Ming Hsieh Institute Symposium explores nanomedicine

By Ryan Ball

Small medicine was the big idea at the Health Sciences Campus. The USC Ming Hsieh Institute for Engineering Medicine for Cancer Symposium on Sept. 29. The inaugural event focused on bridging research in engineering and the sciences with clinical needs, as well as partnering with industry in the quest to develop better therapies.

USC President C. L. Max Nikias delivered the opening remarks and introduced USC Trustee and alumnus Ming Hsieh, who established his namesake Institute with a $50 million gift in October 2010.

“Ming Hsieh acknowledged the symposium’s various presenters from USC’s Viterbi School of Engineering, Keck School of Medicine and School of Pharmacy. “This represents cooperation, teamwork and a grand effort on behalf of our Health Sciences and University Park campuses to represent one united USC,” he remarked.

The keynote address was delivered by Mauro Ferrari, president and CEO of the Methodist Hospital Research Institute in Houston. Ferrari is an internationally recognized expert in the development, refinement and application of biomedical nanotechnology.

“Thank you for your hard work and dedication. We are all excited about what you have all accomplished,” he said.

The ambitious goal of the USC Ming Hsieh Institute is to make USC “a leader in cancer research that bridges medicine, engineering and the sciences,” Nikias said. “Thanks to Ming, we are well on our way to conducting integrated transformational research that will bring recovery and renewed hope to the lives of cancer patients.”

Ming Hsieh concluded with praise for USC and its “The idea for the grant proposal was spurred when Land-O’Lifting attended a lecture given by Borok on studying purified lung epithelia in rats. Afterward, Land-O’Lifting approached Borok with the idea of studying human epithelia (cells from the wall of the lung) using epigenetic science.

“Any new thing to do because it requires the ability to analyze thousands and thousands of genes at the same time,” Borok explained.

“We’re in a unique position of having the USC Epigenome Center. It’s bringing together two different areas of expertise to be able to do something that neither of us could do on our own,” Land-O’Lifting added. “The grant really came about because we’re so interactive at USC. The team spirit is really strong here. I’ve seen a difference between USC and other places that I’ve worked. I hope that more projects like this will come to fruition.”

NIH awards Keck School researchers $3.5 million to study lung cells

By Amy E. Hamaker

Researchers at the Keck School of Medicine recently received a $3.5 million, five-year grant from the National Institutes of Health to study lung biology, and Zea Offringa, associate professor of medicine, and Beiyun Zhou, assistant professor of medicine, celebrate their recent NIH grant.

They will also compare those cell lines to identify genome-wide changes in lung epithelia. They also plan to use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.

Researchers will also use RNA sequencing to identify gene expression changes in lung cells that might be associated with lung disease.
By Leslie Ridgeway

Low blood sugar influences the body’s ability to resist high-calorie food, especially in obese individuals, according to research conducted by Keck School of Medicine and Yale University faculty.

Research conducted by Kathleen Page, assistant professor of medicine in the Keck School Division of Endocrinology, while at Yale University, indicates that the area of the brain regulating impulsive behavior is less able to fight temptation for a big slice of pizza or a box of chocolate chip cookies when blood glucose is low. Glucose is the brain’s primary fuel source.

Page is one of the lead authors of the paper “Circulating glucose levels modulate neural control of desire for high-calorie foods in humans.” The study was published online Sept. 19 in the Journal of Clinical Investigation.

“We’ve all experienced it—we skip breakfast, we’re starving at lunch, and the first thing we usually find to eat is unhealthy.”

—Kathleen Page, assistant professor of medicine

Researchers have known for years that the brain’s primary fuel is insulin. Using functional magnetic resonance imaging (fMRI), the researchers looked at which areas of the brain were activated when the test subjects viewed pictures of different kinds of foods, from fatty foods like cake and ice cream to more healthy choices such as salads and fruit. The subjects rated their desire for the foods.

All the test subjects desired the higher-calorie foods more when glucose levels dropped below normal. The brains of obese people in particular showed a lack of inhibition of impulsive desire for food. “The prefrontal cortex is the part of the brain that says ‘Stop eating,’” Page said. “When blood sugar levels are low, that area of the brain is less activated. Obese individuals lack this prefrontal brain activation even when sugar levels were normal. We don’t know if obesity changes the way the brain responds, or if it responds this way because of obesity.”

Though more research is needed to determine exactly what obese people’s brains respond differently to low blood sugar, the message for most people is: Give the brain a steady supply of fuel to prevent overeating.

“Eating healthy food that maintains glucose levels is the key,” said Page.

The research was funded by the National Institutes of Health.

Avon Foundation for Women awards Keck School clinic $125,000

Women with little or no insurance who have a family history of breast and ovarian cancer are the beneficiaries of an award of $125,000 to the Keck School of Medicine from the Avon Foundation for Women.

The funding is one of five “safety net” grants awarded during the Avon Walk of Santa Barbara, which took place on Sept. 19 and raised a total of $4.6 million for breast cancer research.

