By Tony Fitzpatrick

Peter H. Raven, Ph.D., director of the Missouri Botanical Garden, received the National Medal of Science, one of the nation's highest awards for scientific achievement, during a White House ceremony on Nov. 10. The medal, presented by President Clinton, recognizes Dr. Raven’s scientific accomplishments and his leadership of the Missouri Botanical Garden’s mission to increase knowledge about biodiversity worldwide.

Raven, a pre-eminent scientist in plant systematics and evolution, has published more than 350 books and papers. He has become one of the world’s leading authorities on plant systematics and evolution, introduced the concept of coevolution and made major contributions to international efforts to preserve biodiversity.

Raven helped refocus the role of social forces that shape the development of plant science and has earned the nation’s trust and admiration as one of the leading scientists of our day.

Mark S. Wrighton

Raven’s work has been widely recognized for his professional accomplishments. In 1999, he was named "Hero for the Planet" by Time magazine for his leadership of the Garden and his work to preserve biodiversity worldwide.

Raven is a member of the President’s Committee of Advisors on Science and Technology and is president-elect of the American Association for the Advancement of Science, set to take office in 2001. He is also home secretary of the National Academy of Sciences, a chairman of the National Geographic Society’s Committee for Research and Exploration.

Raven is the recipient of numerous prizes and awards, including the prestigious International Prize for Biology from the government of Japan; Environmental Prize of the Institut de la Vie; Volvo Environment Prize; Tyler Prize for Environmental Achievement; and the Sandoz Environment Prize. He also received the Society for Conservation Biology Distinguished Service Award and the Orville H. Gibson Award for Scientific Merit. He has held Guggenheim and Sloan fellowships and is a fellow of the American Academy of Arts and Sciences.

On behalf of the Washington University community, I extend our warm and enthusiastic congratulations to Dr. Raven upon his being awarded the Medal of Science by President Clinton.

Washington University in St. Louis

---

**Inside:**

Robert Storr, senior curator at MOMA, to speak for School of Art

---

**Business school showcases next wave of commerce**

By Nancy Belt

As you’re looking to ride the Internet wave that comes after e-commerce, say hello to m-commerce, a.k.a. mobile commerce, which lets you communicate and transact commerce via wireless, hand-held devices, setting you free from hardware tethered to a wall.

Helping students, faculty and business people understand the possibilities and pitfalls of doing business this way and via other electronic means is a goal of the Olin Digital Commerce Center, inaugurated by the Olin School of Business Nov. 14 via a symposium, "The Future of Mobile Commerce," in Simon Hall’s May Auditorium.

Speakers from Diamond Technology Partners, Goldman Sachs & Co., IBM, idealab!, McKeeby & Co., and Sprint explained how mobile devices such as cell phones, pagers and hand-held personal organizers can be used to tap the functionality of the Web. They also discussed what successful revenue models may evolve as companies move into m-commerce and debated such issues as customer "ownership" and the importance of branding in this new business environment.

Many feel that using mobile commerce is an even greater effect on business-to-business and business-to-consumer transactions, than on business-to-consumer transactions.

There is much excitement about the role of mobile commerce. Of course, the mobile experience is not yet perfect, with the United States lagging behind Europe and Japan in adopting it.

See Commerce, page 6

---

**Mars Rover project involves faculty, staff, students**

By Tony Fitzpatrick

NASA plans to send two robotic rovers to Mars in 2004, and Washington University is involved in an impressive network of researchers and students to help make the mission possible.

Raymond E. Arvidson, Ph.D., the James S. McDonnell Distinguished University Professor and chair of the earth and planetary sciences department in Arts & Sciences, is a principal investigator for the Athena Science Payload. In addition, he will work with university colleagues and students to develop, test and deploy the MER prototype and other instruments for the mission.

In testing the MER prototypes, Arvidson’s students have been active in field-testing the Mars Exploration Rover (MER) prototype for two years. Arvidson, who has worked for NASA since 1979 and has had a role in almost every Mars mission since the 1970s, is Deputy Principal Investigator for the Athena Science Payload on the two MER rovers that will land on Mars in early 2004.

The Principal Investigator is Steven Squyres, Ph.D., professor of astronomy at Cornell University.

The MER prototypes have the fetching name of FIDO (Field Integrated Design and Operations Rover). Arvidson, his staff and science colleagues also included in the field tests dozens of high school students participating in a NASA-sponsored project called LAPIS.

The students helped put FIDO through its paces in the Silver Lake area of the Mojave Desert in April and October of 1999 and in Nevada in May of 2000. The LAPIS program is part of the Athena Science Payload and is designed to develop new technologies for future space exploration.

See Rover, page 6
Who Ya Gonna Call? “Ghostbusters” star Harold Ramis to talk on Nov. 29

By Barbara Rea

H famed Hollywood writer, director and screen star Harold Ramis, who is also an alumnus of Washington University and a member of its Board of Trustees, will appear in Graham Chapel on Wednesday, Nov. 29, to give a talk to University students, faculty and staff. The title of his talk, which reflects Ramis’ tongue-in-cheek humor, is “The Semiotics of Comedy in the Post-Modern Era: Towards a Hermeneutics of Humor.”

