A bright future in medicine begins with knowing its past

By Sara Reese

In a discussion that ranged in time frame from the mid-1800s to post-Hurricane Katrina, Bryant Boutwell, associate vice president for accreditation and international programs at the University of Texas Health Science Center at Houston, presented lessons from the life and teachings of Sir William Osler on Monday, July 27.

Speaking to an audience of students, faculty and staff in the Aresty Conference Center, Boutwell, who holds the John P. McGovern, M.D., Professorship in Oslerian Medicine, discussed the importance of Osler, who practiced medicine at the turn of the last century.

“The skills that Osler promoted can benefit us today,” Boutwell said. “Long before Stephen Covey, Osler figured out how to get a lot done by building teams and facing challenges.”

Boutwell described Osler’s pursuit of medical professionalism from his early days in a small Canadian town to his years at Oxford University, where he was the Regius Professor of Medicine. According to Boutwell, Osler described medicine as a “calling that will exercise your heart and mind equally.”

Boutwell outlined Osler’s tenets of health care professionalism, which included: subordinating self-interest to the interest of others; responding to societal needs; exemplifying core humanistic values; and reflecting upon actions and decisions, among others.

He also emphasized Osler’s commitment to high ethical and moral standards for medical professionals. “Some of his students just wanted black and white guidelines—what is legal and not legal,” said Boutwell. “But Osler believed that a lot of health care is practiced in the grey area, so adhering to a strict moral and ethical code is very important.”

By studying Osler’s life and work, Boutwell identified eight charges that healthcare professionals should undertake. “They include finding mentors, finding a calling, managing time well, being positive, maintaining commitment to learning and teaching, caring carefully, communicating well and seeking balance between work and personal life,” said Boutwell.

Boutwell brought Osler’s teaching into the present day by discussing the UT Health Science Center’s response to recent natural disasters, Hurrican Katrina and Rita, which struck the U.S. Gulf Coast area in 2005. He pointed out that university faculty, staff and students worked together and learned that with great challenges come great opportunities.

“It doesn’t matter where you are, or what your position, you can apply these skills,” said Boutwell. “Osler provided a road map for professionalism, and a way for all of us to accomplish great things.”

Oslerian medicine expert Bryant Boutwell discusses the habits, skills and qualities that made Sir William Osler such a pivotal and influential physician in the 19th century—and ever since. Boutwell made his remarks at a July 27 lecture at the Aresty Conference Center, hosted by the USC Health Sciences Public Relations and Marketing Office.

NCI awards USC drug study $3.5 million

By Leslie Ridgeway

Alan L. Epstein, professor of pathology, recently received an award of $3.5 million for a drug development project through the National Cancer Institute’s Rapid Access to Intervention Development (RAID) program.

Epstein’s breakthrough discovery is aimed at helping patients with metastatic melanoma and renal cell carcinoma, diseases that affect more than 50,000 people in America every year.

The reagent he developed along with Peisheng Hu, assistant professor of research pathology, is an analog of Interleukin-2 (IL-2) which is an important therapeutic for cancer patients. Current therapy with IL-2, however, is limited due to its severe toxicity and side effects. Epstein’s development was selected by the NCI due to its potential to eliminate the toxicity of the drug.

“NCI picked this molecule because it is curative in many people,” he said. “If we can reduce its toxicity, we can help more patients. Only 14-15 molecules are in the RAID program, so receiving this award is quite prestigious.”

Epstein will serve as an advisor to the NCI team that will do development work, toxicology studies and other tasks to bring the discovery from bench to bedside. The therapy is expected to be ready for patients in two years.

Epstein worked with the USC Stevens Institute for Innovation, which managed the intellectual property portfolio for the discovery and facilitated a licensing agreement with Pivotal Biosciences, a Los Angeles-based, investor-backed biotechnology start-up company working to develop innovative low toxicity therapies for cancer. Epstein is on the company’s management team.

Study sheds new light on schizophrenia risk

By Meghan Lewit

An international research consortium that includes researchers from the Keck School of Medicine has discovered that many common genetic variants contribute to a person’s risk of schizophrenia and explain at least a third of the risk of inheriting the disease.