The safety net grants are part of the Avon Safety Net Hospital program, which comprises more than 100 hospitals and community clinics nationwide supported by the Avon Foundation to assist with access to high quality breast health services for women and men with no insurance or other resources.

The funding donated to the Keck School will support the Avon Familial Breast and Ovarian Cancer Clinic. This clinic at Los Angeles County-USC Medical Center aims to give patients the same high-quality services available in the Lyne Cohen Preventive Care Clinic for Women’s Cancer at USC Norris Cancer Hospital, said Heather Macdonald, assistant professor of clinical obstetrics and gynecology and breast surgery at the Keck School.

“This is the first clinic of its kind in a public hospital in Los Angeles County,” said Macdonald, who directs the clinic with Charite Ricker, genetic counselor. “We are building a medical home for women who have a family history of these cancers.

They feel like sitting ducks, watching cancers run through their families, waiting until it’s their turn. We can support them, educate them, empower them and help them empower each other.”

The clinic offers patients surveillance services for early detection as well as prevention strategies including medication, surgery and reconstructive surgery. The grant enables the program to build a database of patients, hire a data manager who follows up on patients’ test results and a nurse navigator who serves as a point person for patients.

“These women have tragic stories,” said Macdonald. “They are often primary caregivers, taking care of multiple aunts, sisters, cousins and parents who have suffered and died from cancer. Their fear is palpable. We are creating a robust system that we hope will address the medical, psychological and social issues affecting their access to the best medical care.

After two years of recruiting patients, we have a wait list of more than 100 women.”

For additional information on the Avon Familial Breast and Ovarian Cancer Clinic, call (323) 226-2289.

The Lyne Cohen Preventive Care Clinic for Women’s Cancer at USC Norris Cancer Hospital is a specialized women’s care facility that combines research, screening and clinical care for women who are at risk for both ovarian and breast cancers. Patients receive comprehensive breast and gynecologic exams, access to some of the latest clinical trials, genetic counseling and psycho-social counseling.


For information on the Avon Foundation visit www.avonfoundation.org.

Benefits/HR appointments now available

Staff members from both Benefits and HR are now available for counseling or special meetings in the new Soto Building, by appointment only.

However, most benefits-related and HR support services that had been housed at KAM 409 are now provided out of the USC Field House (CUB 200), so there is no drop-in option. Please note that there is no need to drop off paperwork as benefits transactions can be completed online via eTrac, or by fax or phone.

Contact Benefits at benefits@usc.edu for more information or see the website at www.usc.edu/benefits where many questions are answered. For HR questions, please contact your designated HR Partner. The HR Partner contact list is at http://www.usc.edu/dept/personnel/

STRIKE: Patient safety is hospital’s priority

Continued from page 1

Complimentary meals will be provided during the strike, so that employees do not have to leave the facility for lunch or dinner breaks.

Hospital staff are working with physicians to minimize the number of surgical cases scheduled for Oct. 11 through Oct. 13. The Outpatient Surgery Center will be closed on Oct. 12. A Command Center will be activated at USC University Hospital from Tuesday, Oct. 11, through the duration of the strike to address any issues that may arise during this period.

“We are working to reassure our patients and their families that patient safety remains our highest priority in the days ahead and every day,” Creem said. “Likewise, we are reminding ourselves and our colleagues about our shared commitment to coming to work so that we may provide the personal care, compassionate care that is the hallmark of our USC hospitals.

“We are disappointed with NUHW’s decision to strike, and we stand by the proposals we have presented at the negotiating table. We are eager to return to the negotiating table as soon as NUHW is willing.”
Massry Prize Laureates to discuss protein folding research Oct. 13

Proteins are the topic for the 2011 Massry Prize Laureates’ Lectures, to be held on Thursday, Oct. 13, at Aesty Auditorium from noon to 1:30 p.m. (A reception is scheduled for 11:30 a.m.) Massry Prize winners F. Ulrich Hartl, of the Max Planck Institute of Biochemistry, and Arthur Horwich, of Yale University, will present details of their research into how proteins fold.

Proteins are made of long chains of amino acids and fold to form specific shapes that help the protein carry out its specific function. Misfoldings in proteins can cause organ malfunction and neurodegenerative diseases such as Parkinson’s disease and Huntington’s disease. Previously, it was believed that proteins spontaneously folded into stable structures unfolded as collaborators, Hartl and Horwich made the discovery that complex protein machines called chaperones manipulate newly synthesized proteins into the specific shapes needed for a particular purpose.

Hartl’s presentation, “Chaperone-assisted protein folding in health and disease,” will focus on a class of chaperones called chaperonins, which provide nanocompartments for single protein molecules to fold in isolation, and the drugs that are being researched to activate this chaperone system.

In his presentation, “Chaperonin-mediated protein folding,” Hartl will discuss his initial research with Hartl regarding a mutant protein folding, “Massry2011.”

