

THE TREND

IN ENGINEERING

Fall 2004

Two Debts of Gratitude Lead to ME's First Endowed Chair



Henry Schatz (BS ME, '64) toured the ME laboratories during a campus visit in August.

Two debts of gratitude, one dating to World War II and one to the 1960s, have culminated in a \$2 million gift for Mechanical Engineering. The gift honors James Morrison, a retired ME professor, through the generosity of Henry Schatz, CEO of General Plastics Manufacturing Co. in Tacoma. The gift includes \$1 million to endow a chair named for Morrison and \$1

million to fund an endowment for undergraduate scholarships.

The saga begins in China during World War II when Morrison and 10 others bailed out of a crippled B-29. Communist guerillas smuggled the men through Japanese-held territory,

a three-month trek from northern China to Mao Zedong's headquarters in Yanan, where a U.S. plane picked them up. Morrison had no way to pay back the guerillas for saving his life, so he decided that, somehow, he had to "pay back the human race."



Lt. Jim Morrison was treated at a Chinese hospital in 1945.

After the war he signed on as an instructor in UW Mechanical Engineering while earning his masters degree. He discovered a talent and love for teaching and won accolades from students. Morrison confined his research to the summers and devoted full attention to his students during the academic year. It was a way to repay that debt and an "opportunity to help a lot of people."

When Schatz enrolled in the 1960s, Morrison was a full professor still brimming with enthusiasm for his students. Morrison inspired him, and recognized that his lessons

applied not just to engineering, but to the rest of life. "He taught us to think analytically, logically, critically — to look for the things that may not be apparent until thinking it through," Schatz said.

The endowed chair came as a total surprise to Morrison. "I never tried to make a name for myself. I was just trying to be a good teacher," he said. Schatz believes that is what made him so effective and is one of the factors that inspired his gift. The James B. Morrison Endowed Chair in Mechanical Engineering will be filled by someone who excels in balancing teaching and research.

Dean Denton Honored with Presidential Award for Mentoring

Encouraging others to reach high has earned Dean Denice Denton a prestigious award recognizing her role as a national leader in engineering education. She was among nine scholars honored by the White House in May with a Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. Administered by the National Science Foundation, the award includes a \$10,000 grant and a presidential certificate. The NSF cited Denton's role in developing long-term mentoring programs for underrepresented students from K-12 through graduate school, and for helping women and minority faculty members advance their careers. "It is a thrill to watch students and young faculty grow and thrive and become leaders in engineering and science," Denton said.

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From Middle Earth to Mars

Don't Miss the Fall 2004 Lecture Series!

Details on page 8.

Letter from the Dean

A chain of mentoring

It's a pleasure to begin this letter with two hearty welcomes and two deeply appreciative thank yous.

The first welcome is for Mark Emmert, our new UW president, who assumed office on July 12. His arrival is also a homecoming as he earned his undergrad degree here in 1975. Our College leadership team is eager to introduce him to our exceptional teaching and research programs.

We also thank outgoing president Lee Huntsman for his outstanding service the past two and a half years. We are delighted that Lee is now back in our fold as a professor of bioengineering.

The second welcome goes to Mark Tuttle, who became chair of Mechanical Engineering on August 2. He emerged from a very strong group of candidates. Mark has served as chair of the College Council and is the director of the new FAA Center on Composites. His depth of experience in ME and his broad perspective on the College bodes well for the future of the department (see article on page 3).

Bruce Adee did an excellent job as acting chair of ME. He ramped up development and external relations efforts and enhanced the department's industrial partnerships. Thank you, Bruce, for your great work!

In early May, I found myself in Washington, D.C., gathered with eight of my peers from around the country to be recognized with presidential awards for our work in education and mentoring.

It was a great experience. The recognition of years of sustained effort was fulfilling. But the best part of the ceremony for me was meeting up with Reza Ghodssi, one of my former students who attended the event. I was Reza's adviser for both his master's degree and his doctorate at the University of Wisconsin-Madison. He is now an assistant professor of electrical and computer engineering at the University of Maryland. He has a CAREER award under his belt, and is running his own lab investigating MEMS sensors and actuators. As I shook hands with the acting director of the National Science Foundation and the president's technology adviser and received my plaque, I thought of how grateful I was for the chance to be part of Reza's academic journey.

I also thought back to those who have helped me make my way. I had a great undergraduate adviser at MIT who gave me challenging projects and believed in my abilities. His confidence in me

boosted my confidence in myself, and made the difference in my ability to complete my work in electrical engineering.

