sidney Yip received his Ph.D. in 1963 from the UM NE Department. The 1960s marked an extremely productive period for collaboration between Professors Osborn and Yip, culminating in the publication of their classic book: “The Foundations of Neutron Transport Theory”. A kickoff event for the Osborn Lectureship will be planned for spring-summer 2011. The NERS department looks forward to reuniting the former students and colleagues of Professor Osborn to recognize his devotion to education.

The National Nuclear Security Administration (NNSA) announced that Dr. Donald L. Cook has been confirmed and sworn in as the new NNSA Deputy Administrator for Defense Programs. Dr. Cook will oversee the nuclear weapons program for NNSA and will be responsible for ensuring that the U.S. nuclear weapons stockpile remains safe, secure and effective without the need for underground testing.

Dr. Cook most recently served as managing director and chief executive officer of the Atomic Weapons Establishment (AWE) in the United Kingdom from 2006 to 2009. In this capacity, he was accountable for AWE’s performance on the contract with the UK Ministry of Defence. Dr. Cook worked at Sandia National Laboratories for 28 years in pulsed power sciences, microtechnologies, infrastructure and security. Dr. Cook is a graduate of the University of Michigan (BSE ‘70) and the Massachusetts Institute of Technology and a Fellow of the American Association for the Advancement of Science (AAAS) and the Institute of Physics (IOP). He is a member of the UM-NERS Department Advisory Board (1996-1999), (2004-present), as well as the UM College of Engineering Alumni Society Board of Governors (2009-present).

Dr. John E. Kelly, NERS ’76, has been appointed deputy assistant secretary for nuclear reactor technologies in the U.S. Department of Energy’s Office of Nuclear Energy. He recently retired from Sandia National Laboratories after 30 years of research and development in nuclear reactor safety and advanced nuclear energy technologies. In his new position, he will be responsible for DOE’s nuclear reactor R&D programs, which are addressing WFRs, HFRs, SFRs, SMRs, and other advanced reactor concepts. His office also manages the advanced modeling and simulation effort at DOE-NE. John and his wife Sue (EECS ’75) are now residing in Arlington Virginia.

Steve Shannon (BSE ’95, MSE ’97, PhD ’98) studied low temperature plasma discharges under Professors Mary Brake and James Holloway while at Michigan. After graduation, he went to work for Applied Materials Inc. in Sunnyvale CA. As he puts it “I was a very familiar place… I got to keep working with RF plasmas and at the time there were seven or eight NERS alumni working there, all still having night-mares about NE572”. While at Applied, Steve was an assistant secretary for nuclear reactor technologies in the U.S. Department of Energy’s Office of Nuclear Energy. He recently retired from Sandia National Laboratories after 30 years of research and development in nuclear reactor safety and advanced nuclear energy technologies. In his new position, he will be responsible for DOE’s nuclear reactor R&D programs, which are addressing WFRs, HFRs, SFRs, SMRs, and other advanced reactor concepts. His office also manages the advanced modeling and simulation effort at DOE-NE. John and his wife Sue (EECS ’75) are now residing in Arlington Virginia.

John Booske was selected by his departmental faculty and dean in 2009 to serve as chair of the Department of Electrical and Computer Engineering at the University of Wisconsin. In 2007, John was appointed as the Duane H. and Dorothy M. Blumberg endowed Professor of Engineering. Most recently, he has also been appointed as inaugural Director of a campus “center-in-progress”, the Wisconsin Collaboratory for Enhanced Learning (WCET). John was elected to Fellow grade in the IEEE in 2007 in recognition of his research into sources and applications of electromagnetic fields and waves, including advances in high power vacuum electronic microwave sources.

