

HEADLINES

in Utah and
the Intermountain West

White Heads Up Brain Institute

John A. White, Ph.D., was named executive director of the University of Utah Brain Institute last January. He succeeded Thomas N. Parks, Ph.D., who was appointed U vice president for research last year.

White, a biomedical engineering professor, joined the U in 2007 as a member of the Utah Science, Technology, and Research (USTAR)



John A. White, Ph.D.

Economic Development Initiative and an investigator with the Brain Institute. He studies how the brain processes information, including computational modeling of the neuronal networks that send and receive electrochemical signals in the brain, designing and constructing customized instruments that interact in real time with human subjects and biological preparations, and electrophysiological and optical techniques for recording detailed information from single neurons and large neuronal networks.

Prior to coming to Utah, White was professor of biomedical engineering at Boston University, where he also served as interim chair. He is a member of the College of Fellows for the American Institute for Medical and Biomedical Engineering, and a fellow of the Biomedical Engineering Society.

The Brain Institute, established in 2005 to coordinate neuroscience research, is made up of more than 140 investigators from various colleges at the U of U, as well as four other Utah universities. Researchers are working to discover, develop, and deliver new treatments for brain disorders, including multiple sclerosis, autism, Alzheimer's and Parkinson's diseases, depression, and addiction.



PHOTO BY KRISTIAN JACOBSEN

Knock-out Experience An interactive kiosk—providing glimpses into the pageantry of the Nobel Prize as well as explanations of the science for which Mario R. Capecchi, Ph.D., distinguished professor of human genetics and biology at the University of Utah, won the 2007 award—was unveiled at the Salt Lake City and County Building last January. Salt Lake City Mayor Ralph Becker, left, led the ribbon-cutting. Five kiosks are traveling across Utah; others are located at the Salt Lake International Airport and Salt Lake County complex.

Nursing College Welcomes New Associate Dean

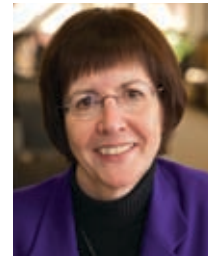
Julie E. Johnson, Ph.D., R.N., joined the U College of Nursing as associate dean for academic programs.

She replaces Susan L. Beck, Ph.D., A.P.R.N., who was named the first holder of the Robert S. and Beth M. Carter Endowed Chair in Nursing at the college last year.

Johnson has more than 15 years experience in educational administration at universities across the country. She served as associate dean, Montana State University College of Nursing; director, School of Nursing, University of Nevada, Reno; dean, School of Nursing and Dental Hygiene, University of Hawaii at Manoa; and dean, Kent State University College of Nursing.

In line with her research interests—self-care activities and health promotion for older women living in rural America—Johnson has been interim director of Montana's Center on Gerontology and interim director, Sanford Center for Aging in Reno.

She is an editorial board member of the *Journal of*



Julie E. Johnson, Ph.D., R.N.

Community Health Nursing and a reviewer for five other journals. Her professional positions include fellow in the American Academy of Nursing and secretary-treasurer for the Western Institute of Nursing.

As co-chair of the Nevada Statewide Nursing Shortage Task Force, Johnson lobbied for legislation to double enrollment in the state's nursing schools.

She also was appointed to the Commission on Collegiate Nursing Education's accreditation review committee and serves as a lead site evaluator.

Johnson received her bachelor's, master's, and doctoral degrees in nursing from the University of Texas at Austin.



PHOTO BY STEVE LETCH

Private Rooms to Open to Public University of Utah Hospital opens the doors to the new West Patient Care Pavilion July 1. The five-story expansion, with two additional stories underground, features 120 private rooms for patients in three areas: cardiovascular, women and children, and neurosciences. It also offers a new cafeteria, expansive lobby with patient admitting and outpatient pharmacy lab, administrative offices, and shelled space for future growth. The 221,329-square-foot building mirrors the Eccles Critical Care Pavilion that opened two years ago. Total cost of the expansion project is \$130 million with some \$20 million in community support raised by the University Hospital Foundation.