A few years later, when I was a junior faculty member at Madison and the only woman in the department, another wonderful mentor — Phil Certain, recently retired dean of the College of Letters and Science there — took the time to help me negotiate the numerous pitfalls of a challenging situation. His advice, leadership and perseverance allowed me to stay at Madison as an assistant professor.

I like to think of all of us in engineering, whether in academia or industry, as being on a mentoring chain. Regardless of where you are in your career, there are people coming along who need your help and colleagues ahead of you to whom you can turn for advice and assistance.

As reported on page 1, a highly successful UW engineering alumnus recently strengthened that chain here with a generous gift of \$2 million to establish the first endowed chair in our Department of Mechanical Engineering and to establish a scholarship fund for undergraduates. Two factors were key in Henry Schatz' decision to make the gift:

- The excellent teaching of his former professor, Jim Morrison, now an emeritus faculty member. Henry credits his teacher with being the first person to inspire him as an engineer.
- The second was a pool of matching funds established with generous donations by friends of the University. They bolstered Henry's \$2 million gift to \$3 million — money that will fund great teachers who inspire and attract students who otherwise might never get the opportunity to see engineering for the exciting, creative field that it is.

So our challenge, as leaders in engineering, is to partner with friends and each other to strengthen those links and extend that mentoring chain to reach bright and able students who might consider engineering if given a chance.

How well we meet that challenge will determine our nation's position in tomorrow's global technology arena.

Sincerely,
Denice D. Denton



“Regardless of where you are in your career, there are people coming along who need your help and colleagues ahead of you to whom you can turn for advice and assistance.”

Mark Tuttle Named Chair of Mechanical Engineering



Professor Mark Tuttle begins his twentieth year on the ME faculty with a new title: chair of the department. He also directs the new FAA-funded Center of Excellence on Advanced Materials in Transport Aircraft, which he helped establish late last year. Tuttle's research focuses on composites, including optimal structural design, prediction of long-term durability, the impact of fire on polymeric composites, and the buckling response of laminates. Other interests include applied solid and adhesion mechanics. He is a past president of the Society for Experimental Mechanics.

"I am excited and honored to serve as the new chair of Mechanical Engineering," Tuttle said. "The department has experienced a renaissance in recent years with development of new areas of research and increases in research awards and applicants to our graduate and undergraduate programs. My principal goal is to maintain this positive growth by stimulating an atmosphere that encourages innovative research and collaboration with colleagues within and outside the department."

Significant campus leadership experience has included a two-year stint on the UW Faculty Senate and chairing the College Council and the ME Faculty Affairs Committee. Tuttle earned his BS and MS degrees at Michigan Technological University and his doctorate in engineering mechanics at Virginia Polytechnic Institute.

EE Prof Wins Two Big NIH Grants

Electrical engineering professor Deirdre Meldrum has received a \$3.5 million grant from the National Institutes of Health's National Human Genome Research Institute to fund the third year of a five-year award for a specialized research center to explore integrated biologically active microsystems. Meldrum has also received a \$1.2 million NIH grant for the first half of a two-year project titled "Microscale Instrument Development for Genomic Analysis." EE colleagues on the grant include Karl Böhringer, Mark Holl, and Mark Troll.



Faculty, Students, and Staff Accrue High Honors

Our outstanding faculty continue to distinguish themselves through numerous honors, awards, and leadership roles in professional organizations — far more than we can report in *The Trend*. Key national and international awards over the past 18 months include:

Fellow, American Association for the Advancement of Science: **Sam Jenekhe**, Chemical Engineering; **Deirdre Meldrum**, Electrical Engineering.

Fellow, American Academy for Arts and Sciences: **Ed Lazowska**, Computer Science & Engineering.

National Science Foundation CAREER Award: **Xingde Li**, Bioengineering; **Venkat Guruswami**, Computer Science & Engineering; **Eric Klavins** and **Tara Javidi**, Electrical Engineering; **Wei Li**, Mechanical Engineering.

iNEER Leadership Award: **Gretchen Kalonji**, Materials Science & Engineering, was honored by the International Network for Engineering Education & Research in Valencia, Spain.

John Simon Guggenheim Fellowship: **Kannan Krishnan**, Materials Science & Engineering.

Sloan Research Fellowship: **Steven Gribble** and **David Wetherall**, Computer Science & Engineering.

