

[HEADLINES]

*in Utah and
the Intermountain West*

Entwistle Named New CEO of U Hospitals & Clinics

David Entwistle, an experienced hospital administrator noted for his compassionate leadership, will take the helm as chief executive officer of University Hospitals & Clinics in February.

Entwistle, senior vice president and chief operating officer of the University of Wisconsin Hospital & Clinics, replaces Richard A. Fullmer, who died in February 2006. Gordon Crabtree served as interim CEO and will return to his previous role as chief financial officer.

“David is an experienced hospital administrator and widely recognized as a rising national talent in the health-care industry,” said A. Lorris Betz, M.D., Ph.D., U senior vice president for health sciences and executive dean of the School of Medicine in announcing the appointment last November. Betz also serves as CEO of University Health Care.

At the University of Wisconsin-Madison, Entwistle was praised for providing “exceptional leadership” and championing “positive change for patients and employees. He is a role model for compassionate and thoughtful leadership,” said Donna K. Sollenberger, president and chief executive officer of the hospital and clinics.

Entwistle served six years at Wisconsin. Prior to that, he held administrative positions at the City of Hope National Medical Center in Duarte, Calif., and completed an administrative fellowship at the University of Texas M.D. Anderson Cancer Center. He is a graduate of Brigham Young University and received a master’s degree in health services administration from Arizona State University.



David Entwistle

A Time, and Place, to Remember To celebrate the first anniversary of the U of U Center for Alzheimer’s Care, Imaging, and Research—and the centennial of the first Alzheimer’s diagnosis—an open house was held last November. Some 125 community and campus members attended the event, which featured more than 25 posters describing research progress, medical imaging, support programs for caregivers, and the Memory Loss & Caregiving Resource Center, where a health educator helps families find reliable information. Below is a planned expansion to the resource center, located in the Center for Advanced Medical Technology in Research Park. The U Center for Alzheimer’s Care, Imaging, and Research is directed by Norman L. Foster, M.D., professor of neurology.



NURA ARCHITECTS, INC.



Avalanche Rescue University Health Care’s AirMed debuted avalanche transceiver technology in Salt Lake County’s Little Cottonwood Canyon in December. New long-range avalanche receivers will enable the fleet of four AirMed helicopters to search an area in 15 minutes, compared with a minimum of two hours needed by search-and-rescue ground teams. The transceivers also eliminate dangers for rescuers on the ground.

Noted Cell Biologist Leads HCI

Mary C. Beckerle, Ph.D., a cell biologist active in national and international scientific affairs, was selected as the new executive director of the University’s Huntsman Cancer Institute (HCI) last August.

Beckerle, HCI deputy director and senior director of laboratory research, replaced Randall W. Burt, M.D., who served as HCI interim director since June 2005. He continues as HCI senior director of prevention and outreach. Barbara J. Graves, Ph.D., professor and chair of the Department of Oncological Sciences, was named senior director of laboratory research. A search for an HCI deputy director is ongoing.

A U of U faculty member since 1986, Beckerle holds the Ralph E. and Willia T. Main Presidential Endowed Chair in Cancer Research, and is professor of biology and adjunct professor of oncological sciences. She serves as president of the American Society for Cell Biology, an international research organization of more than 11,000 members.

Among her many recent honors is a Senior Research Award from the American Cancer Society and being named an Established Investigator of the American Heart Association. In 2000, she was selected as the Rothschild-Yvette Mayent Award



Mary C. Beckerle, Ph.D.

Scholar at the Curie Institute in Paris and as a Guggenheim Fellow. She received the Utah Governor’s Award in Science and Technology in 2001.

Beckerle is associate editor of *Molecular Biology of the Cell* and has served on the editorial boards of the *Annual Reviews of Cell and Developmental Biology*, and *Current Opinions in Cell Biology*. (See her profile on pg. 14.)

New Chief Medical Officer Named for U Hospitals & Clinics

Thomas L. Miller, M.D., assumed the responsibilities of chief medical officer at University Hospitals & Clinics last September.



Thomas L. Miller, M.D.