Since graduating from the University’s College of Arts & Sciences in 1966, Ramis has gained fame for his directing, writing and acting in a number of Hollywood comedies. He got his start as a member of Chicago’s Second City improvisational theater troupe in the late 1960s. In 1974, he joined fellow Second City graduates John Belushi, Gilda Radner and fellow Second City graduates, performer for “The National Lampoon Show.” By the mid-1970s, Ramis was head writer and a regular actor on SCTV, Second City’s television series.” Ramis’ film career took off in 1978 with “National Lampoon’s Animal House,” the blockbuster comedy he wrote about life in a fraternity blockuster comedy he co-

P合同乌尔冈回合汉路WAhg，snt usc pV me ur ucrs cimur urci e13uZ，nem cem iibe

Campus Watch

The following incidents were reported to University Police Nov. 8 - Nov. 13. Records with information that could assist in investigating those incidents are a call 909-9999. This release is provided as a public service to promote safety awareness and is available on the University Police Web site at rescomp.wustl.edu/~wupd.

Subjects sought

Healthy persons are needed as control subjects in research into the biological basis of depress. The study involves interviews, three-day hospital admissions in a general medical research center, blood drawing and the evaluation of hormone systems. Participants will be paid for their time and effort. Jodi A. Poier, M.P.T., assistant professor of psychiatry, is directing the study. For more information, call Casey Babb, 877-0740.

Resident Advisor selection process begins

Residential Life is beginning the Resident Advisor selection process for the 2001-02 academic year. Applicants are asked to provide three letters of recommendation from members of the Washington University faculty and staff. Current seniors and juniors can apply. Applications and recommendations are due Dec. 27.

Social Justice resource

The Social Justice Center (SJC) is a new resource available to students, faculty and staff that provides information about all aspects of social justice. Located in Usrah residence hall on Shepard Drive, the SJC boasts an extensive library of information about social subjects ranging from how to get involved with social justice groups on campus to hosting an Open House and Movie Night at 7 p.m. Nov. 30. Guests are invited to explore the SJC and see what information and support are available at the Center to help make a positive difference in the community. At 8 p.m., the movie “Far and Away” will be shown, followed by a discussion on Ethnomusician. The regular hours of the SJC are Sunday through Thursday from 6 until 10 p.m. For more information, contact the SJC at 935-7683.
A course on medical history returns this month, known as National Diabetes Month. 

Inhaled steroids safe and effective for children with asthma

By DIANE DUKE WILLIAMS

In the largest and longest childhood asthma study ever, School of Medicine researchers helped determine that inhaled steroids are safe and effective for children with mild to moderate asthma.

The researchers and their colleagues in the national Childhood Asthma Management Program (CAMP) reported their results in The New England Journal of Medicine.

There are thousands of inhaled steroids. Doctors should prescribe them, and children with asthma will do a lot better.

There's no evidence that they are harmful.

Robert C. Strunk, M.D., professor of pediatrics and principal investigator at the Washington University site.

The six-year study, funded by the National Institutes of Health, involved 1,041 children in the United States. It compared the effects of three asthma treatments in 1,041 children between ages 5 and 12. The St. Louis group treated 335 participants.

The 1,041 children were randomly divided into three groups. All received a bronchodilator to open the lungs' air passages and relieve current asthma symptoms.

The first group also inhaled an anti-inflammatory and steroid budesonide twice daily. The second group inhaled a non-steroidal anti-inflammatory called nedocromil. The third group inhaled an inactive substance.

"There's no downside to inhaled steroids," Strunk said.

Compared with the last group, the budesonide group had 43 percent fewer hospitalizations, 45 percent fewer emergency room visits and used oral steroids 16 percent less than the children in the control group. But they were not hospitalized fewer times than the children in the control group.

The study also determined which long-term treatment of asthma improves lung growth in asthmatic children. The researchers concluded that either budesonide or nedocromil was better than the inactive substance in this respect.

For years, physicians have debated the long-term risks of treating children with inhaled steroids. The study indicated that inhaled steroids decrease children's growth up to 1/2 inch in the first year. The CAMP results showed the same effect in growth lost only in the first year.

Children in the budesonide group had the same projected adult height as determined from wrist X-rays at the end of the study — as children in the other two groups.

This suggests that the effect on growth in the first year only was a delay and not a permanent reduction, Strunk said.

Additionally, the CAMP researchers found no evidence of thin bones or cataracts, which in the past have been associated with inhaled steroids.

An estimated 3 million children in the United States have asthma, making this disease the most common chronic childhood illness. Childhood asthma can be triggered by allergies, exercise, cigarette smoke and other lung irritants.