College of Health Adds Wellness Coaching Degree

Prevention is receiving increased attention with talk of health-care reform. With a new graduate degree program in the College of Health, Utah students will be well positioned to take on leadership roles in preventive health care.

Wellness coaching is being added this fall to the list of master's degree programs at the college. Offered through the Department of Exercise and Sport Science, the two-year non-thesis degree will include coursework in the Division of Nutrition and the Department of Health Promotion and Education.

Another new graduate program is being added in sports medicine to meet increased demand for athletic trainers and high student interest.

"Clinics around the country see wellness coaching as an option to help patients make behavioral changes. It can also save patients and clinics money," said Patricia Eisenman, Ph.D., professor of exercise and sport science, and

associate dean in the College of Health. She is collaborating with Elizabeth Joy, M.D., associate professor of family and preventive medicine in the School of Medicine, to provide students with opportunities to work on prevention in primary care clinics.

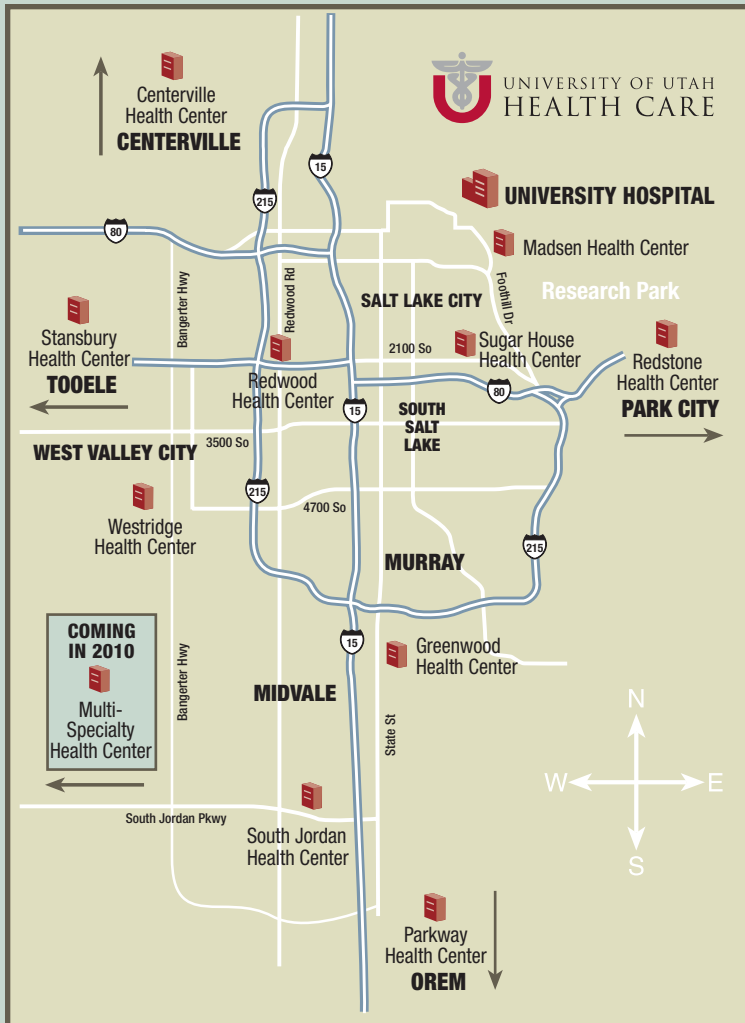
"Companies also are contracting with employers to provide wellness coaching to employees to help them prevent disease," added Eisenman. Last year, the college piloted the new degree with one student who subsequently was hired by the University's Well U program to help coach employees.

At the undergraduate level, sports medicine is a popular major in the Department of Exercise and Sport Science, due in part to the need nationwide for athletic trainers, according to James E. Graves, Ph.D., professor and dean. For the new master's degree program in sports medicine, the college is transforming two racquetball courts into a facility that will accommodate sports medicine research and clinical training, as well as offices.



