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Summer 2004 – Volume 15, No. 3

Congratulations to the class of 2004

The Wayne State University School of Medicine commencement ceremonies celebrated more than 250 students and paid tribute to Howard Birndorf, Dr. Robert Sokol and Dr. George Dambach.

Senator John McCain talks politics with students

Senator John McCain's visit to the School of Medicine engaged students and faculty members in discussions about campaign-finance reform, democracy in Iraq and health insurance.

Exploring the roles of MR in the fight against breast cancer

Dr. Renate Soulen is leading three projects that investigate the use of MRI and MRS applications in preventing, detecting and treating cancer.

Research studies role of cell death in cancer growth

With \$1.4 million from the National Institutes of Health, Dr. Fayth Yoshimura is looking at the initial steps involved in the generation of T-lymphocyte tumors.

Research defines role of cell structure in hearing

Tight junctions, a type of cellular structure, are critical for sound transmission and hearing, according Dr. Alexander Gow who is conducting research with a \$1.2 million grant from the National Institutes of Health.

Dad's sperm packs and delivers more than just fertilizer, report WSU researchers in *Nature*

In addition to chromosomes, a man's sperm also contains RNAs that are critically important to early growth of an embryo, said Dr. Stephen Krawetz in the May 13 issue of *Nature*.

Dr. Bonnie Sloane to host Avon Foundation International Scholar

Dr. Bonnie Sloane has been honored with the Avon Foundation-American Association for Cancer Research International Scholar Host Award in Breast Cancer Research. This allows her to train a junior faculty member in proteases as breast cancer drug targets.

National Cancer Institute awards \$37 million to keep a great thing going

The continuation of the Metropolitan Detroit Cancer Surveillance System (MDCSS) is secured with a National Cancer Institute grant renewal.

Imaging supports aggressive approach for brain recovery in children

Children with progressive Sturge-Weber syndrome may benefit from aggressive removal of up to one half of the brain, allowing the healthy part of the brain to take over, according to Dr. Csaba Juhasz.

Dr. Juzych to lead Graduate Medical Education

Mark Juzych, M.D., has been named assistant dean for graduate medical education, giving him responsibility for more than 900 physicians-in-training through the WSU/Detroit Medical Center Graduate Medical Education Program.

Center established to diagnose and treat asbestos-related diseases

In April, the Barbara Ann Karmanos Cancer Institute and WSU launched the National Center for Vermiculite and Asbestos-Related Cancers under the leadership of Drs. Harvey Pass and Michael Harbut.

\$15 million renovations underway at Mott Center

The C.S. Mott Center for Human Growth and Development is in the midst of a three-year, \$15 million renovation to expand and modernize research space and to improve building infrastructure.

Dr. Smitherman honored as Michiganian of the Year

In recognition of his quest for health care accessibility, Dr. Herbert Smitherman, Jr., has been named a Michiganian of the Year by *The Detroit News*.

Dr. Hendrix honored as Michiganian of the Year

Dr. Susan Hendrix has been honored as a Michiganian of the Year by *The Detroit News* for her role in reversing HRT guidelines to improve the health of women.

Research Day contests

Congratulations to the winners of the 2004 Sinai-Grace Research Day and Department of Internal Medicine Research Day.

Medical student Murinas wins summer research award

Katie Murinas accepts a two-month research award at Emory University School of Medicine.

Pediatric projects win research enhancement awards

Eight research projects related to child health and development were funded by the WSU Research Enhancement Program.

Dr. Meythaler appointed chair of physical medicine and rehabilitation

Jay Meythaler, M.D., J.D., formerly at the University of Alabama at Birmingham, has been named chair of the Department of Physical Medicine & Rehabilitation.

Role of reactive oxygen species in diabetic retinopathy

Renu Kowluru, Ph.D., explores the mechanisms of diabetic retinopathy with a Juvenile Diabetes Research Foundation grant.

Class of 2004

See where this year's medical school graduates will continue training.

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In memoriam

Continuing Medical Education



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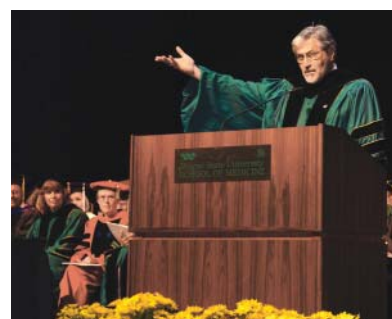
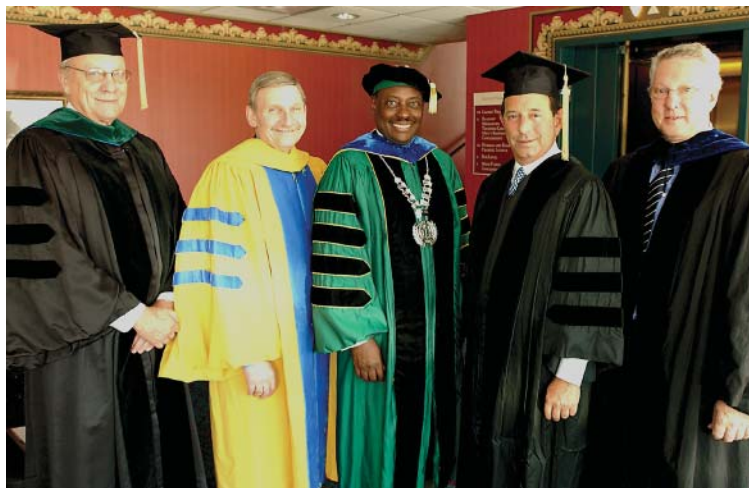
More than 250 WSU students graduated June 8 at the School of Medicine's commencement in the Detroit Opera House. In addition, Howard C. Birndorf, CEO and co-founder of Nanogen Inc., received an honorary Doctor of Science, and two WSU faculty members were honored with Distinguished Service Awards.

Mr. Birndorf, a Michigan native who received his master's degree in biochemistry from Wayne State University, has been called "Biotech's Johnny Appleseed" by The New York Times. He has earned international respect for his trailblazing abilities in the diagnostics field, and his business acumen has allowed him to become a master of the start-up phase of innovative, biotechnology companies.

Although Mr. Birndorf applied to the School of Medicine 33 years ago, he was denied admission to the MD program and he instead went on to complete a master's degree in science in biochemistry. He joked during the ceremony that WSU's judgment has improved over the years.

"Revenge is sweet," he said. "Despite that shocking early rejection from Wayne, I feel like, like you, I've achieved a measure of success."

His firm, Nanogen, his seventh start-up company since 1978, has



Clockwise from top left: The Michigan Opera House was packed for the 2004 commencement ceremonies; (Front to back) Caroline Lee, Lucas Leete and Andrew Lenneman make their way inside; Dr. Robert Frank, associate dean, introduces Distinguished Award recipient Dr. Sokol; WSU Governor Paul Massaron addresses the 2004 graduates; (Left to right) Dean Crissman, Dr. Sokol, President Reid, Mr. Birndorf and Dr. Dambach pose in academic regalia.

developed ways to process quick, inexpensive DNA analyses. The company's latest tool, NanoChip, is setting new standards in DNA-based analysis and is expected to build bridges between bench and clinical research.

Mr. Birndorf has served as a presidential appointee to the U.S. Department of Commerce Biotechnology Advisory Committee and as a director of the Cancer Center at the University of California, San Diego. At commencement, Mr. Birndorf urged

the class of 2004 to pursue success, take measured risks and be mindful of the limitations of science.

"Healing the human body is a wonderful gift but also is healing the human spirit," he said. "Science explains much to us but not everything. None of the tools and techniques my company has created can break down the eternally elusive chemistry of friendship, of idealism, of integrity, of courage, of love and devotion, yet these are the things we truly live for and live by. They are the main

reasons why we value continued good health so highly. They lie at the root of the will to live."

In addition to honoring Mr. Birndorf, this year's commencement ceremony recognized the dedication of two WSU School of Medicine faculty members with Distinguished Service Awards. Drs. Robert Sokol and George Dambach both have made substantial contributions both to the School of Medicine and the overall university.

Dr. Sokol is distinguished professor of obstetrics and gynecology,

director of the WSU C.S. Mott Center for Human Growth and Development and former dean of the WSU School of Medicine. An internationally recognized expert on fetal-alcohol syndrome, Dr. Sokol helped build WSU into one of the top-ranked academic OB/GYN programs in the country and also shaped the service into the premier regional center for high-risk pregnancy, infertility treatment and gynecology.

Dr. Sokol was appointed dean of the medical school in 1988 and continued on page 2

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Senator John McCain visits Scott Hall

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Sperm more than just fertilizer, WSU professor reports

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Match results for the Class of 2004



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served for 11 years, during which time he fueled WSU's rise as a nationally prominent research university. During his tenure, the School progressed from 70th to 22nd in the country in research expenditures, placing WSU among the top fifth of medical schools nationally. At the same time, Dr. Sokol remained focused on the medical students and providing superior medical education, always keeping an "open door policy."

More recently, Dr. Sokol has been charged with leading the Mott Center, which was key in securing

the 2002 contract to establish the National Institutes of Health's Perinatology Research Branch at WSU. Valued at \$125 million in contracts, the PRB is one of few intramural branches of the National Institutes of Health located outside the Bethesda, Md., headquarters and firmly re-establishes WSU as the leader in obstetrics and perinatology research and services.

"Our students, alumni, faculty, staff and administrators make up a wonderful medical school, and I am delighted and honored to be

able to continue to contribute to our success," Dr. Sokol said.

Dr. Dambach has also made major contributions to the university's research portfolio. Most recently, he served as vice president for research and dean of the graduate school for Wayne State University. Previously, he served as associate dean for research and graduate programs at the School of Medicine.

During his tenure at the School, Dr. Dambach oversaw the dramatic growth from a respected center for clinical training to an esteemed

research-intensive institution. The School's research portfolio grew from \$16 million to \$100 million, and its ranking rose from 56th to 22nd among the nation's 125 medical colleges.

On main campus, he was a member of the concept and development team for the Michigan Life Sciences Corridor and was instrumental in the creation of the MLSC's Core Technology Alliance. He also was key in bringing the PRB to WSU's campus.

In 2003, Dr. Dambach returned to the School of Medicine to lead its

INPHAASE initiative, a multidisciplinary program in population and environmental studies. Earlier this year, he was appointed vice president for research of Florida International University.

"While the buildings and the individuals come and go, this school, I think, will survive on into the future as a grand and glorious institution based upon this commitment to service to our community," Dr. Dambach said. "I've been very privileged to spend 30 years here." ■

Senator John McCain talks politics with students

On April 2, Senator John McCain, R-Arizona, addressed the WSU School of Medicine on a number of topics, from campaign-finance reform, to democracy in Iraq, to health insurance.

Sen. McCain, who ran for the 2000 Republican nomination for U.S. President, is the chairman of the Senate Committee on Commerce, Science and Transportation. He also serves on the Armed Services and Indian Affairs committees. He was elected to the Senate in 1986, filling Sen. Barry Goldwater's seat, after serving four years in the House of Representatives.

In 1958, Sen. McCain joined the Naval Academy and went on to serve as a Naval aviator in Vietnam. He was captured during the war after his plane was shot down during a bombing mission over Hanoi. He was a prisoner of war for five years.

When questioned about the Medicare prescription drug bill, he was met with great applause after

commenting, "I voted against it for a number of reasons... I don't think it addressed the real issue. Constituents of mine and people not far from here are going to bed tonight making a decision whether to eat or to purchase their prescription drugs. That's wrong in America. My solution: I'd have taken everyone with 125 percent of the poverty level, given them a card, and said, 'Get your drugs.'"

Sen. McCain's visit to the school was coordinated by his friend and colleague, Dr. John Schwarz, former state senator and gubernatorial candidate, WSU School of Medicine alumnus and member of the Detroit Receiving Hospital Board.

"This was a wonderful opportunity for our faculty, students and staff to have exposure to individuals with such national influence," said Dr. John Crissman, dean of the WSU School of Medicine. "Senator McCain clearly is an independent thinker and we thank him for sharing time with us at the school." ■



Sen. John McCain receives a bag of goodies from Raja Sawhney (left), a year III student and past WSU American Medical Association president, and Brenden Burns, a year I student and current president of the AMA. The senior senator from Arizona packed Scott Hall's Jaffar Auditorium for an informal talk on politics. Sen. McCain's visit was made possible by former Michigan Sen. John Schwarz (R-Battle Creek), an SOM alumnus.



(Left to right) Dean John Crissman, DMC President Michael Duggan, Sen. John McCain and Dr. John Schwarz

Exploring the roles of MR in the fight against breast cancer

Novel therapies and improved early detection techniques hold promise of improved prevention, detection and treatment of breast cancer. Researchers at the Wayne State MR Research Facility are investigating three applications of MRI (magnetic resonance imaging) or MRS (magnetic resonance spectroscopy) in the fight against this prevalent cancer.