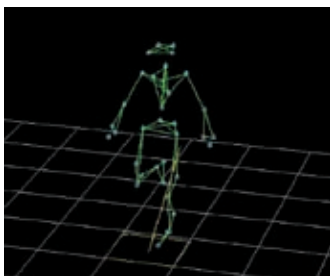
Miller, associate professor of internal medicine, served three years as executive director of the hospital’s ambulatory clinics at the U. He succeeded Neil K. Kochenour, M.D., professor emeritus of obstetrics and gynecology, who retired last June.

A graduate of Colorado College, Miller received his medical degree from George Washington University in Washington, D.C. He completed an internship and residency at the U of U, where he was chief resident of internal medicine. He then joined the U School of Medicine faculty.

Motion Analysis Facility Provides New Look at Illness

Using the same animated technology as the movie *Shrek*, researchers at the College of Health's Motion Analysis Core Facility are helping gain insights into movement problems associated with Parkinson's disease and other movement disorders.

Patients stand on a large grid with white reflective balls taped to their frame. Six digital cameras placed around the grid



record the reflections and create an exact replica of their skeletal and muscular frame, as well as their movements and forces, characterizing mobility and balance problems.

"A motion analysis provides very specific information about how an illness or injury can affect the entire body's movement," said Lee Dibble, Ph.D., P.T., associate clinical professor of physical therapy at the College of Health and co-director of the Motion Analysis Core Facility.

Located in the college's Health Professions Education Building in Research Park, the facility opened last year with funding from groups across campus, including the Center for High Performance Computing and biology department.

Valuing Patients' Time The Centerville Health Center, which celebrated its grand opening in Davis County last September, uses a new care-team model. At check-in, every patient is met by a medical assistant who stays with the individual throughout the visit. While the medical assistant updates the patient chart, the physician can focus on the patient's health-care needs. At the end of the appointment, patients are given a summary of their visit, including their diagnosis, treatment plan, tests that have been ordered, and medications. This new model, in addition to same-day appointments, makes the best use of patients' time with physicians. The Centerville Health Center, the 10th in University Health Care's community clinic network to open, specializes in family medicine and offers podiatry, pharmacy, laboratory, and X-ray services.



Researchers and clinicians from the medical school's Department of Orthopaedics, Division of Endocrinology, Metabolism, and Diabetes, and the Department of Neurology are using motion analysis to help determine the effectiveness of treatments and track disease progression. Current studies are examining mobility and balance consequences of Parkinson's disease and multiple sclerosis.

"Teams of investigators and clinicians already have seen how beneficial it is to analyze movement in this manner, both for patient treatment and research projects," said Paul LaStayo, Ph.D., P.T., associate professor of physical therapy, who co-directs the Motion Analysis Core Facility and directs the Skeletal Muscle Exercise and Research Facility in the Division of Physical Therapy.

For more information about the Motion Analysis Core Facility, see <http://www.utah.edu/mocap/>.

Calls That Save Lives, Money

An apple a day *may* keep the doctor away, but it's been proven that a phone call to the Utah Poison Control Center (UPCC) will keep down hospital costs.

Utah's rural residents save more than \$1 million a year in emergency room costs by calling the UPCC for a suspected poisoning, according to a study in a November issue of the medical journal *Pediatrics*.

For every 43 calls to a poison control center, one hospital visit is prevented, saving an average

of \$7,321 each time a trip to the emergency room is avoided, according to the journal. The UPCC, part of the University of Utah's College of Pharmacy, was among poison control centers studied in 12 states. The UPCC receives more than 50,000 calls a year, according to director Barbara Insley Crouch, Pharm.D., M.P.H. Calls are taken 24 hours a day, every day of the year: 1-800-222-1222.

A 'Healthy' Medicaid Plan

Healthy U received a clean bill of health last November, when it ranked significantly above three other Medicaid plans participating in a recent performance report.

The University of Utah Medicaid plan scored above national and state averages in four consumer satisfaction measures: overall quality of the health plan,

health care, personal physicians, and customer service. Healthy U has ranked number one in customer service for the past two years, according to Russ Elbel, quality improvement manager for the U plan.

