Hopkins Honored for Neurosurgery Advances, Teaching

L. Nelson Hopkins, MD, chair of the Department of Neurosurgery in the School of Medicine and Biomedical Sciences and director of UB’s Toshiba Stroke Research Center, has received the third annual Leaders in Endovascular Education (LIVE) award from Cordis Endovascular and Cordis Neurovascular Inc. The award, honoring the contributions Hopkins has made to advancing endovascular and neurovascular education, was presented at the 2007 National Vascular Interventional Advances (VIVA) seminar held in Las Vegas in September 2007.

Hopkins is known internationally as an innovator in the development, use and teaching of minimally invasive surgical techniques that treat brain aneurysms and stroke blockages by threading specially designed instruments through blood vessels to the site of the injury, rather than opening the skull.

“These techniques have resulted in greatly improved patient survival and in decreased surgical complications and recovery time. “The educational contributions you have made to this field are numerous, consistently innovative and effective, and always centered around advancing patient care,” the award states. “The Global Endovascular Complications seminar you created established a standard in education from which all other peer review meetings are measured.”

The award goes on to note that the numerous fellows and residents Hopkins has taught and mentored as professor and chair of neurosurgery at UB will serve as a continuing legacy of his life’s work.

“The significance of the educational impact you have had on hundreds of healthcare care professionals, students and ultimately patients is extraordinary,” the award states in conclusion.

VIVA presents professional education seminars in vascular medicine and intervention.

—Lois Baker

Griswold Receives International Institute Award

Kim Griswold, MD ’94, MPH, associate professor of family medicine and psychiatry in the School of Medicine and Biomedical Sciences, was presented with the Global Citizen Award by the International Institute of Buffalo on November 14, 2007. The award recognizes individuals in Western New York for their exceptional service to refugees and immigrants and for building bridges across cultures locally and internationally. Griswold was honored as founder of the Refugee Cultural Competency Training Program at Niagara Family Health Center. The program is supported by a five-year, $604,000 federal grant she received in fall 2006 from the National Heart, Lung and Blood Institute. With this support, Griswold and her colleagues in the School of Medicine and Biomedical Sciences are working to develop and test patient-centered videos, called “patient voices,” for use in teaching; consolidate existing cultural-competency projects into a cohesive educational program for medical students, residents and practicing physicians; and produce handbooks on cultural competency.

Buffalo is a major refugee resettlement center, currently receiving refugees from Somalia, Iraq, Cuba, Burma, Sudan, and Vietnam. In the past, the area’s four resettlement agencies also served an influx of persons from Rwanda, Ethiopia, Congo, Kosovo and Bosnia.

—S. A. Unger

Faculty Appointed to NIH Study Sections

The National Institutes of Health Center for Scientific Review has appointed three UB health sciences faculty to serve as members of study sections.

Members of NIH study sections are selected on the basis of their demonstrated competence and achievement in their scientific discipline as evidenced by the quality of research accomplishments, publications in scientific journals and other significant scientific activities, achievements and honors.

LAURIE K. READ, PHD, professor of microbiology and immunology in the School of Medicine and Biomedical Sciences, has been invited to serve as a member of the Pathogenic Eukaryote Study Sections. Read’s research focuses on the mechanisms of posttranscriptional gene regulation, especially RNA editing and endonuclease activity, in the protozoan parasite, Trypanosoma brucei. T. brucei is the causative agent of African sleeping sickness, which afflicts an estimated 500,000 people annually and is invariably fatal if not treated. Her work was recently featured in Buffalo Physician in an article titled “Ancient Organisms, Modern Scourges.” To view the article, visit www.ub瘢.ub.edu/bp, click on “Past Issues” and go to the spring 2006 issue.

As a member of the Pathogenic Eukaryote Study Sections, Read will review applications involving protozoal, helminthic and fungal pathogens in humans and animal models.