Office of Naval Research Young Investigator Award: **Radha Poovendran**, Electrical Engineering.

SIGGRAPH Significant New Researcher Award: **Zoran Popović**, Computer Science & Engineering.

◆ Students

Goldwater Scholars (2004–05): **Eliana Hechter** and **Jonathan Su**, Computer Science & Engineering.

Top Honors in Worldwide Math Contest: **Sasha Aravkin** ('04), a computer science and math major, and two UW teammates earned "Outstanding Winner" status in the 2004 Mathematical Contest in Modeling Results. Of more than 700 teams competing worldwide, they were among 11, including Harvard and Oxford, to achieve top ranking.

◆ Staff

Mel DeSart, head of the Engineering Library, won the 2004 Homer I. Bernhardt Distinguished Service Award from the Engineering Libraries Division of the American Society for Engineering Education.

Engineering Alums Recall Olympic Gold and Glory



Dean Rutz / The Seattle Times

Standing beside the Husky Clipper, the boat they rowed to 1936 Olympic gold, are from left: Bob Moch, coxswain, and engineering alums Roger Morris, bow, Jim McMillin, No. 5, and Joe Rantz, No. 7.

“There is a tradition at Washington that freshmen are required to memorize the names of the 1936 UW team that won the Olympics in Berlin. I was real proud of them; they were a huge influence on us. I hope they are proud of us.”

MATT DEAKIN (UW '02) U.S. men's eight-oared shell team, 2004 Olympic gold medalists in Athens (*The Seattle Times*, page 1, Aug. 23, 2004)

Another Olympic flame has extinguished and dozens of new records are in the books. A victory of another Games burns especially bright for three engineering alumni who pulled oars to rowing gold — nearly 70 years ago. Rather than fading into history, their exploit still claims the record as the greatest athletic achievement in UW history. And for sheer guts-and-glory drama, it rivals the feats of our state's more recent Olympic phenoms.

Engineering students dominated the eight-oar 1936 UW crew team. The survivors, now verging on their 90s, are Jim McMillin (CE '38), Roger Morris (ME '38), and Joe Rantz (ChemE '39). With fellow engineering students George Hunt (Engr '37), John White (Mining Engr '39), and Gordy Adam (Engr), and three students from other programs, the team had won a 3-mile race at the Intercollegiate Rowing Association regatta and every other race they had entered.

The 1936 Olympics in Berlin would be the ultimate proving ground, tinged with the melodrama of war brewing in Europe. In the final event of the games, as their boats lined up on Lake Grunau, the Huskies were dealt major disadvantage. Officials had placed the German boat in lane 1 (no blind draws then) and the Huskies in lane 6, where they faced wind and rough water.

They couldn't hear the start and got off behind the other boats. By mid-race they still trailed the field. “We weren't worried,” said Rantz. “We had a plan for our stroke rate in the different segments of the race and we were going to stick with it.” With less than 1000 meters to the finish, the coxswain called for a higher rate, but the stroke, who was racing despite being ill, had nearly passed out and failed to respond. Suddenly, he opened his eyes, clenched his jaw, and the crew revved up to 44 strokes a minute, faster than they had ever trained.

With Hitler watching near the finish line and a crowd of 25,000 roaring “Deutschland, Deutschland,” the Huskies caught Great Britain and Switzerland and then in the final 10 strokes overtook Germany and Italy. “We were always known as the ‘come-from-behind crew,’ and we believed in ourselves,” Rantz recalled. Hitler was surely not pleased.

Back home they became the biggest news in the state, with more press coverage than the football team. They are still generating ink, including a recent sports section feature in *The Seattle Times*. The four surviving crew members still meet twice a year, sharing close friendship and the invincible bonds forged in their Husky Clipper on that golden day in 1936.

Engineering ▼ EVENTS ▼

2004 Lecture Series “Engineering the Imagination”

October 5 & 26, November 9
See page 8 for program details.

Chemical Engineering Celebrates 100 Years!

September 17–18: For information on centennial events, contact: Wanda Prong, 206-543-2250, prong@cheme.washington.edu/.

Aeronautics and Astronautics Celebrates 75 Years!

October 8–9: For information on 2004 celebration events, contact: Wanda Frederick, 206-616-1113, wanda@aa.washington.edu/.