The 2006 Performance Report for Utah Commercial HMOs and Medicaid & CHIP Health Plans evaluated selected health plans that cover some 940,000 Utahns. It was released last November by the Utah Department of Health's Health Data Committee and Division of Health Care Financing.

Elbel attributes Healthy U's success to staff who are cross-trained and better able to answer benefits and claims questions; provide outreach to members, encouraging them to use their benefits; and offer improved service to non-English speaking members.

Dream Tour for Diabetes Peter Hoogenboom, a 46-year-old cyclist with diabetes who works for University Health Care, arrived victoriously last October at the Utah Diabetes Center, where he concluded a seven-month, 10,000-mile bike tour. Winner of the 2005 Bayer Ascensia Dream Fund, Hoogenboom used his Dream Tour to raise awareness about diabetes. He was diagnosed with type 1 diabetes at age 14.



U Joins World Study of Incurable Blood Disorders

Researchers from throughout the United States—including Utah—and three other countries are joining forces to advance basic and clinical research, and identify new drug treatments.

Josef T. Prchal, M.D., U professor of internal medicine in the medical school's Division of Hematology, was awarded more than \$2 million from the National Cancer Institute (NCI) last October to fund a basic research project and conduct clinical trials at University of Utah Hospital, the University's Huntsman Cancer Hospital, and the George E. Wahlen Veterans Affairs Medical Center in Salt Lake City.

The grant is part of a \$19.6 million effort by NCI, which is funding five basic research and six clinical projects involving more than 20 researchers from the United States, Canada, Germany, and Italy. The newly created Myeloproliferative Disorders Research Consortium will maintain an interactive Web site for investigators, an international tissue bank, and an on-line database on selected incurable blood disorders.

Myeloproliferative disorders occur when the body overproduces certain types of blood cells, including red cells, platelets, and white cells. Incurable blood disorders include chronic myeloid leukemia, polycythemia vera, essential thrombocythemia, and idiopathic myelofibrosis. The consortium is focusing on the latter three, which are among "the least understood, least researched, and often misdiagnosed," according to Prchal.

"Our goal is to evaluate the genetic and molecular structure of these disorders to develop new treatments and improve the quality of life for these patients," said the U researcher, who will be involved in two other projects and will oversee the evaluation of certain studies of all blood samples for the consortium to identify new drug treatments.

\$2.7 Million in Grants Fund Diabetes Studies

Diabetes researchers at the School of Medicine were awarded three grants totaling \$2.7 million last fall to study complications related to impaired circulation and cardiovascular disease.

E. Dale Abel, M.D., Ph.D., associate professor of internal medicine and an investigator with the Program in Human Molecular Biology and Genetics (HMBG), is principal investigator on two grants from the Juvenile Diabetes Research Foundation (JDRF), each providing about \$400,000 for two years. In one study, the endocrinologist will test a protein—Netrin-1—that promotes nerve and blood vessel growth, which potentially could prevent or reverse complications such as limb loss, blindness, and cardiovascular disease.

In the other JDRF study, Abel will investigate cardiovascular complications of diabetes in mice models, including how the disease affects mitochondria, a key component in cells the body uses to convert glucose and fatty acids into energy for the heart. Heart disease is the most common cause of death among the nearly 21 million Americans with type 1 or type 2 diabetes.

With a five-year, \$1.9 million grant from the National Institutes of Health, Abel will study mouse models with cardiovascular disease for ways to reduce diabetes-caused heart failure and ischemic heart disease. He'll also research potentials for reversing the effects of small vessel disease that lead to complications of diabetes.

Co-investigators are cardiologists Sheldon E. Litwin, M.D., professor of internal medicine, and Dean Y. Li, M.D., Ph.D., associate professor of internal medicine and HMBG investigator.



Dennis J. Crouch, Ph.D., research associate professor of pharmacology and toxicology at the College of Pharmacy, directs the recently accredited Sports Medicine and Research Testing Laboratory.

U Sports Medicine Lab Accredited by World Anti-Doping Agency

The University of Utah Health Sciences Center scored a touch-down last fall when its Sports Medicine and Research Testing Laboratory (SMRTL) was named one of two labs in the United States qualified to test Olympic, Paralympic, and professional athletes for performance-enhancing and other prohibited drugs.