PHOTO BY STEVE LEITCH

Picture Perfect Hoisting an 18,000-pound magnet through an 8-foot hole in University of Utah Hospital was a day-long event last April. The Siemens 3T MAGNETOM® Verio, which provides some of the most advanced magnetic resonance imaging (MRI) clinically available, is the centerpiece of the U's new integrated electrophysiology (EP) MRI Lab—the first of its kind in North America. The lab will aid in the diagnosis and treatment of atrial fibrillation, a heart rhythm disorder that annually affects more than 3.5 million Americans. The EP MRI Lab is a partnership between University Hospital, the medical school's Division of Cardiology, Department of Radiology and Utah Center for Advanced Imaging Research, and the University's Scientific Computing and Imaging Institute.



University Health Care to Expand into Salt Lake's South Valley

To serve the fast-growing population in southwest Salt Lake Valley, University of Utah Health Care announced plans last November to construct the first phase of a planned expansion in South Jordan.

The 180,000 square-foot multi-specialty health center, planned for the Daybreak community located in South Jordan, will include: primary and specialty care, ambulatory surgery center, imaging center, pharmacy, vision care services, and an AirMed base. It will be located on 10-15 acres next to the future Mountain View Corridor and Mid-Jordan TRAX extension, providing convenient access for patients and employees.

The University is working with Rio Tinto's Kennecott Land, developer of the Daybreak community, on a master plan for a multi-phase medical campus on up to 50 acres.

New Chair Announced for Physical Medicine

Elie P. Elovic, M.D., director of the Traumatic Brain Injury Research Laboratory at Kessler Medical Rehabilitation Research and Education Corp., in New Jersey, has been named chair of the Division of Physical Medicine and Rehabilitation in the University of Utah School of Medicine.

He replaces Joseph B. Webster, M.D., who served as interim chair at the U.

Kessler Research Lab is affiliated with the Robert Wood Johnson Medical School of the University of Medicine and Dentistry of New Jersey (UMDNJ), where Elovic served as associate professor of physical medicine and rehabilitation. In addition to directing the lab since 2003, Elovic directed Kessler's Traumatic Brain Injury Fellowship Program and twice in recent years



Elie P. Elovic, M.D.

received the UMDNJ Mentor of the Year Award.

Elovic's research interests include: the use of neuropharmacology in the management of patients with acquired brain injury; changes in the central nervous system that result from peripheral intervention to treat spasticity; and the use of functional imaging in the study of working memory and cognitive deficits after traumatic brain injury.

A graduate of Johns Hopkins University with honors, Elovic received his medical degree from the University of Pennsylvania School of Medicine, where he completed residencies in general surgery and physical medicine and rehabilitation.

His previous administrative positions include: associate director of Traumatic Brain Injury Services at Mount Sinai Hospital; director, Spasticity Clinic, Greenery Rehabilitation and Skilled Nursing Center at the Meadowlands; and associate medical director, Spasticity Clinic, JFK Hospital and Center for Head Injuries.

U Pharmacy Services Names New Leaders

Two new appointments in pharmacy services at University of Utah Health Care have been announced. Linda S. Tyler, Pharm.D., was named administrative director of pharmacy services, and Erin Fox, Pharm.D., manager of Drug Information Services (DIS).

Tyler, who served as interim director for six months, oversees pharmacy services at University of Utah Hospital, Huntsman Cancer Hospital, University Neuropsychiatric Institute, and University Orthopaedic Center, in addition to 15 outpatient pharmacies. She is a clinical professor of pharmacotherapy and will serve as associate dean for pharmacy practice in the U College of Pharmacy.

Tyler managed DIS for 22 years. Previously she served as a certified poison information specialist and coordinated continuing education at the Central Ohio Poison Control Center in Columbus, and was a clinical pharmacy faculty member at the University of Wisconsin.

She received a bachelor's degree



Linda S. Tyler, Pharm.D.



Erin Fox, Pharm.D.

and doctorate, both in pharmacy, from the U. She completed a residency in hospital pharmacy at the University of Nebraska Medical Center in Omaha.

Fox served as a drug information specialist at U Hospital for eight years and worked in the hospital's inpatient division and with the Utah Poison Control Center. She received a bachelor's degree in biology and a doctor of pharmacy, both from the U of U, and completed a residency in drug information at U Hospital.