During an attack, the lungs' airways narrow, hampering breathing. Narrow air passages produce some of asthma's hallmark symptoms, including wheezing and shortness of breath.

As children with asthma become adolescents, symptoms often subside and in some cases disappear. But the lungs grow rapidly, allowing young adolescents to breathe easier. As a result, teens often discontinue regular asthma medications. But when they reach adulthood, their lungs are smaller and don't function as well as those of healthy people.

Reduced lung function may predispose asthmatics to a greater decline in lung function than those who never develop asthma. Either condition also can limit a person's ability to exercise and carry out daily physical activities.

Griffith hopes this study will encourage physicians to prescribe inhaled steroids for children with asthma. "These medications are not a curse," he said, "but they're a very good way to treat asthma."

Free diabetes screenings offered this month

The School of Medicine and Barnes-Jewish hospitals are offering diabetes screenings this month, known as National Diabetes Month.

The Washington University School of Medicine's Volunteer for Health program will provide the screenings for free today through Friday for the rest of the month from 7 to 9 a.m. on Saturdays and 1 to 7 p.m. on Saturdays, Nov. 18. The screenings will be held in the Volunteer for Health office, located in the lobby of Barnes-Jewish Hospital South.

The program will provide blood-sugar checks and body mass index calculations to diagnose the disease and determine risk. Because it can be a killer for many years, diabetes screenings are important to ensure that people are aware of it.

One in 12 Americans has diabetes, but most people are not aware of it. Early detection can alert patients and their physicians to begin lifestyle changes and other treatments to control blood glucose. High glucose levels contribute to the long-term consequences of diabetes such as heart disease, blindness, kidney failure and nerve damage.

The risk of developing adult-onset diabetes increases with advancing age, but it also is a growing problem for young adults. Obesity, family history of diabetes and being overweight are significant risk factors.

The American Association of Hispanics also may be at greater risk.

Gift baskets will be awarded to volunteers by a drawing each week. For more information or to make an appointment, call Volunteer for Health at 362-1000. Walk-ins are welcome.

Team receives grant to study liver disease in children

By DIANE DUKE WILLIAMS

A research team led by Harold F. Perlmutter, M.D., the Donald B. Strominger Professor of Molecular Biology, has received a five-year $5.3 million grant program to study liver disease in children.

The grant, from the National Institute of Diabetes and Digestive and Kidney Diseases, will be channeled into projects at two institutions.

The goal of this research is to develop new animal models of pediatric liver diseases and to use information from these models to identify new therapeutic approaches, Perlmutter said.

A number of pediatric livers diseases, such as alpha-1 antitrypsin deficiency, cystic fibrosis, Wilson's disease and defects in fatty acid oxidation involve inherited abnormalities in proteins that transport fats in the liver or the transport of proteins to the correct locations in cells.

This project will examine the idea that the development and severity of liver injury in these diseases is determined partly by the expression of specific liver quality control systems that maintain the fates of these metal ions, and abnormally folded proteins. The researchers will investigate host responses to the accumulation of these materials in the liver in animal models.

There has been little direct research at pediatric liver disease of this kind. "We've found out how these problems cause liver injury and how they result in liver damage," Perlmutter said. "We hope to determine why some children are more severely affected than others."

In the first project, Perlmutter will determine how the endoplasmic reticulum responds to the accumulation of the mutant alpha-1 antitrypsin protein that damages the liver in alpha-1 antitrypsin deficiency. The endoplasmic reticulum is the compartment of the cell that first influences the fate and transport of proteins. He will also create a new mouse model of the disease.

In a second project, Gyujoon Bu, Ph.D., assistant professor of cell biology and physiology, and Alan A. Schwartz, M.D., Ph.D., the Harriet B. Speother Professor and head of the Department of Pediatrics, will investigate the mechanisms by which endoplasmic reticulum, its protein chaperones and quality control apparatus regulate the assembly of large proteins and prevent the secretion of abnormal and familial hypercholesterolemia, a currently incurable metabolic disease.

C. Perlmutter, M.D., the James C. Overall Professor and head of the Department of Pediatrics at Vanderbilt University School of Medicine, will receive the grant.

See Liver, page 7
Robert Storr, senior curator at Museum of Modern Art, to speak for School of Art

Robert Storr, curator at Museum of Modern Art (MoMA), will speak in the Visiting Artist Lecture Series sponsored by Washington College. Storr was appointed senior curator for MoMA in 1995. He received his M.F.A. from Yale University School of Art, where he has organized major exhibitions of important artists, including Jean-Michel Basquiat, Vija Celmins, Francesco Clemente, Lucian Freud, Leon Golub, Felix Gonzalez-Torres, Richard M. Hambleton, Annette Messager, Joan Miró, Andy Warhol, and Mike Kelley. He has been a professor at the university of New York, where he is currently a professor in the School of Art.

Exhibitions


Lectures

Friday, Nov. 17


"Indochine." 935-5175. Room 252 Olin Library.

"Frontera." 935-5156. Room 219 Ridgley Hall.