Since November, when SMRTL was accredited by the World Anti-Doping Agency (WADA), specimens from National Football League (NFL) players and other professional athletes, in addition to those from Olympic and other amateur athletes, have been distributed between the U and the University of California, Los Angeles, the other WADA-accredited facility.

SMRTL, located in the University's Research Park, was co-founded by the NFL and the U.S. Anti-Doping Agency, with significant financial and operational support from the U and U.S. Olympic Committee. In addition to drug testing, the lab conducts research into substances that can modify the body's biochemistry and mimic natural hormones, which might be misused in the future, according to Dennis J. Crouch, Ph.D., SMRTL director and U research associate professor of pharmacology and toxicology at the College of Pharmacy.

\$1.7 Million NIH Grant Helps Purchase Small-animal MRI

Researchers will be able to image the anatomy of a mouse throughout its entire life when Utah's first small-animal magnetic resonance imaging scanner (MRI)

arrives on the health sciences campus later this year.

The University of Utah was awarded a \$1.7 million grant from the National Institutes of Health (NIH) last August to purchase a Bruker BioSpec 7/30 MRI. The U was among 14 American research universities that received funds through the High-end Instrumentation Program at the National Center for Research Resources. The scanner, which does not harm animals, will open numerous possibilities for research in diseases, from cancer and Alzheimer's to basic science and technology development.

"Small-animal imaging is an essential bridge between genetic research, animal disease models, and human diagnosis and treatment," said Thomas N. Parks, Ph.D., professor and chair of the Department of Neurobiology and Anatomy at the medical school, and executive director of the University's Brain Institute.

Edward W. Hsu, Ph.D., principal investigator on the grant and assistant professor of biomedical engineering, is a member of the Brain Institute, which will use the new MRI to study complex neurological disorders.

Zheng-Rong Lu, Ph.D., associate professor of pharmaceuticals and pharmaceutical chemistry at the U College of Pharmacy, will use the scanner in his cancer research. He received a \$50,000 award from the R. Harold Burton Foundation last summer to augment the NIH grant, which pays most of the project cost, but requires universities to cover some expenses.

The scanner will be the centerpiece of a new School of Medicine core research facility that will make the technology available to other U researchers and students.

Home Oxygen Treatment Focus of New NIH Study

Utahns with moderate chronic obstructive pulmonary disease (COPD) will help test the effectiveness of home oxygen treatment in a new \$28 million, six-year clinical study sponsored by the National Heart, Lung, and Blood Institute, National Institutes of Health (NIH).

The U was selected as one of 14 clinical centers in the United States to participate in the Long-term Oxygen Treatment Trial, the largest randomized study of its type, which will examine whether long-term supplemental oxygen helps these patients lead longer, more active, and better quality lives. Results will help Medicare decide whether to extend coverage for the therapy; current coverage is limited to patients with severe COPD.

Some 12 million American adults have been diagnosed with COPD, which causes difficulty breathing; another 12 million are believed to be undiagnosed. The fourth leading cause of death in the nation, COPD is usually caused by smoking or long-term exposure to dust or fumes.

About 3,500 patients nationwide will participate in the clinical trial, with recruitment to begin in late 2007. At the U, Richard Kanner, M.D., professor of respiratory, pulmonary, and critical care medicine at the School of Medicine, will direct the study, supported by NIH and the Centers for Medicare & Medicaid Services.

U Team Joins Forces with Project Bioshield

Investigators from four colleges at the University of Utah are joining together to develop products that will eliminate radioactive materials from the human body.

Scott C. Miller, Ph.D., U research professor of radiobiology at the School of Medicine, received an 18-month, \$675,000 grant from the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH): one of five awarded last September under Project Bioshield, a federal initiative to speed research on medical countermeasures to protect Americans against chemical, biological, radiological, or nuclear attack.

The U team will include researchers from the colleges of Pharmacy, Engineering, and Mines, as well as the medical school, who will continue work on drugs that may be used following an attack by a nuclear device or radiological “dirty bomb,” according to Miller. Development of the drugs, already patented by the University, was supported originally by the National Cancer Institute, NIH, and the North Atlantic Treaty Organization.