Dunbar Receives Top Alumni Award

When Bonnie Dunbar (BS '71, MS '75) visited campus in June to receive the UW's 2004 Distinguished Alumnus Award, she recalled that her big break as a materials science engineering student was a chance to work with Prof. O.J. Whittemore (now retired) to help develop the ceramic tiles that NASA would use on the space shuttle. That expertise led to a research engineer job at Rockwell International to help build the shuttle *Columbia*.

Her selection as an astronaut in 1980 fulfilled a childhood dream. At her family's cattle ranch in Eastern Washington, she read science fiction and watched the night sky for Sputnik. "I thought going into space would be the greatest thing to do," Dunbar said. Over five shuttle flights she has spent 50 days in space covering 20.4 million miles.

Today, as a deputy director in the Space and Life Sciences Directorate, she is one of the few technical women in leadership roles at NASA. She loves her job, but would return to space "in a heartbeat." Read more in *Washington Engineer*, www.engr.washington.edu/news/.



Dutton Begins Astronaut Training



NASA

As a child, Jim Dutton (MS AA '94) kept a poster of Neil Armstrong on his bedroom wall. The Air Force major and test pilot began astronaut training this summer at NASA's Johnson Space Center in Houston. He is part of an astronaut candidate class focused

on fulfilling new goals for space exploration, including returning humans to the moon and traveling to Mars. Dutton is a native of Oregon and earned his BS at the U.S. Air Force Academy.

Hoppe Wins 2004 SIGGRAPH Award

Hugues Hoppe (BS EE '89, PhD CSE '94), a Microsoft senior researcher, won the Computer Graphics Achievement Award at the SIGGRAPH conference.

Wise Words for Graduates

Bonnie Dunbar (BS '71, MS '78) spoke at the Materials Science and Engineering graduation on June 12. Chris Kenworthy (BS EE '76), an executive at a computer security company, gave the graduation talk for Electrical Engineering on June 11. Carol Taylor (BS '83), a technical communicator and site manager for T-Mobile.com, spoke at the TC graduation ceremony on June 12.



The Piper Comanche test team at breakfast at Fox Field in Lancaster, Calif: Left front, Ron Hart; right, front to back, Frank Brown, Clen Hendrickson, Wayne Olson. Photo by R. Colgren

Flight Tests Prove Great Excuse for Reunion of AA & ME Alums

A recent flight test project on a Piper Comanche turned into a mini reunion for UW engineering graduates in Southern California. Richard Colgren and Nell Justice, both AA '82, own the plane. The volunteer test engineers included Frank Brown (AA '79), Ron Hart (ME '62), Clen Hendrickson (AA '60), and Wayne Olson (AA '67). They evaluated aerodynamic performance characteristics including ground effect. That's the tendency of an airplane to flare or "float" above the ground in the instant before landing. Colgren and Olson documented the findings in a technical paper for the American Institute of Aeronautics and Astronautics.

ENGINEERING Dean's Club

Recognizing our most generous annual donors

The Dean's Club is a select group of alumni and friends whose support energizes innovative programs and enhances the student learning experience at the College of Engineering.

Donors who contribute \$1000 or more to any area of the College become Dean's Club members. All gifts received during the current fiscal year (July 1 ~ June 3) count toward recognition.

Later this year you will be hearing more about the Dean's Club exclusive benefits, including:

- **Invitations** to events that highlight cutting-edge research and special programs.
- **Dean's Update** — a new biannual report offering an inside view on College happenings and on the latest engineering research.
- **Annual recognition** in a College of Engineering publication.

Dean's Club donors make a fundamental difference to the quality of our engineering programs. Your commitment and support are important today and for the future.

For information about the Dean's Club and other philanthropic opportunities at the College, please call Danny Geiger at 206-616-1231.

Endowed Chair Brings Kim and Simpson Full Circle



Prof. Yongmin Kim
Hunter W. and Dottie Simpson
Chair of Bioengineering

A gift from the Washington Research Foundation (WRF) has established the W. Hunter and Dorothy Simpson Endowed Chair in Bioengineering, to be held by the department's sitting chair. Simpson was a pioneer of the region's biotechnology industry and a leading force in establishing the WRF. The couple are both alumni and long-time supporters of the UW. Simpson served on the UW Board of Regents from 1981 to 1992 and was named one of 100 UW Alumni of the Century in 1999.