TIMOTHY MURPHY, MD, UB distinguished professor of medicine and microbiology and immunology in the School of Medicine and Biomedical Sciences, has been invited to serve as a member of the Clinical Research and Field Studies of Infectious Disease Study Sections. Murphy’s research focuses on the mechanisms by which drug carriers influence the pharmacology of carriers-associated drugs. Currently, he is at work on an NIH-funded research project that involves designing experimental studies to evaluate strategies to decrease bacterial drug resistance by targeting lipid transporters in them.

The Clinical Research and Field Studies of Infectious Disease Study Sections reviews applications that address population-based studies on the emergence, spread, control and prevention of infectious diseases (including potential agents of bioterrorism) that affect humans.

ROBERT M. STRAUBINGER, PHD, professor in the School of Pharmacy and Pharmaceutical Sciences, has been invited to serve as a member of the Drug Discovery and Molecular Pharmacology (DDMP) Study Section. Straubinger’s research focuses on the molecular mechanisms by which drug carriers influence the pharmacology of carriers-associated drugs. Currently, he is at work on an NIH-funded research project that involves designing experimental studies to evaluate strategies to decrease bacterial drug resistance by targeting lipid transporters in them.

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Lema a Distinguished Speaker at Canisius

Mark J. Lema, MD, PhD, 78, chair of the Department of Anesthesiology in the School of Medicine and Biomedical Sciences and current president of the American Society of Anesthesiologists (ASA), spoke at Canisius College on November 6, 2007, as part of the Dr. George E. Schreiner ’43 Pre-Medical Center Distin- guished Speakers Series. Lema, who also serves as chair of anesthesiology, pain medicine and critical care, and medical director of surgical services at Roswell Park Cancer Institute, spoke on “2007 and Beyond—Preparing for the Future Health Care Paradigm.”

In his role as president of ASA, Lema has lectured all over the country about the future of health care in America. Most recently, he appeared on CNN’s “Anderson Cooper 360.”

“Radical changes in the practice of medicine and surgery over the next decade are inevitable and imminent,” he said. “Practice arrangements and payments for these new therapies will radically change how care is delivered and who delivers it. American physicians, indeed all Americans, must anticipate and plan for future change.”

Recognized in 1998 with the Canisius College Distin- guished Alumni Award, Lema earned his undergraduate degree in political science from Canisius. He received his medical training at the State University of New York, Downstate Medical Center, followed by an internship at Staten Island Hospital, and residency at Brigham and Women’s Hospi- tal/Harvard Medical School in Boston. Lema also holds a PhD in physiology from UB.

Shepard Goldberg Elected ASPPB Fellow

Shepard Goldberg, PhD, clinical assistant professor of psychiatry, was elected a Fellow of the Associa- tion of State and Provincial Psych- ology Boards (ASPPB) at the 47th Annual Meeting of Delegates at Colorado Springs in October 2007. An ASPPB Fellow is an honorific category that “recognizes outstanding service to ASPPB and to the field of professional psychology regulation and licensing/recertification.”

Goldberg, who also is clinical associate professor in the Department of Psychology in the UB College of Arts and Sciences, is presently the director of psychological and clinical services at ByLin Hospitals in Buffalo. His citation states that “he has played a major role in the history of ASPPB.”

Mindfulness and Alcohol Treatment

GERARD J. CONNORS, PhD, director of the UB Research Institute on Addictions, has received a four-year, $1.9 mil- lion grant from the National Institute on Alcohol Abuse and Alcoholism to conduct a study of mindfulness-based stress reduction as an adjunct in the treatment of alcohol-use disorders.

“By adapting and applying mindfulness-based stress reduction in alcoholism treatment, we hope to develop an increased ability to cope with stress and enhanced psycho- logical well-being among alcohol-dependent individu- als,” says Connors. “For people who often deal with stress in their lives by turning to alcohol, this could be a very positive alternative.”

Connors is a clinical psychologist who also serves as professor in the Depart- ment of Psychology in the UB College of Arts and Sciences and as research professor in the Department of Psychiatry in the UB School of Medicine and Biomedical Sciences.