This discovery provides the first molecular evidence that this form of genetic variation is involved in schizophrenia. The researchers also found that many of these DNA variations also are involved in bipolar disorder.

The findings, reported by the International Schizophrenia Consortium and published online in the journal Nature, represent a new way of thinking about the genetics of psychiatric diseases, which seem to involve not only rare variants but also a significant number of common ones as well.

Schizophrenia is a common and often
One-finger exercise reveals unexpected limits to dexterity

By Eric Mankin

“Push your finger as hard as you can against the surface. Now as hard as you can but move it slowly—follow the ticking clock. Now faster. Now faster.”

These were the commands for volunteers in a simple experiment that casts doubt on old ideas about mechanisms to control hand muscles.

Complete understanding of the result may help explain why manual dexterity is so devastating to aging and disease, and even help design more versatile robotic graspers.

A research team led by USC’s Francisco Valero-Cuevas reports the paraconsistent result in the Journal of Neuroscience.

“We expected to find,” said the report, “that maximal voluntary downward force would scale with movement speed. Surprisingly, maximal force was independent of movement speed.”

The observation challenges theories that date back nearly 70 years about how properties of muscles influence their everyday function, and how “redundant” our bodies are.

According to Valero-Cuevas, who holds a joint appointment in the USC Viterbi School of Engineering’s department of biomedical engineering and the USC Division of Biokinesiology and Physical Therapy, in many tasks muscle force is affected by physiological “force-velocity” properties that weaken muscles as they move faster.

“That is why your bicycle has gears, and why as a child you could not speed up and why as a child you could not speed up on the school bicycle. The explanation proposed by Valero-Cuevas showing how other ordinary manipulation tasks are challenging to the nervous system. That is why your bicycle has gears, and why as a child you could not speed up.

The result may help explain why manual dexterity is so devastating to aging and disease, and even help design more versatile robotic graspers.

In addition, they suggest to engineers that adding redundant motors to robots may actually be the key to making them dexterous.

The detailed interactions among muscles and body mechanics are complex and defy easy mathematical modeling at this time, he adds, but further study may offer clues.

The research was supported in part by grants from the National Science Foundation and National Institutes of Health.

RISK: Surprisingly, schizophrenia-related variants were found to be common in people with bipolar disorder

Continued from page 1

devastating brain disorder characterized by persistent delusions and hallucinations. It affects about 1 percent of the world’s population and usually strikes in late adolescence or early adulthood.

Despite the availability of treatments, the course of the illness is usually chronic, and response to treatments is often incomplete, leading to prolonged disability and personal suffering.

Family history, which reflects genetic inheritance, is a strong risk factor for both schizophrenia and bipolar disorder, and it has generally been assumed that dozens of genes, along with environmental factors, contribute to disease risk.

Formed in 2006, the International Schizophrenia Consortium is led by senior researchers from 11 institutes in Europe and the USA.

Professors Michele T. Pato, Della Martin Chair in Psychiatry and director of the Center for Genomic Psychiatry, and Carlos N. Pato, Franz Alexander Professor and chair of the Department of Psychiatry, both members of the Zilka Neurogenetic Institute at the Keck School of Medicine, led the USC team of investigators.

In the current study, the researchers tested hundreds of thousands of genetic variants (single nucleotide polymorphisms) in more than 3,300 individuals with schizophrenia and 3,600 individuals without the disorder. The work used novel analytical techniques based on theoreti cal models developed by consortium members Naomi Yap, and Peter Visscher, of the Queensland Institute of Medical Research, Brisbane, Australia.

USC’s Center for Genomic Psychiatry directs two major projects in the genetics of mental illness: the Genomic Psychiatry Cohort study and the Portuguese Island Collection.

The Portuguese Island Collection was an integral population in these studies and has been done in collaboration with the University of Coimbra and the psychiatry services of the Azores and Madeira in Portugal.

Other authors contributing through USC include: Helena Medeiros, Frank Middleton, Célia Carvalho, Christopher Morley, Ayman Fanous, David Conti, James A. Knowles, Carlos Paz Ferreira, Antonio Macedo and M. Helena Azevedo.

“Our studies that have focused on the Portuguese Island have been extremely fruitful in identifying these genetic factors,” said Carlos N. Pato.