By Valerie Zapanta
USC celebrated the kickoff of Breast Cancer Awareness Month on Oct. 1 at the Coliseum’s USC Trojan football game against Arizona. Before the game, several breast cancer physicians, patients and survivors volunteered at The USC Norris booth and distributed giveaways and information on breast cancer services. The day’s events were in recognition of the researchers, physicians and patients who fight against breast cancer every day.

“Today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

Doctors of USC booth and distributed giveaways

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.

The highlight of the day was when Trojan fans saluted USC breast cancer physicians, patients and survivors during a special halftime appearance on Oct. 1 at the Coliseum.

I remembered those words as I stood on the field waving to the cheering crowd at halftime.

I felt honored and privileged to represent today’s events recognize not only our patients and physicians, but also the nurses, technicians and researchers, who devote so much of themselves to finding a cure to ending breast cancer. I am honored to represent the amazing team of people at USC Norris, and I am humbled to stand next to a group of breast cancer patients and survivors who fight on each and every day,” said Stephen Sener, professor of clinical surgery and chief of surgical oncology.
Calendar of Events

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

Saturday, Oct. 8
8 a.m. – 6 p.m. The 10th Moving Targets Symposium. “Aging and Oxidative Stress.” Various speakers. UPC: Davidson Conference Center. Free registration http://itims.usc.edu/MovingTargets2011/. Info: (323) 442-2187

Monday, Oct. 10
9 a.m. – 5 p.m. Molecular Microbiology and Immunology and Institute for Emerging Pathogens and Immune Diseases Symposium. “30 Years of HIV/AIDS – An LA Perspective.” Various speakers. Broad Center 1st Floor Conference Room. Info: (323) 442-2710


Noon. “Sscarf and Autism: Fifty Years On,” Randy Blakely, Vanderbilt. ZNI 112. Info: (323) 442-2144

Tuesday, Oct. 11
8 a.m. Neurology Grand Rounds. “Oligokondroglial and Astroglial Pathology in MS and EAM.” David Pleasure, UC Davis. ZNI 112. Info: (323) 442-7686

Noon. Psychiatry Grand Rounds. “Draw the Practice of Geriatric Neuropsychopharmacology Compete, Fraud, Anesthesia and Backtesting Despite its Substantial Evidence-Based.” Lon Schneider, USC. ZNI 112. Info: (323) 442-4065

Wednesday, Oct. 12
8:30 a.m. “Pathology 1,” M. Ross, USC. BID 752-734. Info: (213) 226-7923


4:30 p.m. Center for Technology and Innovation in Pediatrics. “Pediatric Medical Device Rounds,” various speakers. CHLA Anderson Pavilion, Barham Family Conference Room. Info: (323) 361-2247

Sunday, Oct. 16
10 a.m. – 2 p.m. Epilepsy Foundation of Greater Los Angeles 5K to End Epilepsy. Rose Bowl, Pasadena. Join the USC Epilepsy Team. To register www.walkintonesendepilepsy.org. Info: (800) 564-0445

Tuesday, Oct. 18
10:30 a.m. USC University Hospital Guild Women’s Health Focus. “You Are What You Do,” Camille Dietzner, USC, and Christy Russell, USC. Coffee reception at 10 a.m. Lunch following program. $45 per person. Wilderness Country Club. Info: (323) 254-0650


Wednesday, Oct. 19

Thursday, Oct. 20

Saturday, Oct. 22
9 a.m. – 1 p.m. USC Norris Women’s Cancer Event. “Personalizing Breast Cancer Care,” Debra Tripathy, USC. This free multidisciplinary half-day conference will feature updates on personalized approaches for the prevention and treatment of breast cancer. Includes breakfast reception and tours of screening, care and research facilities. KAM Meyer Aud. Info: (323) 442-7050

Tuesday, Oct. 25
Noon. Psychiatry Grand Rounds. “Publicly Funded Outpatient Care for Childhood ADHD.” Bonnie Zima, UCLAC USC 250. Info: (323) 442-4065

By Kukla Vera
Robertta Diaz Brinton, the R. Pete Vanderveen Endowed Chair in Therapeutic Discovery and Development at the USC School of Pharmacy, is one of 19 researchers to receive a CIRM Disease Team Therapy Development Award from the California Institute for Regenerative Medicine (CIRM) to support the assembly of a research team to develop a clinical trial that could be worth up to $20 million.

“These planning awards continue CIRM’s record of recognizing scientists to work in teams, sharing knowledge and speeding the time to new therapies,” said CIRM president Alan Trounson in a release. Brinton’s award was the only one received by USC in this round of funding. Brinton’s proposal called for the assembly of a disease team to develop allopeganolone, a small molecule therapeutic, to prevent and treat Alzheimer disease. Lon S. Schneider, professor of psychiatry, neurology and gerontology at the Keck School of Medicine, is co-principal investigator on the project. The Southern California Clinical and Translational Science Institute Center for Scientific Translation and the USC National Institute of Aging Alzheimer Disease Center are contributing partners.

“Allopeganolone promotes the ability of the brain to regenerate itself by increas-