Neurodegenerative Disease Study

ACERULOPLASMINEMIA occurs when the balance between the compartmentalization and storage of iron and the mobilization and transport of iron is disrupted. The condition is caused by a deficien- cy in the activity of the enzyme ceruloplasmin, which is essential for normal iron metabolism.

Kosman will be searching ceruloplasmin for these studies. "This is the first effort to test these findings in a randomized controlled experiment. We want to know if the built environment a child lives in affects physical activity, and if access to parks stimulates an increase in physical activity when access to television and computer is reduced by one-half."

"In addition to providing some interesting data on the influence of the built envi- ronment on youth physical activity, these data can be used to guide the design of new neighborhoods or the redesign of existing neigh- borhoods to best promote spontaneous physical activity of teens," says Roemmich. Experimental sessions will take place during the school year, with the first cohort expected to begin in early spring 2008. The interdis- ciplinary study involves specialists in geographic information systems, urban planning and health behav- ior, as well as pediatrics and exercise science.

To learn more about this study, its methodology and the researchers collaborating on it, visit the UB NewsCenter website at www.buffalo.edu/ news and search “video time.”

—LOIS BAKER

FROM LEFT: Kosman with doctoral candidate Julie Spix and Lynn Zeigler, senior research technician.

Kosman’s group will test the therapeutic protein in a mouse strain genetically altered to exhibit the problems in iron metabolism observed clinically in humans. This work will be carried out in collaboration with Zena Leah Harris, MD, at Johns Hopkins University School of Medicine, and Jonathan D. Gat- lin, MD, professor of pediatrics and genetics at the Washington University School of Medicine.

—LOIS BAKER

Less TV, More Play?

If young teenagers can’t watch TV or play computer games, will they fill that time with physical activity?

And will living close to a park play a role in how active they are during their video downtime?

These are questions researchers at UB hope to answer via a three-year, $1.4 million grant from the National Institute of Child Health and Human Development.

“A lot of our research has shown that for children, living in a neighborhood with high park access is associated with being more physically active,” says James N. Roemmich, PhD, associate professor of pediatrics in the UB School of Medicine and Biomedical Sciences, and lead researcher on the study.

“This is the first effort to test these findings in a randomized controlled experiment. We want to know if the built environment a child lives in affects physical activity, and if access to parks stimulates an increase in physical activity when access to television and computer is reduced by one-half."

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—LOIS BAKER

—S. A. UNGER

Abnormal iron metabolism is linked to many neurodegenerative disorders, spurring scientists to search for ways to keep iron levels in balance and to develop drugs to correct an imbalance.

Daniel Kosman, PhD, profes- sor of biochemistry in the School of Medicine and Biomedical Sciences, has received a two- year, $418,363 grant from the National Institutes of Health to develop a drug aimed at an iron-based neurodegenerative disease called aceruloplasminemia.

This research complements the $1.16 million four-year NIH grant Kosman received in June to study how iron is metabolized in cells.

Aceruloplasminemia occurs when the balance between the compartmentalization and storage of iron and the mobilization and transport of iron is disrupted. The condition is caused by a deficien- cy in the activity of the enzyme ceruloplasmin, which is essential for normal iron metabolism.

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Dalian Ding survived exile to become a world-renowned anatomist

Over 12 hours," recalls Ding, associate research pro-

tessor in the Center for Hearing and Deafness, Department of Communicative Disorders and Sciences. "You had to get to it very early and work until very late at night. For a whole year I didn’t wear shoes; even in the wintertime I had to work in the swampland or the field."

The payment for such labor? Less than 23 Chinese coins daily, which is roughly equivalent to three U.S. cents. Worse yet, he says the farmers soon started to claim "you ate more than you earned" and demanded he return what scant cash he had received. Ding, still only a young boy, was forced to work for the farmers, despite his diligent work. The chance to escape those conditions took about two years, says Ding, explaining that he was hired for a job in a Union Hospital, affiliated with Wuhan Medical University, which was searching for research volunteers for "fresh blood."