"Heike Monogatari." 935-5011. Room 219 Ridgley Hall.

"Old Whales, New Art." Noon-1 p.m. WU Intercollegiate Theatre. 935-5858.

"The Boarders’ Food Bytes." Noon-1 p.m. The Boarders. Room 219 Ridgley Hall.

"Immmune Tolerance and The Immune Piano." Monday, Dec. 4


Film

Monday, Nov. 20

4 p.m. "Russian Film Series," "The House on the Embankment," directed by Fyodor Bondarchuk, 1922, 88 minutes. 935-5156. Room 236 Noyes Hall.

Monday, Nov. 27


Tuesday, Nov. 28

4 p.m. "Near Eastern Film Series," "Waltz with Me," directed by Alain Resnais, 1990, 104 minutes. 935-5156. Room 219 Ridgley Hall.

"Italian Film Series," "Le missioni," directed by Roberto Rossellini, 1945, 103 minutes. 935-5011. Room 252 Olin Library.

"French Film Series," "La promenade des Anglais," directed by Jean-Luc Godard, 1954, 106 minutes. 935-5156. Room 219 Ridgley Hall.

"Russian Film Series," "From Moscow with Love.," directed by Yuri Bykov, 1967, 97 minutes. 935-5156. Room 219 Ridgley Hall.

Wednesday, Nov. 29


Thursday, Nov. 30

7:30 p.m. "French Film Series," "Les Nuits d’algerie," directed by Roberto Rossellini, 1958, 90 minutes. 935-7014.

Friday, Dec. 1

7:30 p.m. "English Film Series," "Merry-go-round," directed by Alfred Hitchcock, 1936, 90 minutes. 935-4523. Room 362-2763.

On Stage

Friday, Nov. 17

5 p.m. "Festive Arts dept. musical." "Moments of Silence." Room 199 Cupples I Hall (tea 4 p.m., lecture 5-6 p.m.).

Tuesday, Nov. 21

5 p.m. "Immunology Research Seminar," "Contact-mediated Integrin activation: two facilitators, one regulator." 935-7014.

"Nanoscale Behavior of Ions in Membrane Proteins." 935-4841.

Wednesday, Nov. 29


"Mountain Air and Body Composition. " 935-4841.

Monday, Dec. 4

5 p.m. "Immunology Research Seminar," "Role of Cytokines in the Pathogenesis of Inflammatory Bowel Disease." 935-7014.

"Proteins from Chemical Evolution to Protein Evolution." 935-4841.

Wednesday, Dec. 6


Unique course ‘awakens’ budding playwrights

By LISA OTTER

Since her “rediscovery” by feminist scholars in the 1960s, author Kate Chopin (1851-1904) has emerged as a major figure in St. Louis’ rich literary history. Though her masterwork, “The Awakening”(1899), initially gained a certain notoriety for its forthrightness about issues of female sexuality, it is only in recent years that the book has become a popular and critical favorite, inspiring at least one novel, several films and a virtual armada of literary analyses.

So it is perhaps not surprising that the story of Edna Pontellier — a New Orleans matron who leaves her husband, takes a lover and otherwise scandalizes polite society — has never been brought to the stage.

Until now. Henry L. Schvey, Ph.D., professor and chair of the Performing Arts Department (PAD) in Arts & Sciences, is currently writing a full-length theatrical adaptation of "The Awakening." Auditions were held this past week and the show will debut next semester in a space directed by Annamaria Pileggi, senior artist-in-residence in the PAD, in the E. H. Hotchner Studio Theatre.

Yet Schvey, ever the teacher, hopes not to travel this uncharted territory alone, instead bringing with him some 20 dozen students of drama, literature, the history of art, creative writing and American culture.

"Drama 424: Kate Chopin’s 'The Awakening' from Page to Stage," co-taught with Daniel Shea, a Ph.D., professor and chair of Arts & Sciences, examines Chopin’s masterpiece from a critical perspective and takes students deep into the playwriting process; by semester’s end, each student will have developed a dramatic adaptation of her own.

"The magic of this kind of course is that it really makes the scholarly and the creative,” said Schvey. "Students will make an intensive study of the author’s life, work, environment and contemporaries, but will also have to find ways to make the drama on stage more than just a résumé, to make it tangible to an audience today.”

Shea, who regularly teaches 19th-century women’s fiction, pointed out that the book "would not alone for a long time, except for its notoriety for its forthrightness about issues of female sexuality, it is only in recent years that the book has become a popular and critical favorite, inspiring at least one novel, several films and a virtual armada of literary analyses."


"Fingers to Toes." Comprehensive orthopaedic review for primary care physicians. Friday, Nov. 17; 12-2:30 p.m. Student Center, 6352 Forsyth Blvd.

"Worship" Friday, Nov. 17

11:50 a.m. Catholic Mass.
Cathedral Center, 6332 Forsyth Blvd. 935-9191.