The first project addresses prevention and is a National Institutes of Health (NIH)-funded parallel study to a multi-institutional phase II chemoprevention trial comparing tamoxifen to a placebo in women with an elevated risk of breast cancer. Tamoxifen is a selective estrogen receptor modulator (SERM) that reduces estrogen stimulation of the breast. This reduction is expected to reduce glandular volume and contrast-enhancement on MRI.

Renate Soulen, M.D., professor of radiology, is principal investigator on the imaging arm of the study. By measuring volume and contrast enhancement, she aims to develop MRI markers of the SERM effect in the breast which, in turn, could then be used as surrogate markers for SERM preventive therapy.

The second project addresses detection of occult breast cancer in the contralateral breast of women with a recent diagnosis of breast cancer and negative clinical exam and mammogram of the contralateral breast. Patients with history of cancer in one breast have a 2-to-6 fold increased risk of cancer in the other breast. Dynamic contrast-enhanced MRI has demonstrated improved sensitivity for detection of breast cancer compared to X-ray mammography, but is a limited and relatively costly resource.

To assess the clinical utility of breast MRI in this setting, the American College of Radiology Imaging Network (ACRIN), funded by the NIH, is conducting a multi-institutional trial involving 27 sites to rapidly recruit 1000 patients. Dr. Soulen is principal investigator for Wayne State, the only participating site in Michigan.

"In an era of ever rising cost, it is



Dr. Renate Soulen is evaluating the effectiveness of MR as a diagnostic tool for breast cancer.

critical to assess appropriate use of health care resources," Dr. Soulen said. "By assessing the diagnostic yield of MRI across multiple institutions and multiple manufacturers of MR scanners in this at-risk group, we can provide guidance to the appropriate use of MRI."

Dr. Soulen's third project, funded by the Susan G. Komen Breast Cancer Foundation, combines MRI and MRS with the aim of improving specificity in breast cancer diagnosis. While the sensitivity of MRI is very high, currently biopsies of breast lesions seen only on

MRI (undetected by mammography and ultrasound) prove benign in 53-80 percent of cases. Similar difficulties arise in examining residual tumors in patients treated with chemotherapy or newer minimally invasive treatments such as cryotherapy (freezing). MRS, which looks at tissue metabolism, provides completely independent biochemical information. Distinctive metabolites observed in breast cancer should allow better discrimination between cancer and benign lesions. Until recently, the spatial resolution of MRS has not been suf-

ficient to assess small lesions—the very lesions that may be detected only by MRI.

A new study, under the leadership of Jiani Hu, Ph.D., assistant professor of radiology, will first develop three-dimensional MRS techniques capable of high-resolution imaging of small lesions. These will then be tested on patients with MRI-detected lesions destined for biopsy to determine whether the combination of MRI and MRS improves specificity in detection of new, residual, or recurrent breast cancer.

"All these efforts seek to determine the role of MRI and MRS in breast cancer detection and treatment," Dr. Soulen said. "With MR technology constantly improving, we are looking for the best and most cost-effective use of these valuable tools." ■

Research studies role of cell death in cancer growth

A WSU researcher's studies of tumor formation in the mouse thymus, where lymphocytes form, is turning upside down conventional thought that the hallmark of cancer is uncontrolled cell growth and the overproliferation of cells. "When we started looking at early events in the thymus of these mice, we predicted that we'd see a population of cells that was growing uncontrollably compared to a normal thymus, but what we found to our surprise was that the cells were actually dying," said Fayth Yoshimura, PhD, associate professor of immunology and microbiology.

With a new \$1.4 million, five-year grant from the National Institutes of Health, she is continuing her work in the hopes of identifying the initial steps in the generation of

a tumor cell, specifically T-lymphocyte tumors that arise from cancer-causing retroviruses. The research hinges on a mouse model that she has been using for the past two decades. "About three months after we inject oncogenic retroviruses into newborn mice, the mice develop these tumors," she explained. "When we looked closer, we found something that was totally counterintuitive. The immature thymic T-cells were being killed by the virus." The mechanism behind their death was apoptosis, or programmed cell death.

Based on those findings, she said, "Our interest has now focused on just what apoptosis has to do with the development of cancers, because it is the opposite of what you would expect." She and her research group believe that they

may be seeing something similar to the progression of radiation-induced cancer. "When you look at certain kinds of cancers and the initial steps in tumor development, cells are killed by some agent, such as radiation, and the cells undergo apoptosis. Eventually, however, the cells respond to this lethal assault, somehow rescue themselves and in the rescue process are transformed into a tumor cell. We think that's probably what is happening in our model."

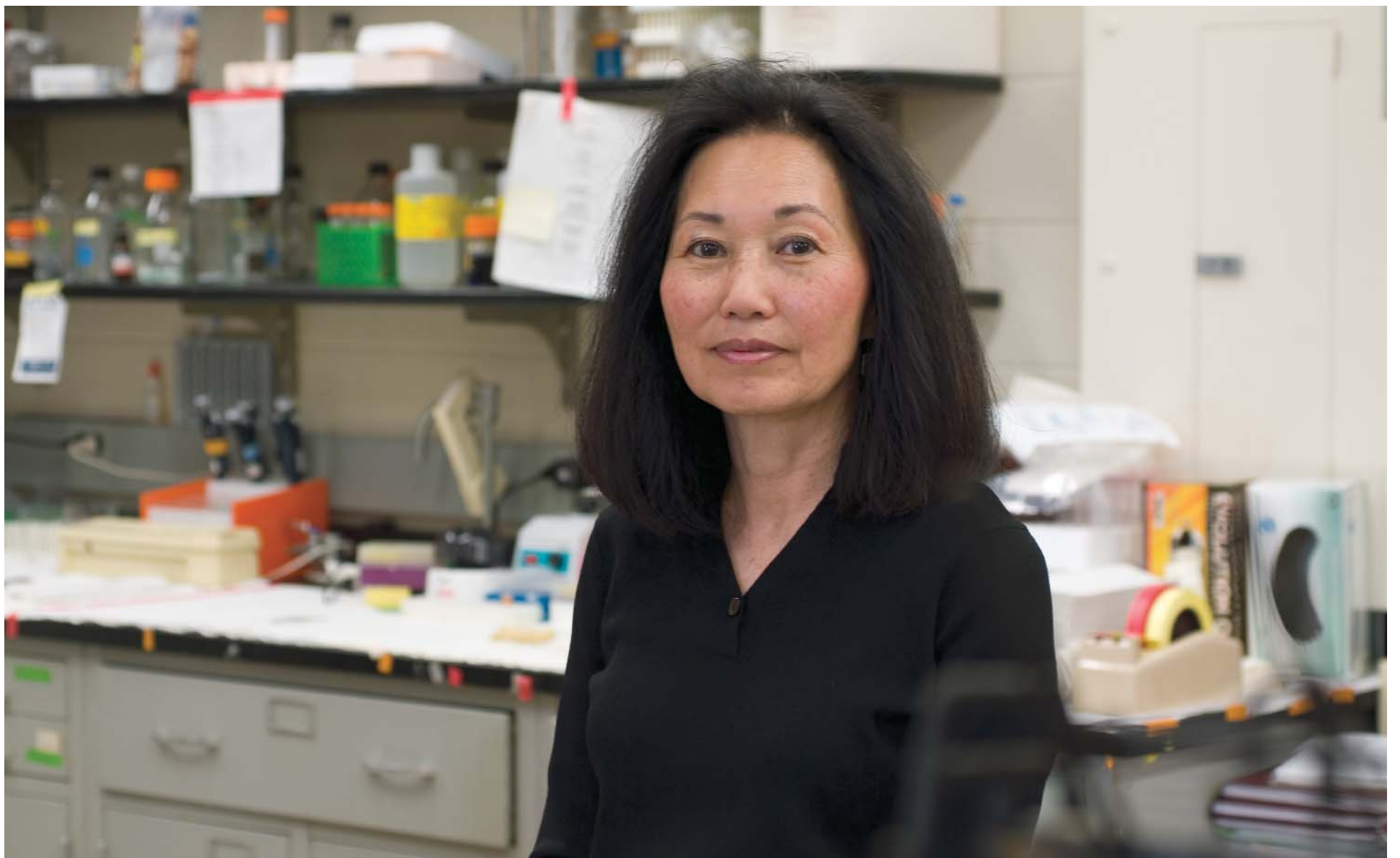
Yoshimura's mouse model has been particularly helpful, she said, because it permits a view into the normally hidden first steps in tumorigenesis. "It's very hard in human cancers to look at what is happening in a precancerous period, because we really don't know which people will develop

tumors. By the time cancer is detected, the cells have already undergone these kinds of transformations," she explained. In the mouse model, on the other hand, the researchers not only know which mice will develop tumors, but also the timing of tumorigenesis, which allows them to follow the early events in the thymic lymphocytes.

Now, the researchers are defining the mechanism. For the first year of the grant, she and her research group will consider endoplasmic reticulum (ER) stress. "We set up a model system *in vitro* to identify cell types that die with virus infection and compare them to other cells that do not die. We have already discovered that in the cells that die, one of the viral proteins, the glycoprotein, is retained at high levels in the endoplasmic

reticulum compared to cells that do not die. We also know that this is a process that leads to what's known as ER stress."

For the next step, they hope to discover how ER stress leads to DNA damage, which is well-known as a cause of cancer, and which damaged genes play a role in transforming a healthy cell to a tumor cell. She added, "If you could then look at early markers that may give you insight into which cells may be undergoing DNA damage at certain stages down the road, then perhaps you could find ways to prevent those steps from happening." After all, she said, "In order to find cures or appropriate therapy for cancer, you first have to understand and identify the steps in the process." ■



Dr. Yoshimura is studying the role of cell death in the development of cancer.

Research defines roll of cell structure in hearing

On the path toward learning more about a type of cellular structure, called a tight junction, a WSU researcher became the first person to clearly test a long-held hypothesis about its role in hearing. Specifically, the project shows that a particular kind of tight junction is necessary to generate the necessary positive electrical potential, but not the ion concentration as previously thought, to transmit sound from the cochlea to the brain.

"This is the first time that this has been demonstrated directly," reported Alexander Gow, PhD, assistant professor in the Center for Molecular Medicine and Genetics and the departments of Pediatrics and Neurology. He is conducting the research with a five-year, \$1.2 million grant from the National Institutes of Health.

His work centers on knockout mice that are lacking specific tight junctions. With this mouse model, he can then re-introduce assorted tight junctions and determine their specific properties. Unlike the more well-known gap junctions that are basically channels allowing small molecules to move between cells, tight junctions serve as an occluding barrier that regulates molecular transport in the paracellular space between cells, he explained. "In the gut, for example, the tight junctions seal the paracellular space to stop the entry of toxins or bacteria into the body from ingested food while still allowing the intestinal cells to take up nutrients."

Tight junctions are present throughout the body, but he focused his work on hearing, because the system had several different types of tight junctions with apparently different, but as yet unknown electrophysiological properties that would be relatively easy to test. "When we made the knockout mice missing one of the tight junctions in the cochlea, all of the mice went deaf by about two months of age. Now, we can replace this missing tight junction with one of the others and see if it can function to restore hearing in the animals," Gow said.

He focused on the cochlea, which transmits sound vibrations along the fluid-filled spiral chamber of

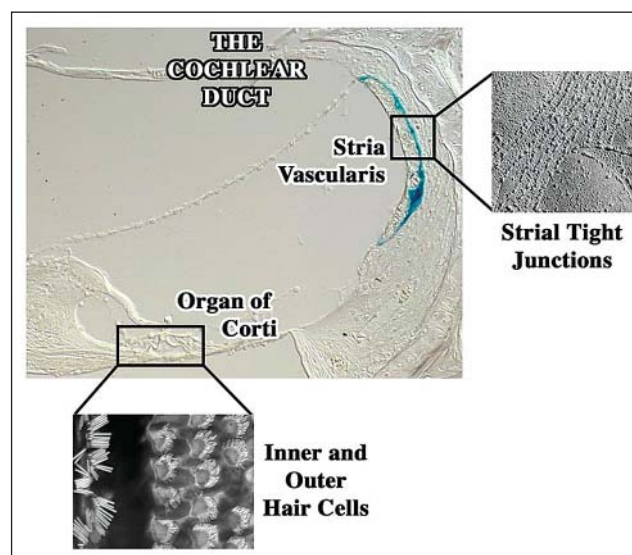
the cochlear duct to hair cells, which then convert the vibration to an electrical signal that goes on to the brain for processing. For the system to work, the fluid, or endolymph, in the cochlear duct must have a high concentration of potassium and a positive electrical potential. Cells in the wall of the cochlea are responsible for maintaining the proper fluid environment, he said. "It was speculated in the mid-1980s that tight junctions are necessary to enable the cells to concentrate the potassium and to generate the positive potential in the endolymph, but that hypothesis has been essentially untested until now. Our knockout mouse is the first model in which we can test this hypothesis. We found in these animals an absence of the positive potential, but a normal potassium concentration. Therefore, we can say that the tight junctions are critical for making the positive potential, but are not necessary to concentrate the potassium."