“Combining the Portuguese Island populations with others from the International Schizophrenia Consortium helped define the importance of these findings,” he added.

The most critical—and surprising—finding of the study was that the same large group of genetic variants was more common in all groups of schizophrenia patients, even though the DNA samples were collected by different investigators and tested in different laboratories.

This discovery that these schizophrenia-related variants were also common in people with bipolar disorder was particularly striking, since the two disorders are considered to be distinct, although related, conditions.

“The findings that show an overlap in the genomic risk for schizophrenia and bipolar disorder shed new light and hope on our understanding of the genetics of these disorders and may clarify strategies for new treatments,” said Michele T. Pato.

Thomas Insel, director of the National Institute of Mental Health, which partially funded the study, added, “These new results recommend a fresh look at our diagnostic categories. If some of the same genetic risks underlie schizophrenia and bipolar disorder, perhaps these disorders originate from some common vulnerability in brain development.”
The Weekly NEWSMAKERS

Etcetera

USC Discretionary Cards. Parking is available in the Biggy Structure, Lot 70 or Lot 71.

Professor Emeritus Laurence "Larry" H. Kedes, William M. Keck Professor of Biochemistry & Molecular Biology and Medicine, and founder and former director of the Keck School's Institute for Genetic Medicine, recently received two high honors from Wesleyan University—one of them setting a historic precedent.

During Wesleyan's 177th commencement, the university awarded an honorary bachelor's degree for the first time—to Kedes. Recognized for his outstanding academic achievements, Kedes departed Wesleyan University in 1958 after only three years because Stanford Medical School was eager to enroll him. Receiving this degree fulfilled a lifelong wish.

A video link to the honorary degree ceremony can be found at http://tinyurl.com/krp5t3.

In a separate ceremony, Kedes received Wesleyan University's Distinguished Alumni Award in recognition of his professional achievements in science and referred to him as "one of the world's foremost molecular biologists."

USC University Hospital and USC Norris Cancer Hospital have received recognition as part of a national program aimed at helping patients and families make informed decisions about the quality of the respiratory care services available in hospitals. Hospitals that earn the designation adhere to strict respiratory care service guidelines to ensure patient safety. About 15 percent of U.S. hospitals have applied for and received the award.

A new USC Norris fundraising tool is now available for use—USC Norris Tribute Funds. USC Norris Tribute Funds is a micro-Web site which allows individuals to create their own fundraising pages, thus putting a personal face on the organization and empowering constituents to raise funds.

The pages operate in a similar manner to walk-a-thon fundraising Web pages. Three types of funds are available: In Memory, and In Gratitude (to a doctor, nurse, caregiver, or friend).

To visit the site, go to: www.uscnorris.com/NorrisTributes. A flyer promoting this new tool can be downloaded, and professionally printed postcards will be available soon.

Winston receives physical therapy profession’s top honor

By Sara Villagran

Carollee Winston, professor of biokinesiology and physical therapy, recently delivered the 40th annual McMillan Lecture, the highest honor bestowed by the American Physical Therapy Association (APTA) on an individual.

Winston, director of research in the USC Division of Biokinesiology and Physical Therapy, where she also directs the Motor Behavior and Neurorehabilitation Laboratory, delivered the lecture on June 11 at the annual conference of the APTA in Baltimore.

During her lecture, "The Best We Can Be is Yet to Come," she asked a room packed with physical therapy clinicians, researchers, educators, and students, "How can our profession achieve its full potential?"—and addressed three concepts she said are needed for the profession of physical therapy to achieve its full potential.

First is to invest in building strong academic centers in physical therapy. Second is building effective academic-clinical partnerships. Third is developing interdisciplinary collaborations with engineers, medicine, medicine, behavioral scientists and other health care professionals," she said.

"To read a transcript of the lecture, visit: tinyurl.com/mmnk7.

Keck School names Moffatt director of finance and budgeting

The Keck School of Medicine’s administration and finance team recruited Lauren Moffatt as director of finance and budgeting for the integrated practice plans in July.

She will work closely with Ted Budge in his continuing role as director of finance and budgeting for the Keck School. Both Moffatt and Budge report directly to Coreen Rodgers, chief operating officer.