Friday, Dec. 1

11:50 a.m. Catholic Mass.
Cathedral Center, 6332 Forsyth Blvd. 935-9191.

And more...

Volleyball continues on NCAA path

Washington University’s volleyball team cruised through the first round of the NCAA Division III volleyball championship, winning the South Regional with a 3-1 defeat of Savannah College of Art & Design (SCAD) and No. 4 (AVCA) poll Emory University.

WU, ranked third in the most recent American Volleyball Coaches Association (AVCA) poll, breezed through its first match against SCAD, set up a highly anticipated rematch of the UAA championship match, in which WU defeated Emory University, 3-1, on Oct. 29. The Bears used defense to overcome the Eagles, holding Emory to a .525 hitting percentage, with the Eagles’ Kaitlyn Link hitting .347. Both teams had 60 digs, led by junior Julie Stuckelberg, who had 14. WU’s consistently solid performers also helped, as Rebecca Rostello posted 25 assists and Katie Gielow had 15 kills in 23 attempts, with just one error.

The Bears are ranked No. 6 in the most recent AVCA poll, and are 22-1 overall. Emory sets up a quarterfinal match with Wellesley College, located near Boston, Mass. Wellesley earned the right to play in the quarterfinals with wins over Gordon College and Bates College. The match will be played on Saturday, Nov. 18, beginning at 7 p.m. in the Field House. This appearance marks a return to the final eight for the Bears, in WU last appeared in the quarters in 1998, where they dropped a heartbreaking to Juniata College on their home floor, 5-2.

Runners head to championships

The women’s cross country team secured a team bid in the NCAA Division III National Championships in Spokane, Wash., with a fourth-place finish at the NCAA Midwest championship match.

Dance master Eileen Copley, longtime member of the Paul Taylor Dance Company, conducted a five-day workshop with students from the dance program in the Performing Arts Department in Arts & Sciences. Copley is in residence this week to teach students Taylor’s famous work “3 Epitaphs,” which will be performed next month as part of Washington University Dance Theatre. Her visit was made possible by the Worscek Dance Fund.
Future of Commerce

Olin showcases the future of commerce — from page 1

and using this new technology. Very few retailers on the Internet are set up for shopping through wireless channels; only a few million Americans possess the technology to engage in m-commerce; the devices involved are relatively few and connection times are slow. According to Frost & Sullivan, m-commerce is expected to grow to $27 billion in revenues in 1999 and $66.4 billion by 2005.

"The revolution is exactly the kind of business-altering development that the Center is designed to explore," said Gregory J. Hutchings, executive director of the Center and associate dean for the Olin School. "The Center will have the flexibility to explore many areas of focus and study, as having the term digital in its title implies. That's key to being important as the Internet evolves."

Arvidson is an assistant research director of the Center and Assistant Professor of Marketing for Olin. said, "We'll invite faculty to submit proposals for funding of research in areas of interest identified by the Center's Board of Advisors, in collaboration with industry partners.

testable hypotheses, command the rover over the Internet and analyze the data. The idea is to provide young people with insight into how planetary mining and rover missions specifically are planned and carried out.

Arvidson has multiple roles with the Athena mission. As Deputy Principal Investigator, he serves as a sort of vice president to Squares. Arvidson is the leader of field trial rehearsals and will oversee archiving the data from the actual 2003 Athena Science Payload at the Planetary Data System at the University of Arizona. He is also an interactive experience scientist for data and archives for the mission.

"We think of LAPIs as a way to get students actively involved with planning missions," said Arvidson. "We're encouraging young students to see how NASA works and feel a sense of participation in a major science project. It's not designed to convince them to become geologists or planetary scientists, but that want to have an exciting interactive experience.

Arvidson said that the FIDO trials are performed to make sure that the MER vehicles will be able to accomplish the tasks NASA has set for it.

"FIDO is trying to mimic what a human field geologist would do," he said. "The group of instruments we're testing is particularly powerful in characterizing the terrain and minerals present, especially in relationship to the LAPIs that may have formed in rivers, lakes or seas.

The Athena payload consists of stereo cameras on a lander vehicle and physical properties analyzer that will measure the heat emitted from the surface of the target rock, which will help determine the age of the rock. An instrument that can do this is a color microscopic imager, alpha proton A-yard.

Moessbauer spectrometers and a rock abrasion tool. Hazard-avoidance cameras mounted on the rover help it avoid obstacles in its path.

"We have a lot to rehearse in terms of getting these instruments to operate effectively," said Arvidson. "NASA has trials with FIDO every few months. Field trials performed in the spring of 1999 with LAPIs participation yielded approximately one gigabyte of data, and the rover traversed nearly two miles.

More research followed in the winter of 2000 and a third field trial that includes LAPI-3 software is scheduled for May 2001.