Besides the insights into the mechanisms of the inner ear, Gow is considering clinical applications of the findings. "The hearing field has been given a large boost over the last 15 years, because of the discovery of mutations in genes that cause deafness. One of the most well-studied of these genes is one comprising the gap junction gene, connexin 26, which helps to transport potassium in the cochlea. In fact, about 50 percent of patients with non-syndromic deafness - a person who is otherwise normal - have mutations in this gene." He added, "Recently another family of patients has been found with a mutation in one of the other tight junctions within the cochlea, so it's possible that there will be families around the world who have a mutation in the tight junction gene that we are studying." He added, "Now that we know exactly what's going wrong with this particular gene, it may be possible in the future to determine how we can lessen the severity of the deafness."

Gow collaborates on his research with Bechara Kachar, a prominent morphologist and chief of the Section on Structural Cell Biology, National Institute on Deafness and Other Communication Disorders of the NIH. ■



Dr. Gow has demonstrated the role of tight junctions in hearing.



A transverse section through the cochlea reveals the location of claudin 11 tight junctions (blue) in a specialized region of the cochlear duct called the stria vascularis. The inset over this region shows tight junction strands (linear particle arrays) comprised of the claudin 11 protein. The second inset shows the inner and outer hair cells located in the organ of Corti. These hair cells transduce sound into electrical signals transmitted to the brain.



Activity of beta-galactosidase (blue) shows the distribution of claudin 11 tight junctions throughout mouse inner ear. This expression is present in all major compartments and indicates that claudin 11 functions in the vestibular and cochlear systems.

Dad's sperm packs and delivers more than just fertilizer, report WSU researchers in *Nature*

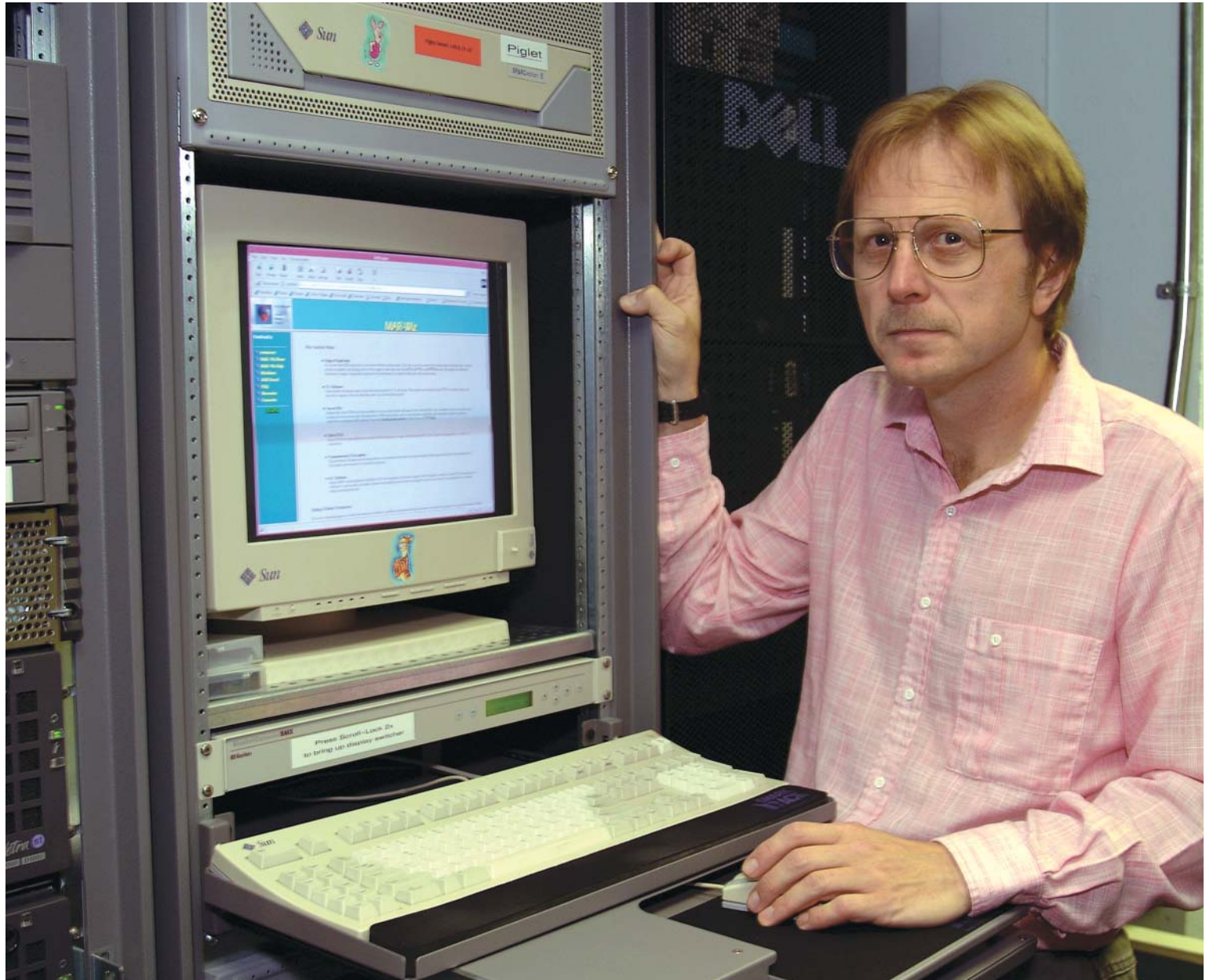
The major function of a man's sperm was fertilization, scientists once thought. True, sperm contains the father's chromosomes; but new studies from Wayne State University show that RNAs critically important to early growth of an embryo are also delivered.

Early embryonic development—once considered “women's work” that was solely steered by the female egg—is actually a partnership with paternal RNA delivered by the sperm at the point of fertilization. In other words, in addition to rousing the egg, the male RNA also participates in oocyte activation, the transition from maternal to embryonic gene control and the establishment of imprints in early embryos. This major paradigm shift suggests that messenger RNAs (mRNAs) turn on a crucial development switch and deliver critical functioning mechanisms to the egg, report Wayne State University researchers in the May 13 issue of *Nature*.

Stephen Krawetz, Ph.D., a WSU professor and senior author on the paper, along with colleagues including David Miller from the University of Leeds, UK, and other WSU researchers, have already documented the presence of RNA strands in sperm. In 2002, they used genetic analysis to identify 3,000 individual mRNAs for the fertile male and have begun to identify defective genes that contribute to infertility and record exposure to environmental toxicants.

Their new work shows that the viability of the sperm goes beyond factors like motility and quantity required for fertilization. The healthy sperm contributes to the viability of the zygote even after fertilization. “Men have a greater role in early development than we previously thought,” Dr. Krawetz said.

This expanded view of sperm's



Dr. Krawetz asserts that men are not obsolete in reproduction, as shown by his new understanding of RNAs in sperm.

responsibility may also explain why cloning has turned out to be so difficult. “Cloning requires an egg to develop without sperm fertilization, and although an egg may be manipulated or ‘tricked’ in the laboratory some of the time, embryonic growth generally requires an activation signal that comes from the male sperm,” Dr. Krawetz said.

He also notes the timeliness of this study given the April publication of *Nature* that featured

Japanese and South Korean scientists who created a mouse born of all-female DNA. “In contrast, we show that men are not obsolete,” Dr. Krawetz said. “Our understanding of these RNAs will certainly enhance our knowledge of the father's influence on early zygotic and embryonic development. Dad indeed has a function.”

Stephen Krawetz is the Charlotte B. Failing Professor in Wayne State University's Department of

Obstetrics and Gynecology, and is also professor in the Center for Molecular Medicine and Genetics, and Institute for Scientific Computing. Co-authors are: G. Charles Ostermeier (WSU), David Miller (University of Leeds), John Huntriss (Leeds) and Michael Diamond (WSU).

The full article titled “Delivering spermatozoan RNA to the oocyte” can be viewed online at: www.nature.com. ■

Dr. Bonnie Sloane to host Avon Foundation International Scholar

Furthering her work in uncovering proteases as drug targets for breast cancer, Bonnie Sloane, Ph.D., has been honored with the prestigious Avon Foundation-American Association for Cancer Research (AACR) International Scholar Host Award in Breast Cancer Research. Dr. Sloane, professor and chair of pharmacology, will host an international scholar in her laboratory for two years beginning in 2005 to collaborate on her well-established research program that is currently funded by a Department of Defense Breast Cancer Center of Excellence Award. Dr. Sloane directs this center of excellence that focuses on the role of proteolytic enzymes in breast cancer.

As a scientific leader and principal investigator, Dr. Sloane will mentor and train a junior faculty member whose home country has

limited specialized scientific training, ultimately contributing to better cancer research and care throughout the world. The scholar will be part of a multidisciplinary and multi-institutional team led by Dr. Sloane and comprised of experts in proteases, specialists in imaging and breast cancer, patient advocates and others who will work together to accelerate discovery, validation and development of protease targets and inhibitors.

According to Dr. Sloane, in cancer, proteases are well known to regulate cell proliferation and cell death, tumor invasion and metastasis and tumor angiogenesis. In the mammary gland, proteases are required for normal development and for lactation, yet can also initiate and accelerate the progression of breast cancer. Despite the awareness that proteolysis is essential for breast cancer pro-

gression, and that proteases represent potential drug targets, no protease antagonists have been entered into clinical trials for breast cancer.

"A broad and comprehensive strategy to identify potential protease targets needs to be employed," Dr. Sloane said. "By imaging protease activity and its inhibition in vivo, we believe we will confirm that proteases represent promising drug targets that are very specific for cancer, have fewer and less severe side effects than conventional chemotherapy, and could be taken for long periods of time to prevent cancer progression and recurrence."

Avon Foundation-AACR scholars and hosts were announced in March at the AACR annual meeting. Over the next year, scholars and hosts will be paired based on specific research interests. ■



Dr. Bonnie Sloane will be paired with an international scholar to further her work on proteolytic enzymes in breast cancer.

National Cancer Institute awards \$37 million to keep a great thing going

The Metropolitan Detroit Cancer Surveillance System (MDCSS), a collaborative effort between the Karmanos Cancer Institute, Wayne State University School of Medicine, the Michigan Department of Community Health and area hospitals and physicians, received a \$37-million grant renewal from the National Cancer Institute to continue cancer registry activities.

The MDCSS is part of a national effort, called the Surveillance Epidemiology and End Results (SEER) program, to collect and maintain cancer statistics to help the medical community study cancer incidence, survival and treatment patterns and geographical influences on cancer risk.

Over the last 30 years, the MDCSS has collected data on more than 550,000 cases of cancer in metro Detroit and collects an average 25,000 cases per year. The most recent statistics available

from the MDCSS are published in a report called "Cancer Statistics in Metropolitan Detroit 2003." It contains important information about the cancer burden in metropolitan Detroit and trends in incidence and survival.

"This database allows us to provide continuing information about cancer diagnoses, treatment and patient survival. We are also able to use the registry as a resource for more in depth studies of risk and prognostic factors," said Ann G. Schwartz, Ph.D., M.P.H., SEER principal investigator and associate center director for population sciences and professor at Karmanos and Wayne State University. "We can greatly reduce our risk of developing cancer through earlier detection and a better understanding of risk factors for specific cancers.

Because of its urban, industrial setting and diverse population, the Detroit SEER program is an important component of the national reg-



Dr. Ann Schwartz received renewed funding to continue operating the Detroit cancer registry, an important research tool.

istry. The MDCSS collects information on more than 30 percent of all reported cases of cancer in African-Americans included in the national SEER program. This data is important in highlighting racial differences in the occurrence of many cancers and provides an opportunity to reverse disparities. ■

The Detroit Area Cancer Registry reports the latest cancer statistics for the tri-county area. (2001 is the latest year recorded.)

Newly diagnosed invasive and in situ cancer in the tri-county area

- 7,341 new cancers in Oakland County
- 5,230 new cancers in Macomb County
- 12,132 new cancers in Wayne County

Most common cancers among females

1. Breast cancer
2. Cancer of the lung and bronchus
3. Colorectal cancer

Most common cancers among males

1. Prostate cancer
2. Cancer of the lung and bronchus
3. Colorectal cancer

Imaging supports aggressive approach for brain recovery in children

Especially aggressive neurosurgery that entails removal of up to one half of the brain may be the best treatment for the recovery of young children with one rare disorder, and possibly other conditions, according to researchers at the WSU PET Center. With a \$1.1 million, four-year grant from the National Institutes of Health, they hope to test that hypothesis and learn more about the mechanisms behind the amazing ability of very young children's brains to compensate for lost tissue and function quite normally.