"I went to the hospital to clean and milk cows, to take care of patients, to take charge of care, to wash apartments, to take care of patients, to distribute lunch and dinner," says Ding. "I knew nothing about medicine, but I worked at a hospital. In the evening, I went to night school because the hospital didn’t really need workers; they wanted medical assistants and nurses." The shortage of professionals was a great concern at the time because all the universities had closed during the Cultural Revolution, he says. "I think we got some very good train-

ing in that very difficult period of time," says Ding, who trained as a nurse and then was chosen to serve as a technician in the otolaryngology department and the otology laboratory. In 1978, Ding moved to Shanghai and sought to reclaim his education. He worked full time as a technician in the otolaryngology laboratory in Shanghai, which was affiliated with Shanghai Second Medical University, and spent nights and weekends going to school. "I had to restart middle school," he says, "then go to high school in the evening, then college." He published his first research paper in 1981, graduated from the Bioengineering Department of Fudan University in 1989, and in 1998 earned the equivalent of a master’s degree in neuroscience from the J. R. Ringer Credential Evaluation Inc. "That was really difficult, but I didn’t give up," he says. "I wanted to learn to make up for missed lessons." The hardest part was not the study or work, he says, but the time not spent with his young son, Feng. Over the next 15 years, Ding worked his way up from technician to associate research professor—a rare promotion—at Shanghai Second Medical University, and played an important role in the development of the otology laboratory at Renji Hospital. Ding also established a well-known series of national education and training courses on inner-ear physiology and pathology. In 1995, Ding joined the research faculty at UB after being offered a position based on reputation alone. A Chinese graduate student at the university brought him to the attention of Richard Salvi, PhD, professor of communicative disorders and sciences, otolaryngology and neurology, and director of the Center for Hearing and Deafness.

Since moving to the U.S., Ding has continued to travel to China to hold workshops and has trained nearly all of the researchers and technicians working in the fields of otology and otolaryngology in that country. "I feel like he’s one of our secret weap-

ons," Salvi says. "Ding has an outstanding research record and is probably one of the best inner-ear anatomists in the country—maybe the world."

Salvi and Ding currently are co-

investigators on a $227,000 grant from the National Institute on Deaf-

ness and Other Communication Disor-

ers to investigate the protective effect of chemical compounds, such as the calpain inhibitor leupeptin and the P53 inhibitor pifithrin, on microscopic “hair cells”—the auditory sensory cells that transduce mechanical sound waves into neural activ-

ity in the brain. The subject has become a "hot topic" in hearing research, explains Salvi, noting that concerns about drug-

induced hearing loss are on the rise in developing nations due to the use of cheap antibiotics and anticancer drugs that dam-

age the inner ear.

Research on the project is carried out on cells culled from test subjects and cultivated under artificial conditions in the lab—“a practice that enables more precise experimentation, as well as reduces the need for animal testing. But because microscopic inner-cell organs from small-

animal models require a gifted anatomist to dissect, laboratories from Boston to South Florida have started to contract out the process to UB.

“You have to have really good hands,” says Salvi, estimating that less than 5 per-

cent of anatomists master the procedure routinely done by Ding. In addition to his anatomical skills, Ding has authored more than 200 papers and close to 20 book chapters. Twenty years ago, he never imagined that such a prolific career lay ahead of him.

DREAMED THAT IN MY LIFE I COULD maybe publish 10 papers," says Ding, "but now, in fact, I’ve written about 230. I can’t stop myself," he laughs. Ding resides in Amherst with his wife, Haiyan Jiang, a research technician in the Center for Hearing and Deafness. A for-

mer technician at the Shanghai Physiology Institute, Haiyan helped Ding so much with his work when he first came to UB that she, too, was hired by the univer-

sity. Ding says. Their son, Feng, 26, who received a master’s degree in computer engineering from UB, was hired recently by IBM.

"The people from Ding’s generation in China who have survived and done well are remarkable people," Salvi adds, noting that Ding “started out with nothing and through sheer willpower made things happen.”