In the event of an attack, individuals could inhale, ingest, or absorb through their skin radioactive atoms. These radionuclides may be excreted from the body or enter bones, organs, or other tissues, which could have significant adverse health

GSLC Develops Web-based Lessons with \$1.3 Million NIH Grant

High school students and teachers from across the country will help the University’s Genetic Science Learning Center (GSLC) develop four Web-based science curriculum modules, thanks to a \$1.3 million grant from the National Institutes of Health (NIH).

The modules will focus on cell biology, developmental biology, molecular genetics, and clinical trials. The five-year Genome Science for Health project, part of NIH’s National Center for Research Resources’ Science Education Partnership Award program, also will include educational material related to the use of animals in research.

Louisa A. Stark, Ph.D., GSLC director, is principal investigator on the grant awarded last September. U School of Medicine faculty members participating in the project will represent the departments of Human Genetics, Neurobiology and Anatomy, Internal Medicine, and Pediatrics, as well as the Office of Comparative Medicine. They will serve on advisory committees—along with members of the University’s Huntsman Cancer Institute and Department of Biology, and Westminster College of Salt Lake City’s biology department—and will present talks to teachers during summer courses and provide scientific review of materials. Students and teachers nationwide will help the GSLC develop the materials.

One of the GSLC’s Web sites—<http://learn.genetics.utah.edu>—is among the most widely used genetics education sites in the world. In 2006, the site received more than 2.7 million visits from students, 1 million from teachers, and some 750,000 from other adults for answers to science questions.

consequences, according to NIAID. The NIH agency is speeding up development of and expanding the pool of products that can bind with radionuclides and eliminate them from the body faster and in greater amounts.

Measuring Nursing Care from Patients’ Perspectives

Contributions nurses make to the safety and quality of patient care at University Health Care will be part of the focus of a rigorous

two-year national research project funded by the Robert Wood Johnson Foundation (RWJF).

Susan Beck, Ph.D., A.P.R.N., associate professor at the U College of Nursing, was awarded \$300,000 for “Measuring Nursing Care Quality Related to Pain Management.” She will develop and distribute a questionnaire to patients at three sites: the University’s Huntsman Cancer Hospital, St. Vincent’s Health-Care, Billings, Mont., and Norris Cotton Cancer Center, Dartmouth Hitchcock Medical Center in Lebanon, N.H.

Results from Beck’s study will help researchers understand how patients with pain understand and interpret questions related to their nursing care. Consumers also may use the information when selecting hospitals that can best address their needs.

RWJF anticipates that results from its Interdisciplinary Nursing Quality Research Initiative will prove useful to clinical leaders and policy-makers nationwide, who can support changes to improve the coordination and quality of nursing care in hospitals.

Wrists, Elbows, Shoulders Focus of Expanded Workplace Study

The largest epidemiological study of common workplace disorders—carpal tunnel syndrome and tennis elbow—got a shot in the arm last December, when the University of Utah School of Medicine and the University of Wisconsin won a \$1.45 million grant from the National Institute for Occupational Safety and Health, National Institutes of Health, to expand the study.

Shoulder tendonitis will be added to the list of disorders in the three-year project. “The study will be a mechanism to both quantify risk factors and provide information to develop effective programs to prevent these and other disorders,” said Kurt T. Hegmann, M.D., M.P.H., co-principal investigator and U research associate professor of family and preventive medicine, who is serving as the study’s epidemiologist.

Researchers will follow more than 1,000 workers in Utah and Wisconsin to analyze workers’ jobs in detail; analyze job factors that predict development of the three disorders and other musculoskeletal disorders; validate existing job analysis methods; and construct new job analytical methods that might prevent these diseases in a broad array of industries.

The Utah study is based at the U of U Rocky Mountain Center for Occupational & Environmental Health with assistance from the Department of Family and Preventive Medicine, and Division of Physical Medicine & Rehabilitation in the School of Medicine; University Hospital’s Hand Clinic; and the U Department of Mechanical Engineering. The University of Wisconsin-Milwaukee and the Medical College of Wisconsin are collaborating on the project.