Led by principal investigator Csaba Juhasz, M.D., Ph.D., WSU assistant professor of pediatrics, the research group is using multimodality imaging, including positron emission tomography (PET), to study the rare Sturge-Weber syndrome. The disorder is typically progressive, affects only one side of the brain in most cases, and often results in seizures, cognitive problems, visual deficits and weakness on one side of the body. Port-wine facial stains are also characteristic, but only a small percentage of children with the stains have Sturge-Weber syndrome.

"The whole thing started almost 20 years ago when the current co-director of the PET Center and chief of the Division of Pediatric Neurology at Children's Hospital,

Harry T. Chugani, then at UCLA, began using a new functional neuroimaging technique, PET scanning, on children with different neurological disorders, including Sturge-Weber syndrome," Juhasz said. "You would expect that those children with Sturge-Weber syndrome who had a large area of destroyed brain hemisphere would be in the worst condition, but that's not what he found. Those children with large involvement on one side of the brain – half of the brain was pretty nearly destroyed – subsequently did pretty well. From those observations, we created the hypothesis that sometimes it is better to destroy the affected hemisphere more rapidly, because it presents a very powerful force to compel the other, good hemisphere to take over the necessary brain functions."

To stop or at least curtail seizures in patients with Sturge-Weber syndrome and other disorders, many neurosurgeons already prescribe surgery to remove affected brain tissue. Physicians usually wait to take such drastic measures until the patient is experiencing repeated seizures for several years, but by that time, the brain has already lost much of its plasticity and recovery is incomplete, Juhasz explained. "We are finding that with many of these kids, if you do the surgery earlier the seizures not only stop, but the kids actually



Dr. Juhasz has found that earlier surgical intervention may be preferable in treating brain damage.

catch up very well."

The researchers believe that functional imaging combined with neuropsychological analysis will provide the insight necessary to determine which patients would benefit from aggressive surgery early in the disease's progression. In addition to PET scanning, they are using magnetic-resonance spectroscopy to view the biochemistry in different portions of the brain, magnetic-resonance susceptibility weighted imaging (SWI) to visualize very small blood vessels in the brain, and diffusion tensor imaging to measure brain pathways and connections. "Diffusion tensor imaging presents a very interesting new perspective for us," he said. "When plasticity works in

the child's brain, it is quite reasonable to imagine that the connections between brain structures change, and with this technique we will be able to measure which connections actually change when the brain reorganizes itself."

Juhasz and the research group hope the imaging studies will provide some early imaging markers to identify which patients have the poorest outlook and warrant the more aggressive surgical solution. He also suspects that they may learn more about how to curb excitatory neurotransmitters that are more prevalent in many children with neurological disorders. "If we can measure the amount of these neurotransmitters in these children's brains early, perhaps down

the road we can stop the effects of these harmful neurotransmitters through a combination of early surgery and drugs."

Although they are focusing on Sturge-Weber syndrome with this project, Juhasz suspects that they may learn a good deal about brain development and its ability in young children to shift neurological function from a damaged area to a healthy one. "In my mind, this is an interesting developmental study. Sturge-Weber syndrome is a prototype of an early, uni-hemispheric, progressive neurological disorder. That's why we are particularly interested in this."

Besides Juhasz and co-principal investigator Harry T. Chugani, the research group includes: Diane Chugani, Ph.D., professor of pediatrics and co-director of the PET Center; Otto Muzik, Ph.D., associate professor of radiology and PET Center physicist; and Michael Behen, Ph.D., and Robert Rothermel, Ph.D., who are performing longitudinal neuropsychological testing on the patients. In addition, the group is collaborating with Mark Haacke, Ph.D., professor of radiology and director of the MR research facility at Harper Hospital, and Jiani Hu, Ph.D., assistant professor of radiology. ■

Dr. Juzych to Lead Graduate Medical Education

Mark Juzych, M.D., MHSA, has been named assistant dean for graduate medical education. In this role, Dr. Juzych will have responsibility for coordinating the WSU/Detroit Medical Center Graduate Medical Education Program for more than 900 physicians-in-training in 40 medical disciplines. The position is a dual appointment with the DMC, where Dr. Juzych has been appointed vice president for academic affairs.

Dr. Juzych is currently WSU associate professor and vice chair of ophthalmology at WSU's Kresge Eye Institute.

After earning both his bachelor's and medical degrees from Wayne State University with highest distinction, Dr. Juzych completed his residency at KEI and a glaucoma fellowship at the Wilmer Ophthalmological Institute at Johns Hopkins University. He returned to WSU and KEI in 1995, where he served as ophthalmology residency program director and coordinator

of the medical student ophthalmology elective as well as associate chair of the department. In 1998, Dr. Juzych earned a master's degree in health service administration from the University of Michigan.

As ophthalmology residency program director, Dr. Juzych was the lead educator and mentor to 21 residents annually. He orchestrated the successful educational and financial merger of the ophthalmology residency programs of KEI and Sinai-Grace Hospital and guided the ophthalmology department five-

year review. He was tapped to assist in the consolidation of the School of Medicine's 19 clinical faculty practice plans and currently serves a leadership role for the resulting University Physician Group of the WSU medical faculty.

"Mark has demonstrated his leadership and successful ability to oversee the direction of a complex program," said Dean John Crissman. "His keen business acumen, combined with his outstanding dedication to medical education and the service of his patients, make him a

unique and valuable resource for the School of Medicine."

In 2000, *Crain's Detroit Business* recognized then 37-year-old Dr. Juzych as one of Detroit's best and brightest professionals in its "Forty Under Forty" edition.

"Leadership rises to the top in all professions," noted Gary Abrams, M.D., chair of ophthalmology and director of KEI, about that honor. "Put Mark in any business and he would succeed."

Dr. Juzych has been bestowed numerous honors and awards

Center established to diagnose and treat asbestos-related diseases

If, in the 1970s, you painted your house, tiled your floor, had insulation installed or replaced your automotive brake shoes, you were likely exposed to asbestos in some form. Though these low-level exposures are probably insignificant, asbestos is a complex health hazard specifically for highly exposed people including construction and shipyard workers and those who helped manufacture items made of asbestos (roofing materials, pipes, furnaces, millboard, coating materials, etc.). Because there is a very long duration between exposure and the onset of most asbestos-related diseases—usually two or three decades—many patients with cancers of the lung, throat, gastrointestinal tract and kidneys are just now realizing the effects of their early exposures.

In April, the Barbara Ann Karmanos Cancer Institute and the Center for Occupational and Environmental Medicine (COEM) affiliated with Wayne State University joined forces to estab-

lish The National Center for Vermiculite and Asbestos-Related Cancers. The joint program is addressing an immediate public health need for early diagnosis and aggressive treatment of asbestos-related diseases in Michigan. The United States Environmental Protection Agency identified Michigan as a major source of public asbestos exposure.

Those who have been exposed to asbestos contaminated vermiculite, either occupationally or environmentally, are at risk of developing asbestosis, a progressive and potentially fatal, long-term disease of the lungs, lung cancer and mesothelioma, an extremely aggressive cancer of the covering of the lungs and intestine whose only known cause is asbestos. Smokers who have been exposed to asbestos are 50 times more likely to develop lung cancer than non-smokers. Additionally, those who have been exposed to asbestos have been shown to have twice the chance of developing col-

orectal cancer.

“The overall extent of asbestos-related cancers and other diseases related to vermiculite exposure is unclear but initial studies suggest it is substantial,” said Harvey Pass, M.D., professor of surgery and oncology. “COEM has had a long interest in asbestos-related diseases and WSU and the Karmanos Cancer Institute are heavily involved in both clinical and basic research on asbestos-related cancers. Through this center we can quickly pull together the expertise and resources necessary to study and treat this problem immediately.”

Spearheaded by longtime collaborators Dr. Pass and Michael Harbut, M.D., M.P.H, chief of COEM and assistant professor of internal medicine, The National Center for Vermiculite and Asbestos-Related Cancers brings together a highly experienced team of specialists in pulmonary medicine, cardiology, gastroenterology, radiology and medical oncology to: implement early detection and treatment pro-

grams, test large numbers of potentially affected individuals, define at-risk populations, examine the health consequences of chronic exposure to asbestos contaminated vermiculite and related fibers, increase the basic scientific understanding of asbestos-related cancers, and intensify physician education of asbestos-related diseases throughout Michigan.

This is slowly becoming a recognized public health problem, particularly in Michigan. A federal health investigation is under way into facilities across the country, including the former W.R. Grace plant on Henn Street in Dearborn that processed vermiculite contaminated with asbestos for decades until it shut down in the late 1980s. More than 300 million pounds of asbestos-contaminated vermiculite mined in Libby, Montana, by the W.R. Grace Company was processed at this Dearborn plant into Zonolite-brand insulation and subsequently used in more than 800,000 Michigan homes. This includes virtually all the single-

family housing in Flint and nearly 280,000 homes throughout southeast Michigan. Eight additional W.R. Grace vermiculite-processing plants were located in River Rouge, Warren, Milan, Reed City, Elsie and Grand Rapids.

“The peak usage of asbestos in the United States was in 1978,” said Dr. Harbut. “There is usually a 15 to 30 year waiting period for diseases related to asbestos to show up after first exposure. We are now in the middle of the peak of expected cases of asbestosis and only at the beginning of the peak of expected asbestos-related cancers.” ■

For more information, call The National Center for Vermiculite and Asbestos-Related Cancers at (888) KARMANOS (527-6266).

throughout his academic and professional careers to date, including recognition for outstanding research and teaching. He received the American Academy of Ophthalmology Honor Award in 1996 and the Wayne State University College Teaching Excellence Award in 1999. On May 8, he was honored with the Recent Alumni Award of the WSU Medical Alumni Association.

Dr. Juzych is extensively published in peer-reviewed journals and books and has received steady outside funding, including grants

from the National Eye Institute of the National Institutes of Health, for his research related to glaucoma and other diseases of the eye. He is involved in many community-based projects, conducting vision screenings for the underserved population of Detroit and participating in a community education program in collaboration with Focus: HOPE and the Michigan Ophthalmological Society.

The WSU/DMC Graduate Medical Education Program is one of the largest in the country, with

more than 900 physicians-in-training completing residencies and fellowships in approximately 40 specialty and subspecialty areas throughout the system's eight hospitals and additional clinical sites. ■



Dr. Juzych

\$15 million renovations underway at Mott Center

The C.S. Mott Center for Human Growth and Development is experiencing some growth and development itself with about \$15 million in building renovations which are expected to be completed during the next three to four years. The Mott Center building, located on Hancock, is being revamped with funding commitments from the National Institutes of Health (NIH), the State of Michigan, Wayne State University and the School of Medicine.

Established in 1973, the Mott Center provides research space for programs in human reproduction, growth and development. The center operates in close association with Hutzel Women's Hospital and the Department of Obstetrics and Gynecology for research and training. "Following a long history of accomplishments since its establishment, investigators and students training at the Mott Center are getting a resource and facility boost that will allow them to embark on important areas of research," said Marappa Subramanian, Ph.D., professor of OB-GYN and director of operations at the Mott Center.

The renovation started in 2001 with the upgrading of administrative offices and conferencing capabilities at a cost of \$150,000 funded by WSU, the School of Medicine and the Department of OB-GYN (Phase I). The infrastructure upgrading of heating, ventilating and air-condi-



The third floor of the C.S. Mott Center has been renovated with modern wet labs designed for easy collaborations among PRB scientists.

tioning and the electrical power back-up system for the entire building was funded by WSU at a total cost of \$1.5 million (Phase II).

Phase III included renovating and expanding third floor laboratories for the Perinatology Research Branch (PRB) of the National Institute of Child Health and Human Development-Department of Health and Human Services. The PRB is housed at Wayne State University and represents a 10-year, \$125 million contract with the NICHD. The laboratory work for this contract is

carried out at the Mott Center. Six million dollars, or about 40 percent of the building's total renovation, has been devoted to the PRB research space which has modern open labs designed for easy collaborations among PRB scientists. At least 10-12 major principal investigators will house their research here.

Related building improvements included an upgraded fire suppression system, American Disabilities Act compliance, new windows, a new fire alarm system and a new roof membrane. The

State of Michigan and WSU each provided \$3 million towards this phase of renovation (Phase III) that was completed in December 2003.

Currently in progress, Phase IV plans will reorganize, expand and modernize laboratories on the ground floor, second floor and a portion of the first floor at a cost of approximately \$6 million. The NIH's National Center for Research Resources (NCRR) has awarded a \$3 million grant and WSU is matching that amount.

Plans for the fifth and final phase

of construction include upgrading the vivarium, or research animal housing facility, at a cost of \$1.2 million. A grant will be submitted to the NCRR to cover the major portion of the cost.

The total project will increase the current 16,000 square feet of research space by 60 percent. Major NIH-funded researchers including Drs. Stephen Krawetz, Randall Armant, John Hannigan and others will now have ample space for their equipment, staff and collaborative research programs.