Yongmin Kim, chair since 1999, has done groundbreaking research in magnetic resonance imaging and telemedicine. The endowed chair brings his ties to Simpson full circle. In 1982, Kim was recruited to the UW for an assistant professor position, enhanced by a Physio-Control Corp. faculty development award. Simpson was then president and CEO of the company. "This

award was the reason I came to the UW, and now I hold the chair named for Hunter and Dottie Simpson," Kim said. "I'm grateful to them, and to the WRF, for making this possible."

WRF provided \$500,000 in seed money to establish the chair — funding that the UW matched (see related article below). WRF helps Washington State research institutions capture the value from their emerging technologies and supports start-up investment activities. "Our ties to the Bioengineering Department are very strong, and there is no better way to honor the Simpsons' contributions to the UW and the WRF than to name a chair in their honor," said Ron Howell, president of WRF. "It is our hope that friends of Hunter and the University will join us in this matching effort by donating an additional \$1.5 million," Howell added.

The Simpson endowment provides the chair holder with "venture funding" and flexibility to support innovative research and teaching.

Scholarship Endowment Offers Fast Track for Undergrads

"We want every smart kid to give computer science a try to see how cool it really can be," said Kirk Glerum (BS CSE '83). Glerum and his wife Melissa, who earned a computer science degree at Brown, want those "tries" to start just as soon as a freshman sets foot on the UW campus. They have created an endowed scholarship fund so that CSE can recruit the brightest Washington State students right out of high school. Some of these highly meritorious students need major financial assistance. The Glerum Family Endowed Scholarship in Computer Science & Engineering allows CSE to compete with other universities that are offering full-ride scholarships to these stellar students. And, four years later, they just might follow in the Glerums' footsteps to embark on a successful career at Microsoft or other high-tech companies in our region.



Kirk and Melissa Glerum

Paving Industry Leader Earns UW Laureate Donor Recognition

Al DeAtley, a leader in the asphalt paving industry, received a surprise award from UW President Lee Huntsman at a May 12 luncheon at the UW Club. He honored DeAtley and his wife, Pat, with a Laureate Proclamation recognizing their outstanding record of giving to the UW. Dean Denice Denton, Prof. Scott Rutherford, chair of Civil and Environmental Engineering, and CEE Prof. Joe Mahoney joined in honoring the DeAtleys.

In 1994 DeAtley founded the National Asphalt Pavement Association Research and Education Fund to provide scholarships for civil engineering students nationwide. Each year 22 UW students receive these awards. "It's extraordinarily gratifying that these scholarships have significantly strengthened the UW curriculum and research on improving materials for paving," DeAtley said. "Supporting students is reward enough, and laureate recognition is an unexpected honor."

UW Matching Funds Magnify Gifts

Endowed chairs, professorships, fellowships, and scholarships enable the College of Engineering to attract and retain outstanding faculty and graduate and undergrad students. They are essential to the future success of the College and its departments.

The UW, through a special group of donors, has created a matching fund to stimulate investment in endowments. Donors who commit \$100,000 or more, payable over five years, are eligible to participate in the UW Matching Initiative. The funds augment donor gifts by 50% (1:2 ratio) and are available until all funds have been reserved.

Endowments create a permanent legacy and a foundation for continuing excellence far into the future. They support the engineering innovators who will improve our lives.

We invite you to participate in the UW Matching Initiative. For more information, contact: Jan Labyak, College of Engineering, 206-543-8779 or labyak@enr.washington.edu.

gifts to the
college

NEWS *Snapshots*

Increasing Freedom Is Goal of AI “Caretakers”

A hand-held device that can precisely pinpoint a person’s location, track the user’s movements and give directions could mean freedom for many people with disabilities and seniors with failing navigational abilities. The device, called “Opportunity Knocks,” is being developed under the Assisted Cognition program in Computer Science & Engineering. It consists of a next-generation cellular phone that captures the user’s location via a GPS beacon, then sends that information to a computer server. Software uses the location information and variables such as mode of transportation, real-time bus location (available in Seattle), and predicted destination, to decide whether the user is on course. If a user gets off course, the phone is prompted to make a door-knocking sound to get the person’s attention and suggest a course of action.



Graduate student Don Patterson (front) and Henry Kautz, associate professor, Computer Science & Engineering, program bus information into an early version of the AI device.

If You Crossed a Computer and a Seeing-eye Dog . . .