[HEADLINES]

in the Nation

Utah Birth Defect Study Awarded \$5 Million

Three today, three tomorrow, three the day after. It's not a new nursery rhyme, but a startling statistic: more than 1,000 babies—about three per day—are born with birth defects every year in Utah. With a new \$5 million federal grant, University of Utah researchers may better understand why.

Awarded last January by the U.S. Centers for Disease Control and Prevention to the U and the Utah Department of Health, the grant focuses on how genetic and environmental factors contribute to birth defects. The state first was funded for birth defects research in 2002 when it formed the Utah Birth Defects Network. Marcia Feldkamp, Ph.D., research assistant professor of pediatrics at the U School of Medicine, directs the network, a population-based surveillance program.

"We've uncovered a critical link between abdominal wall birth defects and first-trimester infections in the mother. The funds will allow us to continue to increase our study population by at least 400 mothers and children each year," noted Feldkamp.

Birth defects are the leading cause of infant mortality in the United States, affecting an estimated 150,000 babies annually and contributing substantially to pediatric morbidity and the cost of health care.

U Research Partners Use NIH Grant to Advance Stem Cell Therapy

A \$5 million grant from the National Institutes of Health (NIH) validates a unique public-private partnership in Utah that is working to bring stem cell therapy to the point of clinical trials to treat amyotrophic lateral sclerosis (ALS).

Linda Kelley, Ph.D., professor of internal medicine and director of the Cell Therapy Facility at the University of Utah, is principal investigator on the four-year grant. She is joined by James Campanelli, Ph.D., senior director of research and development at Q Therapeutics, Inc., a biopharmaceutical company spun off from technology developed at the U of U, and Nicholas Maragakis, M.D., a U medical school graduate now at Johns Hopkins University School of Medicine, where he is researching stem cell therapy in an animal model of ALS.

The NIH grant will enable the research team to work on critical manufacturing and testing requirements necessary to gain U.S. Food and Drug Administration approval for human clinical trials. "While the University will be home to the grant," said Kelley, "the stem-cell technology that Q Therapeutics brings to the table and the clinical expertise of Dr. Maragakis are essential to the project."

"This award validates the approach being taken here at the University of Utah toward emerging technologies, such as regenerative medicine," said Jack Brittain, U vice president for technology venture development.

ALS is a progressive neurodegenerative disease that kills certain nerve cells in the brain and spinal cord. As cells degenerate, they lose the ability to send impulses that control muscle movement for speech, breathing, limb movement, and other functions. Death from respiratory failure typically occurs from two to five years after diagnosis.



Edward Clark, M.D., right, was joined in the recruitment launch by Salt Lake County Mayor Peter Corroon (with folder) and members of the U of U Vanguard Center Team.

National Children's Study Recruits in Neighborhoods

Recruitment for the National Children's Study kicked off last April with a friendly knock at the front door of Salt Lake County Mayor Peter Corroon's home.

His neighborhood was one of 15 randomly selected in Salt Lake County, where some 7,100 homes will be visited to recruit volunteers to participate in the largest study ever to assess the effects of the environment on maternal and child health. As many as 100,000 children nationwide will be studied from early life in the womb through adulthood, seeking information to prevent and treat health problems that include autism, birth defects,



heart disease, and obesity.

Salt Lake County is one of the study's seven vanguard centers located across the United States. Edward Clark, M.D., professor and chair of the Department of Pediatrics at the University of Utah School of Medicine, and medical director of Primary Children's Medical Center, is

Pharmacy Discovery Helps Students Win Venture Competition

What began as a germ of a research idea in the College of Pharmacy spread across the University of Utah campus, helping an interdisciplinary team of students win the Life Sciences Grand Prize in the Carnegie Mellon McGinnis Venture Competition last March.

Three students from the U Department of Bioengineering, College of Law, and School of Business competed against 30 teams of graduate students from 24 colleges and universities for three days in one of the nation's premier new venture competitions. The Utah students were part of the U's Lassonde New Venture Development Center, which provides unique educational experiences dealing with the commercialization of university-developed technologies.