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adjunct faculty member in the Materials Engineering department at San Jose State University where he developed classes in plasma processing and ion-solid interactions. This experience compelled him to try academia full time, and in 2010 he joined the Nuclear Engineering faculty at North Carolina State University. Again, he found himself in familiar territory, getting to continue his work in low temperature plasmas as well as getting to dabble in some of the nanofabrication techniques he picked up while in Silicon Valley, and once again surrounded by a strong network of NERS alumni, three of whom are faculty in the department. Steve has been very busy since he left UofA, travelling to over a dozen countries, publishing papers, filing patents, and spending time with his wife Deanne and two daughters Erin and Rowan. Currently, Steve’s group consists of six graduate students and four undergraduate researchers. You can read more about his current work at his group’s website, http://www4.ncsu.edu/~chamhanno.

Jim Fiocchi received his BSE ’70, MSE ’72 from Westinghouse Electric Company as Senior Vice President of Global Customer Relations & Sales after a wonderful 38 year career with the company. During his career, he enjoyed rewarding experiences in nuclear engineering, project management, total quality, manufacturing, general management, sales and customer relations. Jim previously held positions of Senior Vice President, Nuclear Fuel and Senior Vice President, Nuclear Power Plants. In the area of total quality, he was instrumental in the efforts of Westinghouse’s Commercial Nuclear Fuel Division being recognized with the 1988 Malcolm Baldrige National Quality Award, one of the first seven companies to be so honored. Jim retired in October 2010 and immediately moved across the street to begin full-time work at Lawrence Livermore National Laboratory (LLNL). In his new position he supports technical and policy developments in areas of nuclear nonproliferation and arms control, an important field he has grown to care deeply for. He is one of the few DSS/NNSA scientists, who have now worked at all three NNSA laboratories. He spent four years at Los Alamos National Lab working on Laser Fusion, while his Sandia career spanned Particle Beam Fusion to Magnetic Fusion to Extreme Ultraviolet Lithography and to Nuclear Nonproliferation/Arms Control. Outside of his current work, he is still getting to continue his work in low temperature plasmas and policy developments. Jim is very active in the community, with the NERS Alumni remembering faculty.

NERs alum remembers faculty who inspired and revitalized him

There were two wonderful things that happened to Charlie Schrock (BSE NE ’75 MSE ’78) at the University of Michigan - he met his wife Liz and he discovered nuclear engineering. “I’d always had a fascination with physics and knew that I wanted to be an engineer but when I found out that there was an application to make energy, that was the icing on the cake”, says Schrock.

Schrock began his energy career in 1979 with Wisconsin Public Service as an associate engineer. He remembers almost being passed over for the job because they considered him over qualified because he held an advanced degree.

“We produce a product that our customers can’t live without. People live or die on it. What could be more important than that?”

“As a Nuclear Engineering student at U-M I already had reactor experience and a demonstrated track record with operations and with the Nuclear Regulatory Commission. They gave me a chance because I had what they needed,” remembers Schrock.

Decades later Schrock is on the business side of making energy as the Chairman, CEO and President of Integrys Energy Group Inc. a holding company for energy related subsidiaries including Wisconsin Public Service Corporation.

“I love the energy industry”, says Schrock. “We produce a product that our customers can’t live without. People live or die on it. What could be more important than that?”

Charlie has fond memories of exceptional faculty like Dr. Lee who spent extra time with him to make sure he understood the homework and Dr. Duderstadt who revitalized Schrock’s commitment with his enthusiasm and personal style.

“I remember Dr. Duderstadt telling us, after completing a problem assignment, that, ‘all solved problems are simple. It’s the unsolved ones that are really tough!’ It is faculty like that who drew me back to U-M and make me happy to donate my time to the College of Engineering,” says Schrock of his tenure on the Engineering Advisory Council at the University of Michigan. Recently, Schrock also made a gift to the department that will assist future U-M Nuclear Engineering students well into the future.

On Friday, October 15, 2010 Schrock was one of a small handful of alumni who were granted the Alumni Society Merit Award. Besides serving on the Advisory Council, Schrock is also active in the community, having served on many organizations over the years. He has a bent toward education-related organizations. During his 39 years in Green Bay, Charlie chaired the Partners-in-Education committee for a few years, and received its prestigious Golden Apple for his service. Now in Chicago, Charlie serves on several organizations, including After School Matters and the Chicago Public Library Foundation.