Emily Dea , a senior at Lansing High School in Lansing, Mich., was one of the Lansing LAPIS team her sophomore and junior years. Her group developed a proposal for FIDO, which included researching the terrain, developing mission goals and understanding the rover's limitations. While her team controlled the rover through the Internet from the school they were in the Mojave Desert in southern California, taking measurements and making general observations for the team. "During my experience in the field, I had several opportunities to talk to the engineers, geologists and scientists working on the project and ask them any questions, but I felt that my team had thought of," said Dea, who is considering coming to the University as a student in the fall, "the students' needs and the project. I felt that I was a part of NASA. I am still grateful to them for opening their doors to me and my team."

"LAPIs taught me a lot. It gave me an idea of what learning about everything from the details of the sensors on the rovers to the instruments on the rover. My team and I gained experience in creating solutions to spontaneous problems. We also got the chance to talk to professionals in other careers of the scientists. Overall, the experience was one of the best experiences of my life and I'd do it again in a second.

In all, the MER vehicles are expected to weigh more than two kilometers of the Martian surface will weigh. One of the 190 and 180 Martian days, or sols. A sol is just 39 minutes longer than an Earth day. Both Mars rovers currently are planned for launch on Delta II rockets from Cape Canaveral Air Force Station, Fla. The first mission is targeted for May 22, 2001, with the second launch slated for June 4. After a seven- and a half month cruise, the first rover will enter Mars' atmosphere Jan. 2, 2004, with the second rover bouncing to a stop on the Martian surface Jan. 20.

The rovers will reach Mars in a series of maneuvers. The MER vehicles will be sophisticated descendants of the popular, highly successful 1997 Sojourner rover, though much larger and vastly more capable.

"The MER vehicles will carry more than Sojourner and will do more sophisticated science," Arvidson said. "The MER will be one of the most exciting Mars missions because we will actually have the opportunity to search different areas of the Martian surface, and we should have exciting discoveries about Mars the rover will not be able to find in other ways."

For food thoughts

Second-year law student Klinner Lastimosa, left, and Rebecca Garcia, co-chairs of the Career Services Committee of the Phi Delta Alpha Fraternity, sort through canned food donations collected at the School of Law. This year's annual drive brought in more than 2,000 pounds of food to benefit the St. Louis Area Food Bank.
Williams named assistant dean for academic affairs at GWB

James Herbert Williams, Ph.D., has been appointed assistant dean for academic affairs at the George Warren Brown School of Social Work. A member of the faculty since 1995, Williams also was promoted with tenure.

"Williams is an exceptional professor in the department, and we are pleased that we can now recognize him for his contributions to the school," said MaryAnn L. Buder, M.D., Ph.D., dean of the School of Medicine.

Williams' research and teaching interests focus on the social problems of African-American adolescents, the collection of the Missouri juvenile justice data base, and drug use. He currently is addressing the over-representation of African-American youths in the juvenile justice system through a collaborative effort of the Missouri Juvenile Justice Advisory Group, the Missouri Department of Public Safety and the Missouri Senate Appointed Ato-Hc Committee.

In 1984, Williams received a bachelor's degree in philosophy from the University of Southern Mississippi. He received a master's degree in social work from St. Louis University and a Ph.D. in social work from the University of North Carolina at Chapel Hill, where he received the Dean's Award for Teaching Excellence.

In addition, Williams is a licensed social work supervisor in the state of Missouri.

Britton named head of access for Olin Library

Britton received a bachelor's degree in English literature and a master's degree in library and information science from Simmons College in Boston, Mass.

Trustees announce promotions, appointments

Stuart Beagn, has been named head of access for Olin Library.

Beagn was admitted to the school's master's degree program in library science and received a bachelor's degree in English literature from Simmons College.

Beagn will be responsible for the operation of the library and the management of its resources.

Service at the University of Washington in Seattle.

At the Oct. 6 meeting of the Board of Trustees, the following Washington University faculty members were appointed, on temporary or one-year contracts: one for hydrodynamics for $130,000 and the other for $70,000 for a project on flow distribution in beds with structured packing for $55,000.

Lummis, one of many companies that support CREL, awarded two companies $7,000 for a project on flow distribution in beds with structured packing for $55,000.

Williams named assistant dean for academic affairs at GWB

James Herbert Williams, Ph.D., has been appointed assistant dean for academic affairs at the George Warren Brown School of Social Work. A member of the faculty since 1995, Williams also was promoted with tenure.

"Williams is an exceptional professor in the department, and we are pleased that we can now recognize him for his contributions to the school," said MaryAnn L. Buder, M.D., Ph.D., dean of the School of Medicine.

Williams' research and teaching interests focus on the social problems of African-American adolescents, the collection of the Missouri juvenile justice data base, and drug use. He currently is addressing the over-representation of African-American youths in the juvenile justice system through a collaborative effort of the Missouri Juvenile Justice Advisory Group, the Missouri Department of Public Safety and the Missouri Senate Appointed Ato-Hc Committee.

In 1984, Williams received a bachelor's degree in philosophy from the University of Southern Mississippi. He received a master's degree in social work from St. Louis University and a Ph.D. in social work from the University of North Carolina at Chapel Hill, where he received the Dean's Award for Teaching Excellence.