"The Mott Center facility support is a testament to the national stature and reputation that WSU's Department of Obstetrics and Gynecology has attained," said Daniel Walz, Ph.D., assistant dean for basic science research and principal investigator on the NIH-NCRR construction grant. In 2002 (the latest year reported), the department ranked third in the country for total research funding, according to the NIH.

"The National Institutes of Health recognizes the value of the multidisciplinary work underway here and has committed major funding to its continuation," Dr. Subramanian said. "Investigators will use this state-of-the-art facility to continue advancing research in women's and children's health, reproductive biology, toxicology and perinatal medicine." ■

Dr. Smitherman named Michiganian of the Year

Battling for health care accessibility

Dr. Herbert Smitherman's patients are the poor and uninsured citizens of Detroit who lack adequate accessibility to quality health care. In his quest for a reliable and equitable system of care, he is rallying the medical community, health officials and legislators to make resources available for the needy. In recognition of his continuous and compassionate efforts, Herbert Smitherman, Jr., M.D., M.P.H., has

been honored as a Michiganian of the Year by *The Detroit News*.

An assistant professor of internal medicine, Dr. Smitherman chooses to practice in Detroit where he hopes to make an impact on the health status of the community. In 1997, he became medical director for 21 Detroit Medical Center health centers and recruited a team of mostly African-American doctors who were committed to urban health care. When those clinics were sold in February, he

started the Health Centers Detroit Medical Group to continue the work he started. His group is building a public health network to provide preventive care and education.

As a researcher, Dr. Smitherman focuses primarily on health issues related to underrepresented populations. He works with diverse communities in Detroit to develop primary-care delivery systems that integrate their social goals and concerns. He uses models that have community participation and

collaboration as the key element in creating sustainable programs. With an interest in health care and international economics, Dr. Smitherman is also qualified to affect public policy through his research.

Dr. Smitherman received his bachelor of science degree in chemical engineering with a minor in biomedical engineering from Northwestern University. He completed his medical degree at the University of Cincinnati and his

health services administration degree at the University of Michigan.

"This honor recognizes Herb's passionate commitment to health care for all people," said Dr. Robert Frank, associate dean for academic and student programs. "Herb has dedicated a great deal of his professional life to this end. He presents a cogent agenda for primary care and its importance in the delivery of health care for everyone." ■

Dr. Hendrix named Michiganian of the Year

Women's health expert fuels reversal on HRT guidelines

In this time of “Who Moved My Cheese” and general resistance to sweeping change, Susan Hendrix, D.O., stands out for her instrumental influence in overturning the medical community's view of long-standing therapies for menopausal women.

Dr. Hendrix, associate professor of obstetrics and gynecology, has been recognized as a Michiganian of the Year by *The Detroit News* in part for launching an about-face on the use of menopausal hormone therapy (MHT), which—after years of consideration as the gold standard treatment—has been found to put women at risk for coronary heart disease, stroke and pulmonary embolism. The experience has reinforced for her, the entire medical community and the general public that we can not rely on assumptions that current practices

are best.

“Technology and research allow us to advance knowledge, and in this case, completely change what we know about the risks and benefits of estrogen therapy,” she said. “It has caused quite a shake-up, but that's academic medicine and biomedical research at its finest.”

A nationally recognized expert on MHT and menopause, Dr. Hendrix became the director and principal investigator of the Women's Health Initiative (WHI) in 1994. The project began as a 10-year, \$9.2 million National Institutes of Health (NIH) grant awarded to WSU to examine the causes and prevention of cancer, cardiovascular disease and osteoporosis.

In August 2002, the NIH halted a major WHI clinical trial after it showed that a combined estrogen-progestin regimen in healthy

menopausal women led to adverse effects including an increased risk of breast cancer, heart disease complications, and lack of overall benefit. Dr. Hendrix was part of an expert panel that drafted new recommendations for treating menopausal conditions.

“Past prescription of MHT was based mostly on observational and anecdotal experience, not scientific data. As more objective studies are done, we find that MHT generally does more harm than good,” Dr. Hendrix said.

Dr. John Malone, chair of obstetrics and gynecology, said, “This award is fitting recognition of her role as an advocate for women's health.”

Dr. Hendrix, 51, graduated from the Michigan State University College of Osteopathic Medicine and has been a WSU faculty member since 1992. ■



Dr. Susan Hendrix was named a Michiganian of the Year for her commitment to improving the health of women.

Research Day Contests

Sinai-Grace Research Day 2004

Congratulations to the winners of the 2004 Sinai-Grace Hospital Research Day. First place awardees received \$500, second place winners received \$250 and third place winners got \$100.

Case Report – Poster

1st place: Mary Santiago, M.D. – Family Medicine
2nd place: Kavitha Potluri, M.D. – Internal Medicine
3rd place: Ahmed Kaseb, M.D. – Internal Medicine

Case Report – Oral

1st place: Ryan Barrett, D.O. – Neurosurgery
2nd place: Jayasree Grandhi, M.D. – Internal Medicine
3rd place: Arvind Reddy, M.D. – Internal Medicine

Clinical Research – Poster

1st place: Asheesh Tewari, M.D. – Ophthalmology
2nd place: Ashish Sharma, M.D. – Ophthalmology
3rd place: Tricia Wells, Pharm.D. – Pharmacy

Clinical Research – Oral

1st place: Michael Abowd, M.D. – Ophthalmology
2nd place (tie): Francis Bayaca, M.D. – Family Medicine
2nd place (tie): Jennifer Rais, Pharm.D. – Pharmacy

Basic Science – Oral

1st place: Pravin Goud, M.D. – OB/GYN
2nd place: Mehrdad Ghaffari, M.D. – Internal Medicine
3rd place: Razmig Haladjian, M.D. – Anesthesiology ■



Dr. Bernard Gonik and second-place winner Dr. Kavitha Potluri discuss a case report and research poster regarding an abdominal aorta aneurysm.

Department of Internal Medicine Research Day

Congratulations to the winners of the Department of Internal Medicine Research Day.

Oral Presentation–Original Research

1st place: Frederick Locke, M.D. – “The Bcl-2/Bcl-xl Small Molecule Inhibitors (BI-193 and TW-37) Induce Growth Inhibitions in a Waldenström's Macroglobulinemia Cell Line”

Oral Presentation–Clinical Vignette

1st place: Olivia Aranha, M.D. – “Idiopathic Hypereosinophilia with Granulocytic Sarcoma and Splenic Infarction: Dramatic Response to Imatinib (Gleevec)”

Poster Presentation–Original Research

1st place: Neelima Thati, M.D. – “Functional Health Literacy in At Risk Populations”

Poster Presentation–Clinical Vignette

Tie for 1st place: Pallavi Jasti, M.D. – “Missed

Abortion and Simultaneous Multiple Venous Thrombosis as the Initial Manifestations of Anti-Phospholipid Syndrome”

Nirav Mamdani, M.D. – “Profound hypoglycemia resulting from malignant solitary fibrous tumor of the Mesentery”

“Research is a priority at Wayne State University,” said Diane Levine, M.D., executive director of medical education for the Department of Internal Medicine. “Our postgraduate trainees complete a rigorous multi-dimensional curriculum in research including didactic lectures, workshops and hands-on opportunities to complete individual research projects. Our fellows have the opportunity to engage in an even higher level of research participating in long-term projects with distinguished members of our faculty. Research Day represents the culmination of the scholarly work of our trainees. We congratulate them on their accomplishments.” ■

Medical student Murinas wins summer research award

While her friends spend the summer getting rest and relaxation, Katie Murinas will cap off her first year of medical school with a two-month research stint at the Emory University School of Medical in Atlanta. She will explore the force constraint strategy by studying how cats use their muscles and limbs to balance and land. This information is important in determining whether the brainstem and spinal cord contain intrinsic circuitry to control posture and movement.

Her project is funded through the American Academy of Neurology's Medical Student Summer Research Scholarship. She was one of 20 students across the country to be honored with this competitive award.

Twenty-five-year-old Murinas came to WSU after earning her master's degree in bioengineering from Georgia Tech (Georgia Institute of Technology), which has a joint program with Emory. While there, she laid the groundwork for these studies that focus on the interactions between the muscu-

loskeletal system and the spinal cord by studying normal versus abnormal movements and postures. This work has applications in several movement disorders, including spinal cord injury and cerebral palsy.

"Since I previously worked in this lab and conducted my own independent research, I feel very familiar with the experimental set-up and other important analysis techniques related to the project," Murinas said. "This will enable me to begin conducting experiments right away. I am expected to determine parameters for each trial, come up with my own analysis techniques, and draw conclusions from the results. At the end of the project, I will present my work to the Spinal Cord Journal Club in the Department of Physiology, which will enable me to receive valuable feedback from an audience with different interests in neurology."

"That Katie would go to the trouble of returning to Georgia for the summer speaks to her strong and ongoing interest in her project," said Dr. James Garbern, associate professor of neurology who nomi-



Katie Murinas will spend June and July completing a summer research project at Emory.

nated Katie for the AAN award. "I anticipate for Katie a rewarding career in clinical neuroscience and I am proud of her efforts to

research new treatments to help people with neurologic diseases." ■

Pediatric projects win research enhancement awards

School of Medicine faculty members reached out to other WSU schools to successfully compete in the WSU Research Enhancement Program. Four School of Medicine faculty members received a total of nearly \$1 million; four additional awards were made to other WSU faculty members with collaborators at the School of Medicine.

All projects included a focus on children.

"The process was quite wonderful, for the projects that emerged were far different for most of the investigators than work that had been done previously. It included a wonderful mix of disciplines and also of junior and established faculty members," said Bonnie Stanton, M.D., chair of pediatrics. The process required that we step

out of our comfortable research niches and explore the wealth of scholars concerned with the multitude of issues related to child health and development."

School of Medicine awards included:

- A \$200,000 grant to Paul Giblin, professor of pediatrics, to leverage matching funds to establish "www.kids.wayne.edu: An Information Resource of Children, Family and Community Status for Metropolitan Detroit";
- A \$244,000 grant to Xiaoming Li, professor of pediatrics, for "Effect of Early Computer Use on School Readiness and Psychosocial Development of Urban Preschoolers."
- A \$239,000 grant to Patrick McAllister, professor of neurosurgery, for "Technological Advances to Aid Children with Brain Injury: Smart Shunts for the Improved Treatment of Hydrocephalus."
- A 200,000 grant to Jeffrey Taub, associate professor of pediatrics, for "Differences in Etiology of Acute Lymphoblastic Leukemia Between Caucasian and African-American Children."
- Co-investigator awards included:
 - A \$202,000 grant to Eileen Trzcinski of Social Work for "The Impact of Total Workload on Maternal and Infant Health: How Employment Before and After Childbirth Influences Maternal and Infant Health." Co-investigators include Judith Fry-McComish and Sean Blackwell, both assistant professors of obstetrics and gynecology.
 - A \$245,000 grant to Rangaramanujam Kannan of Chemical Engineering for "Development and Application of Novel Dendritic Nanodevice Platforms for Targeted Drug Therapy in Children." Co-investigators include Mary Lieh-Lai, associate professor of pediatrics; Sujatha Kannan, assistant professor of pediatrics; Anthony Shields, professor of internal medicine; and Larry Matherly, professor at the Karmanos Cancer Institute.
- A \$201,000 grant to Joseph Jacobson of Psychology for "Neural Correlates of Fetal Alcohol Spectrum Disorders." Co-investigators include Sandra Jacobson, professor of psychiatry, and Gregory Moore, associate professor of psychiatry.
- A \$227,000 grant to Linda Lewandowski of Nursing for "The Differential Effects of Cumulative Violence and Trauma Exposures on Two Adolescent Populations". Co-investigators include Antonia Abbey, chair of community medicine; Lisa Chiodo, a research associate in pediatrics; and Virginia Delaney-Black, associate professor of pediatrics. ■

Dr. Meythaler appointed chair of physical medicine and rehabilitation

Jay M. Meythaler, M.D., J.D., has been named chairman of the Department of Physical Medicine & Rehabilitation at the Wayne State University School of Medicine and Rehabilitation Institute of Michigan. Dr. Meythaler's appointment is effective July 1.

"I look forward to working with Dr. Meythaler in expanding our neuroscience programs," said Dean John Crissman. "The School of Medicine is uniquely positioned to develop a comprehensive neuroscience and neurorecovery research program that will set the standard for quality care."

Dr. Meythaler currently serves as co-director of the Traumatic Brain Injury Care System at the University of Alabama at Birmingham and director of Brain

Injury Services at Spain Rehabilitation Center. A tenured professor, Dr. Meythaler is also medical director of the UAB Injury Control and Research Center and medical director of the Center for Injury Sciences.

"We are pleased that Dr. Meythaler has accepted this position and feel he will be a valuable asset to the staff of Rehabilitation Institute of Michigan," said Terry Reiley, president, Rehabilitation Institute of Michigan in the Detroit Medical Center.