“Education is a passion for me. If we can provide funding for programs to open up learning opportunities for kids who otherwise wouldn’t get a chance to experience nature and science, then we’ve given them something that can inspire them forever. My education at U-M opened up so many more doors for me than I ever imagined. It’s not what you study Education is about learning to think, solve problems and to listen,” says Schrock.

Schrock and his wife Liz at the Alumni Society Merit Awards ceremony
Career Fair 2010

One of the reasons that students choose U-M’s Nuclear Engineering and Radiological Sciences department is because of the contacts in the industry they will get. Each year NERS hosts a Career Fair that introduces companies and agencies to qualified students about to enter the workforce.

Jeremy McGrew (BSE ’03), senior engineer at Westinghouse, enjoys coming back to campus for the annual Career Fair for several reasons.

“It’s exciting to speak with former professors on a different level and have the ability to keep them updated on current industry changes and innovations. Sitting on the other side of the interview table is rewarding, especially when I am able to pass along my experiences and provide advice to those students going through the same thing that I did a few years back. Overall though, the greatest reward for me is finding that special candidate who is an excellent fit for our company. I’m proud that we have found quite a few of those at the University of Michigan. And one more reason I like coming back for the career fairs…Blimpy Burgers!”

AWARDS & SCHOLARSHIPS

PhD Graduates 2009-2010
listed with Thesis Titles and Advisors

Kauh Ekan Magnetism Estimator Methods for Monte Carlo Radiation Transport
William K. Morton

Troy Becker Hybrid Monte Carlo/Deterministic Methods for Radiation Shielding Problems
Edward W. Larsen

Jesse Chaitham Truncation Analysis and Numerical Method Improvements for the Thermal Radiation Transfer Equations
James P. Holloway

Jeremy Conlin Explicitly Restated Arnold’s Method for Monte Carlo Nuclear Criticality Calculations
James P. Holloway

Gregory Davidson Time-Dependent Radiation Transport Using the Staggered-Block Jacobi Method
Edward W. Larsen

Hao Aang Improvement of Ion-Beam Energy Resolution in a Solemio-based Nuclear Beam Facility
Kimberlin Keefe/Oyed Bocchi

Master’s Students 2009-2010

Scott Ambers
Margaret Bacon
Eric Baker
Benjamin Betzler
Yuval Bouchet
Edward Cruz
Carlos Di Stefano
John-Michael Fischer
Tyler Fensel-Guazzo
Matthew France
... 
Daniele Grosso
Hing Haydu
Douglas Kake
Cens Hamilton

John Hayes
Efran Hernandez-Rivera
Adam Hoffman
Jiaju Hou
Armee Hubble
Sonal John
Blake Kelley
Brian Kitchen
James Lard
Justin Lamy
Weixing Li
Ben Mantas
Robert Mcelae
Eric Miller

Maria Morell Gonzalez
Eric Differs
Scott Pfeffer
Ian Rittersdor
William Schumaker
Piotr Starakiewicz
Kayla Thompson
Scott Wagner
William Walsh III
Jonathan Wierschn
Tomasi Zik
Owen Zirman

*Continuing for PhD

2009-2010 CoE Graduate Student Awards

Distinguished Achievement
Matthew Gomez

Distinguished Leadership
William Kaye and Efran Hernandez-Rivera

Tom S. Rice Tau Beta Pi Award
Yuan Bouchet

Marian Sarah Parker Prize
Jennifer Dolan

2010 Nuclear Engineering Graduate Student Internships

Cheri Perbetti
David French
Anne Campbell
Adam Hoffman
David Simon
Dong Pyun
Eric Gillman
John Hayes
Eric Baker
Travis Trahan

ORNL
Air Force National Lab
ORNL
Argonne National Lab
L3 Communications
Idaho National Lab
NASA Glenn Research Center
Centra Atonics Banksohe
LANL
Argonne National Lab