The U students created and developed a business plan for ElutInc, a start-up implantable drug delivery company. David W. Grainger, Ph.D., professor and chair of the U Department of Pharmaceutics and Pharmaceutical Chemistry, developed the technology with his students for an implantable bone graft material that releases, or elutes, antibiotics and other drugs directly into a surgical site. The orthopedic graft biomaterial is intended to improve surgeries by reducing surgical site infections and promoting rapid bone healing.

Grainger met with the Lassonde team several times and critiqued their plans for translating the technology and communicating implant concepts. He doesn't directly share in the grand prize award—\$20,000 in cash and \$20,000 in in-kind services—but if the corporate plan the team is working on becomes a reality, his technology could be commercialized and benefit from the award.

"Commercial opportunities are contingent on the patent," said Grainger last May. "It's been filed, but that step can take years."

principal investigator in Utah.

The National Children's Study, authorized in the Children's Act of 2000, is led by a consortium of federal agency partners: U.S. Department of Health and Human Services—including the Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institute of Environmental Health Sciences of the National Institutes of Health, and the Centers for Disease Control and Prevention—and the U.S. Environmental Protection Agency (see saltlake.nationalchildrensstudy.gov).

More Moms Can Donate to Cord Blood Program

University of Utah Health Care partnered with St. Mark's Hospital in Salt Lake City last February to expand its Umbilical Cord Blood Program, providing more Utah mothers with the option of donating blood from discarded umbilical cords of healthy newborns.

Similar to bone marrow, umbilical cord blood is rich in adult stem cells, which are used to treat diseases such as leukemia, lymphoma, metabolic storage disease, and aplastic anemia. Unlike bone marrow, however, cord blood poses less risk for transplant rejection, is more readily available, and requires less stringent tissue matching. Approximately 10,000 cord blood transplants have been performed worldwide.

"In Utah, we're in a unique position because of our high birth rate to make a significant contribution to the national inventory," said Linda Kelley, Ph.D., professor of internal medicine at the University of Utah School of Medicine and director of the U Cell Therapy Facility.

About 60 percent of the cord blood units collected voluntarily through the U program is eligible for public banking. University Health Care partners with StemCyte International Cord Blood Bank in Arcadia, Calif., one of nine banks nationwide. About 10,000 cord blood units are stored in the national inventory; 150,000 are needed, according to the Institute of Medicine.

Launched in 2007 with federal funding, University Health Care's Umbilical Cord Blood Program has collected more than 946 units and is actively pursuing partnerships with additional hospitals and health systems.



Academic Winners All Around

The U of U is four-for-four in this year's *U.S. News & World Report* rankings of graduate programs: all four academic components of the health sciences placed in the magazine's 2010 edition of *America's Best Graduate Schools*.

In the report released in May 2009, the School of Medicine ranked 29th in primary care, 10th in rural medicine, and was tied for 4th in physician assistant (PA) programs. Rural medicine is a priority for the Department of Family and Preventive Medicine, which offers outreach programs and resident rotations in rural medicine, as well as a one-month clerkship with emphasis on rural practice experiences. The PA program, also in the Department of Family and Preventive Medicine, has a rural/medically underserved training program as well.

In the College of Pharmacy, where academic excellence has long been recognized by *U.S. News*, the doctorate in pharmacy (Pharm.D.) program tied for 16th best in the country this year.

The College of Nursing, also a mainstay in the *U.S. News* rankings for academic achievement, was tied for the 8th best midwifery program and tied for the 47th best master's in nursing program.

The College of Health's doctoral program in physical therapy was tied for 19th.



Link to the Latest To keep up with late-breaking health sciences news at the U of U, check the Public Affairs Web site: healthcare.utah.edu/publicaffairs/.

If you prefer social media, University of Utah Health Care is on Facebook—www.facebook.com—and, later this summer, will be on Twitter—www.twitter.com. Members may search for "University of Utah Health Care," click on "Become a Fan" for Facebook, or "Follow" for Twitter, to receive instant updates and links to news stories, photos, and videos, and join the conversation.