Dr. Meythaler's research interests include spinal-cord injury, traumatic brain injury, spasticity, peripheral neurophysiology and Guillian-Barre Syndrome. He has a particular interest in neuropharmacology.

At WSU, Dr. Meythaler plans to

develop an interdisciplinary center to support a comprehensive, nationally recognized neuroscience program. One key area he plans to explore is neurorecovery.

"Neurorecovery is one very important part of that process after managing the acute processes," he said. "At this point in time, this type of research is analogous to stepping on an undiscovered continent. With neurological injury and illnesses responsible for much of the long-term disability in the United States, developing a better understanding for neuroscience will be paramount to improving the quality of life for current and future patients." ■



Dr. Meythaler will join WSU from the University of Alabama at Birmingham and he's particularly interested in neurorecovery research.

Role of reactive oxygen species in diabetic retinopathy

Although it is well established that high blood glucose (hyperglycemia) causes diabetic retinopathy (eye disease), the mechanism through which this damage occurs is not completely understood. Researchers know that hyperglycemia leads to the production of toxic metabolic byproducts called reactive oxygen species, but they are unsure of exactly how these reactive molecules may be affecting retinal cells.

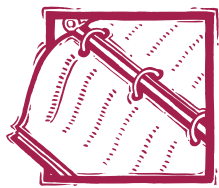
Renu Kowluru, Ph.D., associate professor of ophthalmology, received a \$470,000 grant from the Juvenile Diabetes Research Foundation to study the pathogenesis of retinopathy in diabetes – the No. 1 cause of blindness in young adults in the United States. Her studies are aimed at understanding the signal transduction mechanisms involving reactive

oxygen species to modify the course of development of retinopathy in diabetes and are expected to elucidate new important molecular targets for future pharmacological interventions to treat this sight-threatening complication of diabetes. Recent studies from her laboratory have shown that inhibition of free radicals accumulation in the retina can inhibit increased capillary cell death in diabetes.

"Diabetic retinopathy may go unnoticed at first, but a healthy retina is necessary for good vision, so over time, it will likely lead to vision loss," Dr. Kowluru said. "Better control of blood sugar levels can slow the onset and progression of the problem, but that is very difficult to obtain and maintain for long durations. We are looking at more aggressive therapies to inhibit the development and progression of retinopathy in diabetes." ■



Dr. Kowluru also studies the role of oxidative stress in diabetic retinopathy.



Notes

Gyula Acsadi, M.D., Ph.D., assistant professor of neurology and pediatrics, presented “Electrophysiologic Criteria Defining Charcot-Marie-Tooth Disease With Intermediate Conduction Velocities” at the American Academy of Neurology’s annual meeting in April. Co-authors were: Michael Shy, Karen Krajewski, and Richard Lewis.

Hiranmoy Bhattacharjee, Ph.D., assistant professor of biochemistry and molecular biology, was one of 24 faculty members to receive funding from the Wayne State University Research Grant Program which was designed to encourage scholarly research and artistic expression among junior faculty.

N. Cao, M.D., chief neurology resident, presented “The Possible Pathophysiological Determinants of West Nile Induced Paralysis” at the American Academy of Neurology’s annual meeting in April. Co-authors were: William Kupsky, C. Ranganathan and Jun Li.

Seemant Chaturvedi, M.D., associate professor of neurology and director of the WSU/DMC Stroke Program, gave two lectures at the 2004 Society of Interventional Radiology meeting. He presented “Medical Management of Carotid Atherosclerosis” and “Is Carotid Stenting Supported by the Data?”

Dr. Chaturvedi also presented “Asymptomatic Carotid Surgery Trial (ACST): Interim Five Year Results” at the American Academy of Neurology’s annual meeting in April. In addition, as principal investigator for the WSU site, he was part of the WASID Investigators of the Stroke Section of the AAN presenting “Physician Preferences for Diagnosis and Treatment of Symptomatic Intracranial (IC) Arterial Stenosis.”

William Coplin, M.D., associate professor of neurology, gave two lectures in the course, “Controversies in Critical Care,” at the American Academy of Neurology’s annual meeting in April. He also co-chaired a platform session on

“Critical Care/ Emergency Neurology/Trauma” and led a walking tour of “Poster Session V: Basic and Clinical Neurophysiology of Neurological Critical Care.”

Bruce Deschere, M.D., assistant professor of family medicine, recently served as the physician to Team USA at the World Synchronized Skating Competition in Zagreb, Croatia. Dr. Deschere has provided medical coverage at skating events for the past five years.

Robert Freedman, Ph.D., professor of psychiatry and behavioral neurosciences and obstetrics and gynecology, has been named chairman of the abstract review committee of the North American Menopause Society. The society is an international organization with more than 3,000 members devoted to the research and treatment of issues related to menopause and women’s health.

James Garbern, M.D., Ph.D., assistant professor of neurology, presented “The Proteolipid Protein-Specific Region of PLP Is Necessary for Normal Peripheral Nerve Function” at the American Academy of Neurology’s annual meeting in April. Co-authors were: Karen Krajewski, G. Hobson, Jun Li, Richard Lewis, John Kamholz and Michael Shy.

Meegan Green, year I medical student, was elected as Region IV Trustee of the American Medical Student Association at the organization’s national convention in Kansas City.

Jiani Hu, Ph.D., assistant professor of radiology, presented “Muscle Proton MRS in West Nile Virus Induced Paralysis” at the American Academy of Neurology’s annual meeting in April. Co-authors were: Yimin Shen, N. Cao, William Kupsky and Jun Li.

Bradley Jacobs, M.D., assistant professor of neurology, was part of a state-wide group presenting “In-Hospital Strokes in a Statewide Prospective Stroke Registry in Michigan” at the American Academy of Neurology’s annual meeting in April.

Csaba Juhasz, Ph.D., research associate in pediatrics, presented “PET Imaging of Recurrent Brain Tumors Using Alpha [C-11] Methyl-L-Tryptophan” at the American

Academy of Neurology’s annual meeting in April. Co-authors were: Diane Chugani, Otto Muzik, Andrew Sloan, Geoffrey Barger, Craig Watson, Sandeep Sood and Harry Chugani.

Omar Khan, M.D., associate professor of neurology, co-chaired a platform session on “Multiple Sclerosis: Clinical Trials” at the American Academy of Neurology’s annual meeting in April. He also gave two presentations:

“APO e4–Frequency of in African-American MS Patients and Association with Disease Severity” with co-authors: W. Ching, C. Ozust, Christina Caon, M. Renzar, Alyssa Buchheister, Beena Shah, Alex Tselis and Alan Hudson, and “Treatment of Severe Refractory Optic Neuritis in MS Patients with Intravenous Immunoglobulin” with co-authors: M. Din, Christina Caon, Robert Lisak, W. Ching and Alex Tselis.

Richard Lewis, M.D., associate chair of neurology, has been invited to serve on the editorial board of the *Journal of Clinical Neuromuscular Disease*. He also presented “A CMT1C Family with Gly112 Ser Mutation in LITAF Simple: Mild Phenotype, Minimal Axonal Loss, and Slow Conduction Velocities” at the American Academy of Neurology’s annual meeting in April. Co-authors were: Karen Krajewski, Rosemary Shy, M. Saifi, J. Lupski and Michael Shy.

Jun Li, M.D., Ph.D., assistant professor of neurology, gave two presentations at the American Academy of Neurology’s annual meeting in April. They were:

“Clinical, Pathological and Molecular Phenotype of a Human MPZ Mutation: An Autopsy Study” with co-authors: M. Grandis, Karen Krajewski, Emilia Ianokova, William Kupsky, and Michael Shy, and “The Use of Skin Biopsies in the Evaluation of Inherited Neuropathies” with co-authors: M. Grandis, Xingyao Wu, Michael Shy and M.E. Vallat.

Ralph Lieto, adjunct assistant professor of radiation oncology, was reappointed to a three-year term on the Advisory Committee on the Medical Uses of Isotopes of the federal Nuclear Regulatory Commission.

Robert Lisak, M.D., professor and chair of neurology, was part of the Copaxone Study Group that presented “Long-term Slowing of Disability Progression in Patients Receiving Continuous Glatiramer Acetate Compared With Those Withdrawing From Therapy: 10 Year Results From an Ongoing Trial” at the American Academy of Neurology’s annual meeting in April. Also participating in the group were Omar Khan and Alex Tselis. Additionally, Drs. Lisak, Khan and Tselis participated in the PROMiSe Study Group as WSU principal investigators.

Jeanne Lusher, M.D., distinguished professor of pediatrics and director of the hematology/oncology division of Children’s Hospital of Michigan, has been elected president of the Wayne State University Academy of Scholars for 2004-2005.

Amanda Meulenberg, year III medical student, was elected national vice president of the American Medical Student Association at the organization’s national convention in Kansas City.

Daniel Michael, M.D., Ph.D., associate professor of neurosurgery, was re-elected as vice speaker of the Michigan State Medical Society (MSMS) House of Delegates at its 139th annual meeting in May. As vice speaker, Dr. Michael presides over the 300 physician-delegates who assemble each year to set policies for the 14,500-member MSMS on various issues involving public health, health care delivery and medical ethics.

Apurva Motivala, M.D., internal medicine resident, was an invited presenter at the 2004 American College of Physicians annual meeting in April. Dr. Motivala’s poster presentation featured “The Role of Fine Particulate Air Pollution and Elevation of Circulating Asymmetric Dimethylarginine (ADMA) Levels.”

The Department of Psychiatry and Behavioral Neurosciences announced its chief residents for the 2004-05 academic year. **Hany Mekhael, M.D.**, will be chief resident for general psychiatry; **Thomas Henry, M.D.**, will be outpatient chief resident; and **Suresh Chitturi, M.D.**, and **Kristyn Gregory, D.O.**, will be co-chief residents for child/adolescent psychiatry.

Aashit Shah, M.D., assistant professor of neurology, presented “Effects of Seizures on Intracranial Pressure in Children Undergoing Invasive EEG Monitoring” at the American Academy of Neurology’s annual meeting in April. Co-authors were: Sandeep Sood, Darren Fuerst, E. Asano, J. Ahn-Ewing and Harry Chugani.

George Shade Jr., M.D., associate professor of obstetrics and gynecology and chief of OB/GYN at Sinai-Grace Hospital, was appointed to the Michigan Board of Medicine. His seat on the 19-member board is one of 10 held by physicians. The board is responsible for establishing criteria for licensing physicians and providing for disciplinary action against those who violate the Michigan Public Health Code. The board also sets standards for continuing medical education.

Timothy Stemmler, Ph.D., assistant professor in biochemistry and molecular biology, was one of 24 faculty members to receive funding from the Wayne State University Research Grant Program which was designed to encourage scholarly research and artistic expression among junior faculty.

Mohammed Sunbuli, M.D., stroke fellow, presented “Intracranial Atherosclerosis in African Americans with Ischemic Heart Disease” at the American Academy of Neurology’s annual meeting in April. Co-authors were: Renee Van Stavern, Bradley Jacobs, Elizabeth Berlow, James Marsh, Patrick McLaughlin and Seemant Chaturvedi.

Gregory Van Stavern, M.D., assistant professor of ophthalmology and neurology, presented “Clinical Characterization of Idiopathic Intracranial Hypertension in a North American Urban Population” at the American Academy of Neurology’s annual meeting in April. ■



Rounds

NEJM publishes new standard for treatment of high-risk head and neck cancers

Results of a nationwide study based on a regimen originating from pilot work done by the Karmanos Head and Neck Multidisciplinary Team and Wayne State University in the 1980s show that concurrent chemotherapy and radiation therapy after surgery for high-risk head and neck cancer patients significantly improves the chance that a tumor will not recur at the site of the original cancer (local-regional control) and disease free survival rates.

The study was published in the May 6 edition of the *New England Journal of Medicine* in an article titled "Postoperative Concurrent Chemotherapy and Radiation Therapy in High Risk Squamous Cell Carcinoma of the Head & Neck Region: The RTOG 9501/Intergroup Phase III Trial."

John Ensley, M.D., a senior author on the study, is a professor of oncology at WSU and head of the medical oncology component of the Karmanos Cancer Institute's Head and Neck Cancer Multidisciplinary Team. "These results establish a new standard of care for the treatment of late stage

head and neck cancers," said Dr. Ensley, who also chaired the Southwest Oncology Group Head and Neck Cancer Committee, one of the three NCI Cooperative Groups that participated in this study. "This is an important milestone in the fight against head and neck cancers."

Drs. John R. Jacobs, professor of otolaryngology, and Harold Kim, assistant professor of radiation oncology, co-authored the study.

WSU student wins national leadership award

Nicole Burdrys, a WSU School of Medicine student, was named one of 55 emerging national leaders by the American Medical Association Foundation. Burdrys won an Excellence in Medicine Leadership award, a distinction earned through memorable public and professional service.