SCHOLARSHIPS

Kikish Scholarship (sophomore award) — for FY 10-11
Alex Robinson
Eric Welch

Kushner Scholarship Award (2nd Year Merit Award) — for FY 10-11
Derek Lax
Sean D’Haal
Alexandra Nikola Buja
Jason von Ehr
Drew Johnson
Daniel Chudnow

John S. King Scholarship — for FY 10-11
Edward Harvey

NEUP Scholarship Award — FY 10-11
Marc Bechetti
Timothy Burke
Sean Lamer
Lee Gunderson
Geoffrey Gunow
Matthew Marcare
Sean D’Haal
Patricia Schuster
Robert Steinbock

National American Nuclear Society Undergraduate Scholarships — for FY 10-11
Alexandra Nikola Buja
Timothy Burke
Lee Gunderson
Patricia Schuster
Robert Steinbock

National Academy for Nuclear Training (NANT) — for FY 10-11
Justin Ball
Nanette Gill

Outstanding Undergraduate (NERS) 2010
Andrew Till
Outstanding Undergraduate (Eng Physics) 2010
Aaron Rosca
Distinguished Leadership Award 2010
Maggie Honing
Cooky Writing Prize (Essay Division) 2010
Andrew Patton
New Achievement Award (NEUP) 2010
Julian Taney
T he 2010 ANS Student Conference, hosted April 8–11 by the U-M Student Section of the Eagle Crest Conference Center, in Ypsilanti, Michigan, welcomed 665 attendees and community members for a forum brought together nearly 400 conference attendees and community members for a town-hall discussion with a panel of experts on nuclear energy. Other highlights of the conference were 157 student presentations on subjects ranging from nuclear policy to medical isotopes, six workshops, three panel discussions, tours, and a career fair. There was even time for some well-deserved social activities such as a golf tournament, and an awards banquet held aboard the Detroit Princess Riverboat.

“Students of all class standings, faculty and staff all pulled together to create the most professional ANS Student Conference to-date. With all the time that we spent together, and the challenges we worked through, we really learned the value of calling the NERS department our own,” says Eddy.

Aimee Hubble (BSE 04) is busy working on her Ph.D. in Plasma Physics, with a thesis on electronic propulsion and hopes to soon be working in a national lab or for NASA. Her dreams are close to becoming a reality thanks to two prestigious fellowships: one from the National Science Foundation and one from the American Society for Engineering Education. “U-M has not only given me the confidence to apply and receive these fellowships but offers me the connections that I need to land the jobs that I want,” says Hubble.

Patricia Schuster is in her senior year and is busy applying to various PhD programs around the country. Patricia received two prestigious scholarships this year, one from the NEUP and American Nuclear Society Undergraduate Scholarship. She has also shown great leadership skills as the student organizer for the DAPCEP program (see page 15). To Patricia it seemed almost pre-ordained that she would end up in nuclear engineering. “When I was in 8th grade my class took a career path test. Everyone else got multiple results. I got one: basic waste disposal engineer. I was a little disappointed that it was so narrow, but it makes sense considering my favorite class was applied physics!”

REACHING OUT

Students Profiles

Patricia Schuster

DAPCEP (Detroit Area Pre-College Program)

L ast spring 157th and 8th graders from Detroit entered the Cooley Nuclear Engineering Building on the U-M campus with a touch of anxiety. The term “nuclear” conjured up thoughts of radiation, cancer, and accidents. But after five Saturdays of hands-on activities, experiments and in-class instruction, the students left with a basic understanding of what covers the field. Are these all future engineers? Maybe.

The Detroit Area Pre-College Engineering Program (DAPCEP) is an extracurricular program and has a mission to increase the number of historically underrepresented youth who are motivated and prepared academically to pursue careers in science, technology, engineering and math related fields. These students are chosen through an application process that looks at interest in math and engineering, grade point average and all around good citizenship.

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U-M students explore China’s new nuclear frontier

Letter from the Chair

UM Leads Major Initiative on Nuclear Reactor Modeling

Faculty & Staff News

Alumni News

Student News