In this role, Moffatt will work closely with all clinical chairs and administrators to support the financial progress of the practices in FY10, and to provide assistance in the overall asset transfer arrangements over the next few months.

Moffatt has an 18-year record in health care consulting and academic medical center sectors. Most recently, she has worked for Ernst and Young as senior manager for health science advisory services, providing consulting services to academic medical centers, hospitals and private practices, including financial, revenue cycle and physician affiliation strategies and analysis. Previously, she spent 11 years at UT Southwestern Medical Center at Dallas in clinical practice, revenue cycle and financial management.

Moffatt received an M.B.A. in finance and accounting from Sam Houston State University. She earned the prestigious Certified Medical Practice Executive designation from the American College of Medical Practice Executives, the standard-setting and certification organization for group practice professionals, and is a published author and national presenter on physician revenue cycle topics.

Moffatt is available to assist all clinical departments with any integration, budgetary or financial questions and issues. She can be reached at Lauren.Moffatt@keck.usc.edu and (323) 442-2169.

The Weekly NEWSMAKERS

A July 22 Time Magazine article featured an asthma study led by Rob McConnell, which found that children with stressed-out parents and exposure to air pollution have a higher risk of asthma than those who are just exposed to air pollution. The widely carried study was also covered by The Centers for Disease Control and Prevention’s recent recommendations.

A July 23 Science magazine article quoted Richard Bergman about insulin resistance.

On July 24, La Opinion quoted Michael Cousineau in a story about likely budget cuts to the state’s Healthy Families Program.

A July 24 Los Angeles Times article about making the air healthier in the home quoted Jonathan Samet about having houses checked for radon exposure.

A July 28 KPCC “Air Talk” radio show featured Michael Goran discussing obesity as related to the Centers for Disease Control and Prevention’s recent recommendations.

A July 28 Los Angeles Times article quoted Astrid Veger about a child fatality in which a social worker allegedly failed to act on a nurse practitioner’s suspicions of abuse.

On July 28, Fox 5 News (Las Vegas) quoted Philip Lumb discussing the risks of using drugs in a story about the investigation into Michael Jackson’s death.

A July 28 Ventura County Star article featured a story on six Keck School of Medicine of USC students who participated in Community Memorial Hospital’s (Ventura) community doctor program.

A July 31 National Public Radio’s “All Things Considered” feature quoted Philip Lumb about Michael Jackson’s use of the drug propofol.

An Aug. 1 Los Angeles Times article quoted Astrid Veger about a child fatality in which a social worker allegedly failed to act on a nurse practitioner’s suspicions of abuse.

An Aug. 2 Los Angeles Daily News article quoted Sean Henderson about therapeutic hypothermia, used to help prevent brain damage when blood flow stops.

An Aug. 3 Santa Rosa Press Democrat article featured Brian Schmidt, Keck School of Medicine alumnus, and director of Santa Rosa Memorial Hospital’s trauma program.
Calendar of Events

This Calendar of events is also online at www.usc.edu/hsccalendar for the Health Sciences Campus community.

Monday, Aug. 10

Tuesday, Aug. 11
1 p.m. ZNI Seminar Series. “Multidimensional Imaging: Approaches to Study Cellular Processes In Vitro in the Immune System.” Simon G. Watkins, Univ. of Pittsburgh. ZNI 112. Info: (323) 442-2144

2 p.m. ZNI Seminar Series. “The Use of Contemporaneous Ocular Imaging to Reveal Molecular Pathways Regulating Contractile Events in the Pulmonary Vasculature.” Claudette M. St. Croix, Univ. of Pittsburgh. ZNI 112. Info: (323) 442-2144

Wednesday, Aug. 12
8:30 a.m. “PFT I.” Ami Oren, USC. GHN 11-321. Info: (323) 226-7923

10 a.m. ZNI Seminar Series. “Multiphoton Imaging of Organ Functions In Vivo.” Janus Piot-Piotelli, USC. ZNI 112. Info: (323) 442-2144


11 a.m. – 3 p.m. HSC Farmers’ Market. Pappas Quad. Info: (323) 442-2830

Friday, Aug. 14
8 a.m. CHLA Grand Rounds. “Pediatric Obesity and Fatty Liver Disease: Old Disease with New Faces.” Jamie R. Wood and Sylvia Marie Lobele, USC/CILA GCELA. Saban Research Building Auditorium. Info: (323) 361-2935