In addition, Williams is a licensed social work supervisor in the state of Missouri.

Britton named head of access for Olin Library

Britton received a bachelor's degree in English literature and a master's degree in library and information science from Simmons College in Boston, Mass.

Trustees announce promotions, appointments

Stuart Beagn, has been named head of access for Olin Library.

Beagn was admitted to the school's master's degree program in library science and received a bachelor's degree in English literature from Simmons College.

Beagn will be responsible for the operation of the library and the management of its resources.

Service at the University of Washington in Seattle.

At the Oct. 6 meeting of the Board of Trustees, the following Washington University faculty members were appointed, on temporary or one-year contracts: one for hydrodynamics for $130,000 and the other for $70,000 for a project on flow distribution in beds with structured packing for $55,000.
At the heart of behavioral medicine

Robert M. Carney, Ph.D.

Robert M. Carney, Ph.D., continues his groundbreaking research at the medical school into depression and cardiac problems.

Robert Michael Carney, Ph.D.

Bern St. Louis, Missouri

Education: St. Mary's High School, University of Missouri, B.A., Psychology, 1969; Washington University in St. Louis, Ph.D., Counseling Psychology, 1978

University position: Professor of psychological medicine, Department of Psychology, Arts & Sciences.

Family: Wife, Cathy S. Carney; sons, Michael; and Jimmy.

Other interests: Rams season ticket holder, theater, Symphony season ticket holder; kids' sports; they're both soccer fanatics, and they're not satisfied with being on a single team; travel. "Before we had kids we went to the Alps. Once we drove through Norway up to the Arctic Circle to see the bears. But for now, it's mostly Disney World."

Missouri, but he eventually changed to psychology. "I had a really good class that I enjoyed, and I decided psychology might be something both that I would enjoy and that I could help other people," he said.

After college, he went to medical school and eventually completed a dissertation in counseling psychology from Washington University.

He was all set to go into clinical practice, but a job interfered. While working as a fellow in the School of Medicine, Carney began studying the medical and psychological effects of exercise. As a matter of courtesy, he went to Richard D. Wetzel, Ph.D., who was in the medical school's chief psychologist at the time and currently is a professor of neurology and neurological surgery at the school of medicine, to let him know about his research.

"Shortly after we spoke, he asked if I would be interested in a faculty position," Carney said. "Wetzel told Carney's background in counseling psychology, which deals with how people adapt to illness, various crises and other stressors in life.

"We wanted someone who was interested in the intersection between the mind and body, and Bob was very qualified," said Wetzel, professor of medical psychology in psychiatry and professor of neurology and neurological surgery. "He was bright, and interested in many of the things that interested us."

But Carney wasn't sure the Washington University Department of Psychiatry was right for him. Some friends warned him, as a psychologist in a medically oriented department, that he personally would value or be interested in the research and that he should pursue his interest in counseling psychology, which deals with the interaction of mind and body, especially as it relates to cardiac disease.

Finding value

Carney didn't set out to become a heart disease researcher. When he began his education, his primary goal was to find a field that he personally would value and feel important.

He started out as a chemistry major at the University of Washington but eventually changed to psychology. "I had a really good class that I enjoyed, and I decided psychology might be something that I would enjoy and that I could help other people," he said.

After college, he went to medical school and eventually completed a dissertation in counseling psychology from Washington University.

Carney was putting together a study validating a new depression interview with Teresa Benoist, R.N.

Robert M. Carney, Ph.D. discusses a study validating a new depression interview with Teresa Benoist, R.N.

"It's all about doing good research and being able to back up your methods and ideas with solid science." ROBERT M. CARNEY

National Institutes of Health-funded study.

"Bob Sobel was head of cardiology at the time, and he called me," Carney said. "I was a brand-new assistant professor and no head of a division or department ever called me. If he asked if I would be interested in participating in a large, multi-project grant he was putting together."

Carney began studying smoking and heart disease, looking at the link between depression and heart problems. He learned, among other things, that about 20 percent of heart patients are depressed at any given time. That compares to a 40 percent rate of 2 or 3 percent of the general population.

In 1989, he began a study in the journal Psychological Medicine demonstrating that depression doubled the risk of heart attacks and other cardiac events in patients with heart disease. That link has been his primary research focus ever since.

There's this interesting paradox in depression," he said. "If you look at someone who's depressed, you see someone who looks very slow, sedentary and withdrawn. But physiologically, they are hypertensive. Depressed people usually have elevated heart rates, increased levels of stress hormones and other signs that they are wound up inside."

"So we put together a study," he said. "We had no funding, but we were able to address the relationship between smoking and weight gain, and that became my first publication in the New England Journal of Medicine."

Looking back, Carney calls the early work with exercise psychology "the most important thing" he's done. "If you could demonstrate that you were working for certain patients, no one in the department would call you a quack scientist. It's all about doing good research and being able to back up your methods and ideas with solid science."