You would have a high-tech pair of eyes to help navigate walking hazards, but without the disadvantages of drooling, feeding, and pooper scoopers. Student researchers at the UW Human Interface Technology Laboratory have, in concept, done just that to produce a first-of-its-kind Wearable Low Vision Aid that has the potential to be better than a dog in identifying walking hazards. A laptop computer carried in a backpack provides the “brains” for the system. An imaging device mounted on a pair of glasses fires bursts of infrared light in coordination with a small camera that collects images of the infrared-illuminated landscape. Software created by the student team compares that infrared scene with the normally lit scene. The computer assesses the situation and generates a flashing icon to warn the wearer of any danger. The system can be customized to the individual needs of low-vision users. Development and testing continue with funding from the National Science Foundation.



Low-Vision Aid could offer a safer way to navigate around everyday obstacles.

Want more details?

To read the articles on these pages and other stories, visit

Washington Engineer

our new online newsletter at

www.engr.washington.edu/enews/.

Send us your email address and three times per year we'll send you updates about engineering breakthroughs, fascinating research, and what's new at the college.

Send to: enews@engr.washington.edu/.



Dan Lamont

Attendance Rockets at Open House

More than 6,350 people, including students and teachers from over 75 schools, attended the 2004 Open House — the largest crowd ever. They could choose from over 100 exhibits and hands-on activities demonstrating real-world engineering principles. Above: Future engineers watch the blastoff of a water-propelled rocket.

HIT Lab a Media Hit

Besides developing high-tech vision aids (above), the UW Human Interface Technology Laboratory is engaged in innovative research focused on using virtual reality technology to help relieve pain. MRI studies show that VR appears to dramatically change how the brain physically registers pain. Reuters Health, YahooNews, and ABCNews.com have run recent stories. The HIT Lab was the cover feature for the April 11 Pacific Northwest Magazine published by *The Seattle Times*.



A patient being treated for severe burns at Harborview Medical Center uses a VR device to enter a virtual world during a painful procedure.

Is Kirsten Wind Tunnel the Bike Racer's Edge?

In a top-secret December 20 visit to the UW campus, Lance Armstrong and a cohort of biking equipment engineers prepared for the 2004 Tour de France by testing product modifications in the Kirsten Wind Tunnel. Among companies represented were Trek Bikes, Nike, and helmet-maker Giro. Tunnel manager Will de Jong reports they ran tests at several wind speeds and measured factors such as Armstrong's pedaling speed and drag. Armstrong won a record sixth Tour by a wide margin on July 25. *The Seattle Times* revealed the wind tunnel tests in a sports feature on July 1 (www.seattletimes.com for archive search).

“Engineering the Imagination”

Don't Miss the 2004 Engineering Lecture Series!

Presented in Partnership by:

UW College of Engineering and the Alumni Association

Tuesday, October 5, 2004

“Making *Finding Nemo* and *Gollum*”

The Science of Digital Filmmaking

Steve Seitz UW Computer Science & Engineering

Loren Carpenter Co-founder, Pixar Animation Studios

How are the blockbuster animation films made? How do creatures like Gollum from *Lord of the Rings* come to life? Join Professor Steve Seitz and UW alum Loren Carpenter to learn the trade secrets. Together they'll take you behind the scenes to reveal how advances in new technology help to create stunning animated films and digital special effects.



Tuesday, October 26, 2004

“Destination Mars!”

Adam Bruckner UW Aeronautics & Astronautics

Rob Grover NASA JPL Laboratory

AA Chair Adam Bruckner and UW alum Rob Grover, entry/descent/landing systems engineer for the Spirit and Opportunity rovers, explore the spacecraft design and propulsion systems behind these flights to Mars. Hear stories from the control room on the night of the landings and view incredible 3-D images of the Red Planet.



Photo courtesy of NASA JPL

Tuesday, November 9, 2004

“Virtual Reality: Translating Technology into Patient Care”

Hunter Hoffman UW Human Interface Technology Lab

Cognitive psychologist and researcher Hunter Hoffman from the “HIT-lab” will take you into the world of virtual reality. From overcoming fears like arachnophobia, to helping burn victims manage pain without large doses of narcotics, VR is emerging as an important new medical treatment.

- Time:** All lectures begin at 7 pm
- Location:** Kane Hall 110, UW campus
- Reception:** 8 pm with presenters, light refreshments
- Admission:** Series pass (3 lectures) \$18 for UWAA members, \$25 nonmembers
Single lecture: \$7 UWAA, \$10 nonmembers
- To Register:** **Advance registration recommended**
www.UWalum.com or 206-543-0540

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