Burdrys was the 2002 chair of HealthFOCUS (Health For Our Children in Urban Settings), a conference providing those intimately involved with child welfare an opportunity to raise awareness of the challenges involved in improving the health care of urban children. She is involved in the American Medical Association and was recently elected chair of the Medical Student Section of the Michigan State Medical Society Governing Council. She also serves on the board of directors for the Southeastern Michigan American Red Cross.

The annual award recognized 20 students, 20 residents and fellows and 15 young physicians from the

United States who have demonstrated outstanding leadership skills in non-clinical and community service activities.

Participants needed for African-American health studies

Wayne State University School of Medicine researchers are seeking participants for two studies that will examine the causes of disease conditions that represent areas of known health disparities in African Americans.

The studies are part of the Center for Urban African American Health (CUAAH), one of only eight institutions in the United States studying health disparities in minority populations and the recent recipient of a \$6 million grant from the National Institutes of Health.

- 1) The first study invites participation of African-American males or females, 45 or older, who are not hypertensive, diabetic or taking lipid-lowering drugs. The study will analyze how genes and lifestyle factors may affect salt sensitivity and obesity in African Americans who do not have high blood pressure and whose weight is higher than recommended standards.
- 2) The second study invites participation of African-American females, ages 18-70, who were previously diagnosed with breast cancer and have completed therapy without recurrence. The study will examine the effect of peer counseling on weight loss in breast cancer

survivors. Women currently on a weight loss program cannot be considered.

The studies include modest compensation for participants. For more information or to be considered for the study, call Donna Ford at (313) 745-5774.

"This center has a tremendous opportunity to provide greater insight into how the environment, stress and genetic factors conspire to diminish health and cause disease in African Americans," said Dr. John Flack, principle investigator for the CUAAH and associate chair of the School of Medicine's Department of Internal Medicine.

Wayne State professor links low testosterone with Alzheimer's Disease

Wayne State Professor Scott Moffat and his colleagues have discovered a link between low testosterone and Alzheimer's disease (AD) in older men.

"This is a big step forward in helping to understand how sex hormones affect the aging brain and body," said Moffat, the lead investigator on the study, which appears in the January 27, 2004 issue of the journal *Neurology*.

Moffat, an assistant professor with WSU's Institute of Gerontology and department of psychology, conducted this study in collaboration with other research scientists at the National Institute on Aging, one of the National Institutes of Health, and WSU.

In this study, investigators evaluated the testosterone levels of 574

men, ages 32 to 87, who participated in the Baltimore Longitudinal Study of Aging. They examined "free" and "total" testosterone levels—measured over an average of 19 years—in relationship to subsequent diagnosis of AD.

The research team found that for every 50 percent increase in the free testosterone in the bloodstream, there was about a 26 percent decrease in the risk of developing AD. Although overall free testosterone levels fell over time, these levels dropped more dramatically in those men who later developed AD. In fact, at the end of the study, men who were diagnosed with AD, on average, had about half the levels of circulating free testosterone as men who didn't develop the disease. In some cases, the drop-offs in free testosterone levels associated with AD were detected up to a decade before diagnosis.

In earlier studies, Moffat and his colleagues found that older men with high levels of circulating free testosterone have better visual and verbal memory and perform spatial tasks more adeptly than their peers. "It's quite possible that free testosterone has many different influences on the aging brain," he suggests. "The effects of some of these influences—on certain types of memory loss and Alzheimer's disease, for example—are just beginning to be explored." ■

Continuing Medical Education

4th Annual Obstetrics and Gynecology Symposium: New Strategies in Gynecological Practice
July 16-18, 2004
The Grand Hotel
Mackinac Island, Mich.

4th Annual Update in Internal Medicine: Selected Topics and Controversies
July 30 - August 1, 2004
The Inn at Bay Harbor
Bay Harbor, Mich.

Arterial Fibrillation and Stroke
October 2, 2004
The Somerset Inn
Troy, Mich.

4th Annual Karmanos Cancer Institute Breast Cancer Symposium: A Multi-Disciplinary Approach
October 16, 2004
The Ritz Carlton
Dearborn, Mich.

Neurology for the Non-Neurologist
October 23, 2004
The Townsend Hotel
Birmingham, Mich.

5th Annual Norman N. Krieger, M.D., Lecture in Geriatric Medicine
November 3, 2004
The Sheraton Detroit Novi
Novi, Mich.

2nd Annual Cancer Supportive Care
November 6, 2004
The Dearborn Inn
Dearborn, Mich.

Molecular Targeted Therapies
November 20, 2004
The Dearborn Inn
Dearborn, Mich.

For more information or to register for conferences, please call Wayne State University's Division of Continuing Medical Education at (313) 577-1180.

Class of 2004

Congratulations to the class of 2004 who will pursue post-graduate medical training at the following institutions. Transitional students will begin training at one place and later transfer to another for their second year of postgraduate training, as indicated.

Maheer D. Abu-Hamdan
Postponing post-graduate training

Yetunde E. Adigun
Baylor College of Medicine
Obstetrics-Gynecology
Houston, Texas

Radhka Aggarwal
University of Illinois College of
Medicine
Internal Medicine
Chicago, Illinois

Abraham Ahmed
Postponing post-graduate training

Hussein H. Ajrouche
Henry Ford Health System
Internal Medicine
Detroit, Michigan

Alit J. Amit-Yousif
Oakwood Hospital
Diagnostic Radiology
Dearborn, Michigan

Tanja A. Andrzejewski
Henry Ford Health System
General Surgery
Detroit, Michigan

Paolo M. Aquino
Wayne State University/Detroit
Medical Center
Medicine/Pediatrics
Detroit, Michigan

Nicole C. Aratari
Henry Ford Health System
Internal Medicine
Detroit, Michigan

Crystal L. Arthur
Wayne State University/Detroit
Medical Center
Emergency Medicine
Detroit, Michigan

Hisham M. Awan
Wayne State University/Detroit
Medical Center
Orthopaedic Surgery
Detroit, Michigan

Sara B. Bachman
Mercy Catholic Medical Center
Medicine-Preliminary (1)
Darby, Pennsylvania
Hospital of the University of
Pennsylvania
Anesthesiology (2)
Philadelphia, Pennsylvania

Amy Bahl
New York Medical College/St.
Vincent's Hospital
Internal Medicine
Staten Island, New York

John R. Bahling
University of California
San Francisco
Pediatrics
San Francisco, California

Melisha D. Baldwin
Wayne State University/Detroit
Medical Center
Surgery-Preliminary
Detroit, Michigan

Sudhir B. Baliga
Henry Ford Health System
Emergency Medicine
Detroit, Michigan

Sarah M. Bancroft
Oakwood Hospital
Family Practice
Dearborn, Michigan

Leslie M. Barnes
Rush University Medical Center
Surgery-Preliminary
Chicago, Illinois

Jirair K. Bedoyan
UPMC Medical Education
Program
Pediatrics
Pittsburgh, Pennsylvania

Anthony M. Bielawski
Naval Medical Center
Transitional
San Diego, California

John J. Blasé
Henry Ford Health System
Diagnostic Radiology
Detroit, Michigan



Left to right: Orlin Hadjiev, Reema Gupta and Michael Grimes await their diplomas.

Michelle L. Boykin
St. Louis University School of
Medicine
Pediatrics
St. Louis, Missouri

Tiffany J. Braley
St. Joseph Mercy - Ann Arbor
Medicine-Preliminary (1)
Ann Arbor, Michigan
University of Michigan Hospitals
Neurology (2)
Ann Arbor, Michigan

Jerry D. Brewer
Yale-New Haven Hospital
Medicine/Prim-Preliminary (1)
New Haven, Connecticut
Mayo Graduate School of Medicine
Dermatology (2)
Rochester, Minnesota

Bradley S. Briercheck
Wayne State University/Detroit
Medical Center
Psychiatry
Detroit, Michigan

Karl L. Brown
San Antonio Uniformed Services
Health Education
Internal Medicine
Consortium - Air Force
San Antonio, Texas

Kingsley I. Bryan
Pennsylvania Hospital
Obstetrics-Gynecology
Philadelphia, Pennsylvania

Brian A. Buckler
Grand Rapids Medical Education
Center
Family Practice
Grand Rapids, Michigan

Joel A. Caldón
Orlando Regional Healthcare
System
Emergency Medicine
Orlando, Florida

Rachel M. Callaghan
William Beaumont Hospital
Diagnostic Radiology
Royal Oak, Michigan

Diana L. Caragacianu
Baylor College of Medicine
General Surgery
Houston, Texas

Robert M. Cercek
Tulane University School of
Medicine
Orthopaedic Surgery
New Orleans, Louisiana

Terry Chang
Mt. Sinai School of
Medicine/Cabrini
Surgery-Preliminary
New York, New York

Andrew A. Cherro
Wayne State University/Detroit
Medical Center
Anesthesiology
Detroit, Michigan

Paul J. Chittick
William Beaumont Hospital
Internal Medicine
Royal Oak, Michigan

Erika K. Crane
Wayne State University/Detroit
Medical Center
Pediatrics
Detroit, Michigan

Vladimir Y. Dadashev
Emory University School of
Medicine
Neurological Surgery
Atlanta, Georgia

Stephen J. DeHorn
Henry Ford Health System
General Surgery
Detroit, Michigan

Stephanie N. DeLeon
William Beaumont Hospital
Family Practice
Royal Oak, Michigan

Jeffrey M. Decker
William Beaumont Hospital
Internal Medicine
Royal Oak, Michigan

Patricia J. Dehaan
Madigan Army Medical Center
Internal Medicine
Tacoma, Washington

Vladimir N. Despotovic
Barnes-Jewish Hospital
Internal Medicine
St. Louis, Missouri

Jeffrey S. Dittkoff
William Beaumont Hospital
Emergency Medicine
Royal Oak, Michigan

Nikola M. Dobrasevic
Wayne State University/Detroit
Medical Center
Orthopaedic Surgery
Detroit, Michigan

Hadi A. Dourra
Henry Ford Health System
Internal Medicine
Detroit, Michigan

Cicely P. Dowdell
Baylor College of Medicine
Pediatrics
Houston, Texas

Andrew J. Dublin
University of California
San Diego Medical Center
Internal Medicine
San Diego, California

Cristina S. Dunlop
Loyola University Medical
Center
Anesthesiology
Maywood, Illinois

Mark J. Dzwik
Henry Ford Health System
Emergency Medicine
Detroit, Michigan

Najwa El-Nachef
University of Michigan Hospitals
Internal Medicine
Ann Arbor, Michigan

Fadi A. Eliya
William Beaumont Hospital
Urology
Royal Oak, Michigan

Philip S. Estrellas
William Beaumont Hospital
Diagnostic Radiology
Royal Oak, Michigan

Riyad A. Fares
St. John Hospital and Medical
Center
Internal Medicine
Detroit, Michigan

Dennis J. Firchau
Medical College of Wisconsin
Affiliated Hospitals
Pathology
Milwaukee, Wisconsin

Arman Forouzannia
Virginia Mason Hospital
Diagnostic Radiology
Seattle, Washington

Todd B. Francis
Wayne State University/Detroit
Medical Center
Neurological Surgery
Detroit, Michigan

Regina R. Frost
St. John Hospital and Medical
Center
Obstetrics and Gynecology
Detroit, Michigan

James R. Frybarger
SUNY Health Science Center at
Brooklyn
Orthopaedic Surgery
Brooklyn, New York

Julia K. Fuzak
Children's Memorial Hospital
Pediatrics
Chicago, Illinois

Aaron P. Garrison
University of North Carolina
Hospital
General Surgery
Chapel Hill, North Carolina

Gregory B. Gaskin
Wayne State University/Detroit
Medical Center
Transitional (1)
Detroit, Michigan
Cleveland Clinic Foundation
Anesthesiology (2)
Cleveland, Ohio



Left to right: Sherilyn Russell, Lesli Rusche and Deniese Sabbath make last minute adjustments.