Smoke and stress

Although he had a wide range of interests, early in his training Carney knew he wanted to move beyond traditional psychiatry and psychology. He hoped to understand how psychological and social factors might be significant in medical illness.

His early work with exercise psychology led him there. One of his early collaborators was Exercise Psychologist Andrew Goldberg, M.D., who was interested in fat metabolism. Goldberg had found that cigarette smokers were unable to interfere with the normal activity of an enzyme called lipoprotein lipase.

The research suggested the enzyme might be connected to the weight gain many experience when they quit smoking. It seemed to open up fat cells and allow them to take in extra fat and triglycerides. Carney was interested because a large part of his clinical practice involved helping people stop smoking, and he often heard addicted smokers say that they were afraid they would gain lots of weight if they actually quit.

"So we put together a study," he said. "We had no funding, but we were able to address the relationship between smoking and weight gain, and that became my first publication in the New England Journal of Medicine."

Looking back, Carney calls the early work with exercise psychology "the most important thing" he's done. "If you could demonstrate that you were working for certain patients, no one in the department would call you a quack scientist. It's all about doing good research and being able to back up your methods and ideas with solid science."

"Bob Sobel was head of cardiology at the time, and he called me," Carney said. "I was a brand-new assistant professor and no head of a division or department ever called me. If he asked if I would be interested in participating in a large, multi-project grant he was putting together."

Carney was doing clinical research, looking at the link between depression and heart problems. He learned, among other things, that about 20 percent of heart patients are depressed at any given time. That compares to a 40 percent rate of 2 or 3 percent of the general population.

In 1989, he began a study in the journal Psychological Medicine demonstrating that depression doubled the risk of heart attacks and other cardiac events in patients with heart disease. That link has been his primary research focus ever since.

There's this interesting paradox in depression," he said. "If you look at someone who's depressed, you see someone who looks very slow, sedentary and withdrawn. But physiologically, they are hypertensive. Depressed people usually have elevated heart rates, increased levels of stress hormones and other signs that they are wound up inside."

"So we put together a study," he said. "We had no funding, but we were able to address the relationship between smoking and weight gain, and that became my first publication in the New England Journal of Medicine."

Looking back, Carney calls the early work with exercise psychology "the most important thing" he's done. "If you could demonstrate that you were working for certain patients, no one in the department would call you a quack scientist. It's all about doing good research and being able to back up your methods and ideas with solid science."

Wetzel told Carney's background in counseling psychology, which deals with how people adapt to illness, various crises and other stressors in life.

"We wanted someone who was interested in the intersection between the mind and body, and Bob was very qualified," said Wetzel, professor of medical psychology in psychiatry and professor of neurology and neurological surgery. "He was bright, and interested in many of the things that interested us."

But Carney wasn't sure the Washington University Department of Psychiatry was right for him. Some friends warned him, as a psychologist in a medically oriented department, that he personally would value or be interested in the research and that he should pursue his interest in counseling psychology, which deals with the interaction of mind and body, especially as it relates to cardiac disease.

Finding value

Carney didn't set out to become a heart disease researcher. When he began his education, his primary goal was to find a field that he personally would value and feel important.

He started out as a chemistry major at the University of Washington but eventually changed to psychology. "I had a really good class that I enjoyed, and I decided psychology might be something that I would enjoy and that I could help other people," he said.

After college, he went to medical school and eventually completed a dissertation in counseling psychology from Washington University.

Carney was putting together a study validating a new depression interview with Teresa Benoist, R.N.

Robert M. Carney, Ph.D. discusses a study validating a new depression interview with Teresa Benoist, R.N. They were interested in the research and recommended exercises. So the connection between depression and cardiac problems is both physiological and behavioral, a goal of the link between depression and heart attacks was not immediately accepted in the medical community. Many believed that feeling depressed was a side effect of a catastrophic event like a heart attack.

Cardiologist Allen Jaffe, M.D., now a consultant in cardiology and laboratory medicine at Mayo Clinic and professor of medicine at the Mayo Medical School in Minnesota, has worked with Carney since the beginning of the heart research.

"I have always been very committed to what I have found because Bob is such a rigorous scientist and also capable of taking advice about the medical side of cardiac disease," Jaffe said. "I do feel that depression is a real problem, and that's why so many of us have such high regard for his work."

While the risk factors have become clearer over the years, Carney still searches for the actual mechanism that connects cardiac and depression. In just one day, researchers will find a new story, and they are more interesting stories, but I've never profiled in these articles," joked Robert M. Carney, Ph.D. "I haven't done anything exciting in years."

The professor of medical psychology in the Department of Psychiatry is referring primarily to his life as a husband and father of two young boys, or "soccer fanatics" as he calls them.

"If I'd interviewed me 10 years ago, I would have you more interesting stories, but I've given most of those things up," he laughed. "Not that I'm complaining, but spending time with wife and kids is really what I enjoy the most."