Monday, Aug. 17

Wednesday, Aug. 19
8:30 a.m. “Sleep Breathing Disorders.” Ricardo Jeaneret, USC. GHN 11-321. Info: (323) 226-7923

Friday, Aug. 21
8 a.m. CHLA Grand Rounds. “Building Tomorrow in Mongolia: How a Small Group of CHLA Faculty and House Staff Made a Difference.” Richard Mackenzie and Lawrence Ross, USC/CHLA. CHLA: Saban Research Auditorium. Info: (323) 361-2935

8:30 a.m. “Pneumonia.” Thomas Boylen, USC. GHN 11-321. Info: (323) 226-7923

11 a.m. Hematology Grand Rounds. “Acquired Platelet Disorders.” Casey O’Connell, USC. IPT C3J103. Info: (323) 365-3950

11 a.m. Gastrointestinal Grand Rounds. “Case Presentations.” Michael Chou, USC. OPT ASC129. Info: (323) 499-7995

Wednesday, Aug. 26
8:30 a.m. “Introduction to Clinical Research.” Jonathan Sumit, USC. GHN 11-321. Info: (323) 226-7923

Friday, Aug. 28

8:30 a.m. “Cystic Fibrosis.” Adupa Rao, USC. GHN 11-321. Info: (323) 226-7923


Saturday, Sept. 19
10 a.m. – 5 p.m. The 4th Annual Medical Student Leadership Conference. “Your Futures in Medicine, Business, Medicine or Medicine?” Various speakers. KAM Mayer Auditorium. Info: www.cmcmct.org/studentleadership

Notice: Deadline for calendar submission is 4 p.m. Monday to be considered for that week’s issue—although three weeks’ advance notice of events is recommended. Please note that timely submission does not guarantee an item will be printed. Send calendar items to HSC, Weekly, KAM 400 or fax to (323) 442-2832, or e-mail to eblauausc@usc.edu. Entries must include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location, and a phone number for information.

Consumer Reports ranks USC’s hospitals as best in L.A.

USC University Hospital and USC Norris Cancer Hospital ranked first and second, respectively, among Los Angeles hospitals in Consumer Reports’ new ratings of more than 3,400 hospitals nationwide. USC University Hospital and USC Norris Cancer Hospital ranked in the top 5 percent of 310 California hospitals in the magazine’s first-ever ratings, published Aug. 3 on the Consumer Reports Health Web site—www.consumerreports.org/health. University Hospital also ranked significantly over the national average in the magazine’s rating of 48 teaching hospitals for patient satisfaction.

“it’s an honor to know that our patients think so highly of us, and this is due to the dedication of our hospital personnel and physicians,” said Mitch Green, CEO, USC University Hospital and USC Norris Cancer Hospital. “The ratings show us we’re going in the right direction and will help us focus on improving and enhancing the patient experience across the USC clinical enterprise. Providing great service to our patients is our highest priority.”

The ratings, based on the federal government’s Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) and the Dartmouth Atlas of Healthcare, assess hospitals based on criteria including: patient communication with doctors and nurses, pain management, information about medications, discharge information, and whether patients would recommend the hospital to family and friends.

“When Consumer Reports says a product is good, people listen,” said Carmen A. Policillo, dean of the Keck School of Medicine of USC. “The top ranking among teaching hospitals affirms the value of the education we provide here at Keck.”

Both USC University Hospital and USC Norris Cancer Hospital ranked well above average in categories of physician and nurse communication, as well as pain management, attentiveness of staff and cleanliness of rooms.

In case of an emergency...

Call the Emergency Information Phone: 213-740-9233 The emergency telephone system can handle 1,400 simultaneous calls. It also has a backup system on the East Coast.

Visit the USC Web: http://emergencyusc.edu This page will be activated in case of an emergency. Backup Web servers on the East Coast will function if the USC servers are incapacitated.

USC Health Sciences Public Relations and Marketing 1975 Zonal Ave. KAM 400 Los Angeles, CA 90033

Non-Profit Organization U.S. POSTAGE PAID University of Southern California

AUGUST 7 • 2009