Ross M. Germani
University of Miami
Otolaryngology
Miami, Florida

Saleh A. Ghaith
Oakwood Hospital
Internal Medicine
Dearborn, Michigan

Sonia K. Ghei
St. John Hospital and Medical
Center
Transitional (1)
Detroit, Michigan
University of California Davis
Medical Center
Diagnostic Radiology (2)
Sacramento, California

Kristi L. Gibson
Marquette General Hospital
Family Practice
Marquette, Michigan

Karanbir S. Gill
Georgetown University Hospital
Pediatrics
Washington, District of Columbia

Parin S. Gohel
Lahey Clinic
Medicine-Preliminary (1)
Burlington, Massachusetts
University of Colorado School of
Medicine
Ophthalmology (2)
Denver, Colorado

Michael P. Grimes
Martin Luther King, Jr./Charles
R. Drew Medical Center
Obstetrics and Gynecology
Los Angeles, California

Reema Gupta
University of Illinois College of
Medicine
Emergency Medicine
Chicago, Illinois

Orlin Hadjiev
Henry Ford Health System
Diagnostic Radiology
Detroit, Michigan

Alwyn D. Harriott
St. John Hospital and Medical
Center
General Surgery
Detroit, Michigan

Sarah E. Hartley
Wayne State University/Detroit
Medical Center
Internal Medicine
Detroit, Michigan

Alex B. Haynes
Massachusetts General Hospital
General Surgery
Boston, Massachusetts

Patrick A. Herek
Cook County - Stroger Hospital
Medicine-Preliminary (1)
Chicago, Illinois
Cook County - Stroger Hospital
Emergency Medicine (2)
Chicago, Illinois

Joshua J. Herskovic
University of Illinois College of
Medicine
Anesthesiology
Chicago, Illinois

Doraliz Hildalgo
Thomas Jefferson University
Emergency Medicine
Philadelphia, Pennsylvania

Albert D. Ho
Wayne State University/Detroit
Medical Center
Pediatrics
Detroit, Michigan

Mark R. Hofmeyer
Jackson Memorial Hospital
Internal Medicine
Miami, Florida

Steve C. Hong
William Beaumont Hospital
Diagnostic Radiology
Royal Oak, Michigan

Douglas J. Hoye
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Transitional (1)
Detroit, Michigan
Emory University School of
Medicine
Anesthesiology (2)
Atlanta, Georgia

Brian M. Hughes
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Chicago, Illinois

NiJuanna P. Irby-Johnson
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Dearborn, Michigan

Jyothsna Iyengar
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San Francisco
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Fresno, California

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Brooklyn, New York

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University of Pittsburgh Medical
Center
Neurological Surgery (2)
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Neurological Surgery (2)
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Leyam T. Kewson
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Kristen E. Kingzett
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LaSonya D. Jones
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Eileen Kuet
Postponing post-graduate training

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Royal Oak, Michigan

Lucas R. Leete
Grand Rapids Medical Education
Center
Emergency Medicine
Grand Rapids, Michigan

Andrew J. Lenneman
Vanderbilt University Medical
Center
Internal Medicine
Nashville, Tennessee

Joseph P. Liu
Harbor-UCLA Medical Center
Transitional
Los Angeles, California

Jacob A. Livermore
Wayne State University/Detroit
Medical Center
Transitional (1)
Detroit, Michigan

Patrick M. Long
University of Michigan Hospitals
Diagnostic Radiology (2)
Ann Arbor, Michigan

Patrick M. Long
University of Florida Health
Science Center
Emergency Medicine
Jacksonville, Florida

Joshua Lubek
Wayne State University/Detroit
Medical Center
Oral-Maxillofacial Surgery
Detroit, Michigan

Christopher Lynch
Emory University School of
Medicine
Emergency Medicine
Atlanta, Georgia

Michael D. Magiera
University Hospitals of Cleveland
Psychiatry
Cleveland, Ohio

Farah K. Malick
Henry Ford Health System
Medicine-Preliminary
Detroit, Michigan

Angela R. Mangus
University of Wisconsin Medical
School
Family Practice
Madison, Wisconsin

Vera Maranci
Wayne State University/Detroit
Medical Center
Internal Medicine
Detroit, Michigan

Joseph S. Marzano
University Wisconsin Hospital
and Clinic
Psychiatry
Madison, Wisconsin

Hawa S. Massaquoi
Virginia Commonwealth
University Health Systems
Medicine/Pediatrics
Richmond, Virginia

Dara N. Maurant
St. John Hospital and Medical
Center
Obstetrics and Gynecology
Detroit, Michigan

Kristen W. McBride
William Beaumont Hospital
Obstetrics and Gynecology
Royal Oak, Michigan

Eric J. McGrath
Wayne State University/Detroit
Medical Center
Pediatrics
Detroit, Michigan

Candice J. McNeil
Bridgeport Hospital
Medicine/Pediatrics
Bridgeport, Connecticut

Ronald J. Meade
Oakwood Hospital
Diagnostic Radiology
Dearborn, Michigan

Mishal Mendiratta-Lala
Henry Ford Health System
Diagnostic Radiology
Detroit, Michigan

Daniel J. Mercier
Grand Rapids Medical Education
Center
Emergency Medicine
Grand Rapids, Michigan

Paymon Mesgarzadeh
University of Illinois College of
Medicine
Internal Medicine
Chicago, Illinois

Jessica M. Michajlyszyn
Barnes-Jewish Hospital
Obstetrics and Gynecology
St. Louis, Missouri

Davin G. Mitchell
St. John Hospital and Medical
Center
Medicine-Preliminary (1)
Detroit, Michigan
Duke University Medical Center
Anesthesiology (2)
Durham, North Carolina

Ryan K. Miyamoto
University of Texas Health
Science Center
Surgery-Preliminary (1)
San Antonio, Texas
University of Texas Health
Science Center
Urology (2)
San Antonio, Texas

Laura A. Monson
University of Michigan Hospitals
Plastic Surgery
Ann Arbor, Michigan

Gregory J. Moore
Milton S. Hershey Medical Center
Diagnostic Radiology
Penn State University Program
Hershey, Pennsylvania

Christina M. Morton
St. John Hospital and Medical
Center
Transitional (1)
Detroit, Michigan
McGaw Medical Center -
Northwestern University
Physical Medicine and
Chicago, Illinois
Rehabilitation (2)

Mark A. Moyad
Postponing post-graduate training

Mondeep Narewal
Postponing post-graduate training

Lawrence Narkiewicz
Wayne State University/Detroit
Medical Center
General Surgery
Detroit, Michigan



Left to right: Nicole Aratari, Paolo Aquino and Tanja Andrzejewsk mug for the camera.

Farid A. Nasser
Rush University Medical Center
Medicine-Preliminary
Chicago, Illinois

Craig L. Nerby
University of Nebraska
Affiliated Hospital
Pathology
Omaha, Nebraska

Daniel P. O'Donnell
Indiana University School of
Medicine
Emergency Medicine
Indianapolis, Indiana

Michelle D. Ober
William Beaumont Hospital
Pediatrics
Royal Oak, Michigan

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Evanston, Illinois

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Left to right: Richard Utarnachitt, Leyam Kewson and Heinric Williams pose in front of the Opera House.

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Left to right: Richard Utarnachitt, Leyam Kewson and Heinric Williams pose in front of the Opera House.

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Adam T. Zierenberg
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Physical Medicine and
Royal Oak, Michigan
Rehabilitation ■

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Physical Medicine and
Royal Oak, Michigan
Rehabilitation ■



Honors

Agustin Arbulu, M.D., professor of surgery, received the MSMC Distinguished Service Award at the annual conference of the Michigan State Medical Society held in April. Dr. Arbulu was presented with a Presidential Citation "in recognition of distinguished service on behalf of the medical profession."

Eric Ayers, M.D., assistant professor of internal medicine, was named the 2003 Physician of the Year by the Visiting Nurses Association (VNA). He was selected from over 2,000 physicians across the state and was awarded most outstanding physician based on input from patients, nurses and administrators input at the VNA.

Ismail Bobat, M.D., fellow in critical care/pulmonary medicine (internal medicine), received one of three runner up research awards from the Michigan Thoracic Society at its annual meeting.



Drs. Potts and Fong

Angelina Fong, Ph.D., postdoctoral fellow in the laboratory of Dr. Jeffrey Potts, assistant professor of physiology, received the recognition award for meritorious research in the respiration section of the American Physiological Society at the Annual Experimental Biology Meeting held in Washington, D.C. Dr. Fong's research examined the

effect of the neuropeptide substance P on the excitability of respiratory neurons in the mammalian brainstem. Findings from this initial work provide the foundation for future studies that will investigate the excitatory effects of substance P on breathing.

Ahmed Kaseb, M.D., internal medicine resident, was a top 10 finalist in the research poster competition at the 2004 American College of Physicians annual meeting in April. Dr. Kaseb's presentation, "HPV-16 and Schistosomiasis-Caused Bladder Cancer," was the only top 10 winner from Michigan.

Ahmed Khan, M.D., fellow in critical care/pulmonary medicine (internal medicine), won a first place research award from the Michigan Thoracic Society at its annual meeting.

Stephen Krawetz, Ph.D., professor in the Department of Obstetrics and Gynecology, Center for Molecular Medicine and Genetics, and Institute for Scientific Computing, was awarded the CEGYR (Centro De Estudios En

Ginecologia Y Reproduccion) 5th Magisterial Tribune Gold Medal for his work on the repertoire of spermatozoal mRNAs as a genetic fingerprint of normal fertile males and spermatogenesis: a model system for understanding how to reprogram our genome. The honor was awarded at the CEGYR 5th Magisterial Tribune, Sero Symposium International.

Raymond Mattingly, Ph.D., associate professor of pharmacology, has been designated a Wilson Scholar after winning a biomedical sciences grant from the Ralph C. Wilson, Sr., and Ralph C. Wilson, Jr., Medical Research Foundation. His \$200,000 award allows him to work on a project titled "Modeling in the Early Stages of Breast Cancer: Assessing the Roles of PAK1 in Mammary Epithelial Hyperplasia Through Functional Imaging."

Yousha Mirza, M.D., second-year resident in child and adolescent psychiatry, was one of 50 residents in the nation to earn a fellowship to attend the American Society of Clinical Psychopharmacology/

National Institutes of Mental Health/Zucker-Hillside Hospital clinical trials workshop in April. The program helps physicians and researchers design and implement clinical trials with an emphasis on methodology.

Linda Roth, Ph.D., associate professor of family medicine, and Stanley Terleckey, Ph.D., associate professor of pharmacology, have received fellowships to attend the 10th Annual Conference on Teaching Survival Skills and Ethics, June 7 through 12, in Snowmass, Colo. The five-day conference, which is funded by the National Institutes of Health, is designed to prepare faculty and administrators to establish or improve instruction in research ethics and in professional development.

Herbert Smitherman, Jr., M.D., M.P.H., associate chair of community medicine, received the Testimonial Resolution Award from the Detroit City Council for 18 years of service to Detroit by advocating and providing safety net primary care services. ■

In memoriam

Dean who led School through '70s dies

Dr. Robert D. Coye, who served as Dean of the Wayne State University School of Medicine from January 1972 until January 1980, died on February 26, 2004. Dr. Coye began his tenure as dean in the newly-opened Gordon Scott Hall of Basic Medical Sciences and quickly saw the School grow into one of the largest in the country, both in terms of student enrollment and campus size. He continued to guide the expansion of the medical school facilities, while overseeing the integration of medical education and research programs with the clinical programs of the various medical center institutions. Dr. Coye oversaw the opening of the C.S. Mott Center for Human Growth and Development, the \$48

million University Health Care Institute and the Radiation Oncology Center.

Dr. Coye was a graduate of Williams College and received his medical degree from the University of Rochester in 1952. He completed his training at Strong Memorial Hospital, Rochester, NY. He served for 17 years as a member of the faculty of the University of Wisconsin until coming to WSU.

Former pediatric urology chief dies at 73

Dr. Alan D. Perlmutter, former WSU professor of urology and chief of pediatric urology at Children's Hospital of Michigan, died of bladder cancer last week in Massachusetts.

Dr. Perlmutter, who moved with his wife, Ronna, to Cape Cod after

his retirement about 10 years ago, was a faculty member for almost 25 years and served on the School's admissions committee.

A former trustee, president and secretary of the American Board of Urology, Dr. Perlmutter wrote 74 peer-reviewed articles and co-edited two editions of the textbook "Campbell's Urology."

Dr. Perlmutter graduated from Harvard College and Harvard Medical School before training in surgery, urology and pediatric surgery at Peter Bent Brigham Hospital and Children's Hospital Medical Center in Boston.

Memorial donations can be made to the National Kidney Foundation 30 E. 33rd St., Suite 1100, New York, N.Y. 10016, or to the Amyloid Research Fund, Boston University

School of Medicine, 75 Albany St., K5-3, Boston, Mass. 02118.

CHM loses a pediatrics pioneer

A private memorial service was held for retired pediatrics professor Dr. Flossie Cohen. Dr. Cohen was an internationally recognized pediatric physician and researcher with specialties in rheumatology, hematology, immunology and pediatric HIV-AIDS. Born in Calcutta, British India, Dr. Cohen became a US citizen in 1955 during her fellowship in hematology with Dr. Wolf Zeulzer here at CHM. Following her fellowship, she stayed at CHM and WSU until her retirement in 1992. Dr. Cohen was the first physician in Michigan to perform a successful pediatric bone marrow transplant.

A revered researcher and clinician, with dozens of awards and academic citations to her credit, Dr. Cohen held several positions during her tenure including: Director of Clinical Immunology and Rheumatology at Children's Hospital of Michigan, Director of the Michigan Maternal-Infant Center for HIV, and Professor, and then Professor Emeritus of Pediatrics at Wayne State University School of Medicine.

In recent years, Dr. Cohen was named to the Michigan Women's Hall of Fame for her contributions in the field of research and pediatric medicine and for her contributions to the research and treatment of pediatric AIDS. ■

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