

focus

UMMS awarded National Children's Study contract

The profile of the University of Massachusetts Medical School's clinical research enterprise was dramatically elevated in early October when the National Institute of Child Health and Human Development (NICHD) awarded UMMS one of 22 highly competitive contracts to participate in the landmark National Children's Study (NCS). The largest study ever to be conducted in the United States to assess the effects of environmental and genetic factors on child and human health, the NCS was created in response to the Children's Health Act of 2000, which specified a national, long-term study of children's health and development in relation to environmental exposures. The NCS will follow 100,000 children from before birth to age 21, seeking information to prevent and treat some of the nation's most pressing health problems, including autism, birth defects, diabetes, heart disease and obesity.

"This is a watershed moment for UMass Medical School as the Commonwealth's research institution," said Terry Flotte, MD, executive deputy chancellor and dean of the School of Medicine, noting that UMMS was the only awardee selected in the state. "We have long held public health as our passion and our obligation, and we are exceptionally proud to be chosen as one of a select few to make such an important contribution to the body of knowledge related to child health and development. This contract award is a testament to the Medical School's demonstrated ability to conduct exceptional public health and epidemiological research."

"UMMS is uniquely positioned to accept this charge from the NICHD in part because of the partnerships we have established throughout the community and the trust we have earned over decades of caring for families and children," said Marianne E. Felice, MD, chair of pediatrics for UMMS and physician-in-chief of UMass Memorial Children's Medical Center. Felice is the principal investigator of the UMMS arm of the NCS, which will be known as the Massachusetts Children's Health Indicators and Life Determinants study (MassCHILD). "We're delighted that families of Worcester County will be able to contribute to the health of the nation for generations to come. We may be able to identify solutions to issues of children's health that are important to us in Worcester County area, such as infant mortality." The counties selected are, collectively, demographically representative of the U.S. population.

MassCHILD will enroll and follow at least 1,000 children from Worcester

County and will be funded by more than \$16 million in its first five-year phase, during which UMMS will begin recruiting and training staff and working with community leaders in preparation for opening enrollment into the study in the summer of 2009. Of critical importance, according to study co-principal investigator Thomas McLaughlin, ScD, professor of pediatrics, will be the recruitment and retention of participants. "That's really the key to the success of any long term study, particularly one of this depth and complexity. We feel very strongly that our connection to the community will help us not only to attract women interested in participating, but to forge a bond with them that will last throughout the entire study."

UMMS will work with Timothy J. Downs, DEnv, of the Department of Geographic Information Science at Clark University, for expertise in geographic information systems, which will be instrumental in household selection for the survey. Enrollment of 1,000 participants in four years will likely require identification of more than 13,000 households in which there may be women in the first trimester of pregnancy or women who could become pregnant in the next year. (Twenty-five percent of the children are to be identified before they are even conceived.) With more than 42 percent of all babies born to women in Worcester County delivered at the Memorial Campus, the clinical system's involvement will be crucial. "The support of UMass Memorial during the hectic proposal submission process was energizing," said Dr. Felice. "Our clinical partner's response to our many requests was



The founding team of MassCHILD pictured (front, left to right) Katherine Ruiz de Luzuriaga, MD; Judith Ockene, PhD; Marianne Felice, MD; and Janet Hardy, PhD; (back, left to right) Thomas McLaughlin, ScD, and Onesky Aupont, MD, PhD, MPH. Not pictured is Tiffany Moore Simas, MD, MPH.

simply, 'We'll do whatever is needed to make it happen.'"

In addition to answering questions about children's health and influencing environmental and health policy, the NCS, Felice says, will also open doors to new areas of research. "Our department is fortunate in that we have scores of senior faculty who are recognized experts in their areas of interest. For some of the young faculty, the NCS may provide a niche, a focus for what may very well become their life's work."

Along with Felice and McLaughlin, the founding team of MassCHILD includes Onesky Aupont, MD, MPH, MA, PhD, assistant professor of pediatrics; Katherine F. Ruiz de Luzuriaga, MD, professor of pediatrics and medicine; Janet R. Hardy, PhD, assistant professor of medicine; Tiffany Moore Simas, MD, MPH, assistant professor of obstetrics & gynecology; and Judith K. Ockene, PhD, the *Barbara Helen Smith Chair in Preventive and Behavioral Medicine* and professor of medicine. ■

"UMMS is uniquely positioned to accept this charge from the NICHD in part because of the partnerships we have established throughout the community and the trust we have earned over decades of caring for families and children."

Marianne E. Felice, MD

Get in Focus

Have a story idea, a faculty, student or staff achievement, or a campus-wide event for the calendar? Send it to the *Focus* editor at focus@umassmed.edu



Doxsey, Tissenbaum and Walhout named Ellison Senior Scholars in Aging

UMMS scientists Stephen Doxsey, PhD, Heidi Tissenbaum, PhD, and Marian Walhout, PhD, have been named recipients of the Ellison Foundation's Senior Scholar Award in Aging. Established in 1998 by Lawrence J. Ellison, founder and chairman of Oracle Corporation, the Ellison Medical Foundation supports basic biomedical research on aging. In keeping with Ellison's own entrepreneurial drive, which enabled him to build one of the world's leading software developers, his foundation fosters creativity and risk-taking in scientists with exciting but as yet untested ideas relevant to understanding lifespan development processes and age-related diseases and disabilities. Ellison Foundation senior scholars are established investigators who seek funding for novel or high-risk projects.

Dr. Doxsey, professor of molecular medicine, biochemistry & molecular pharmacology and cell biology, will study how asymmetric cell division affects aging and longevity with his project *A New Paradigm for Cellular Aging Based on Asymmetries During Cell Division*. Doxsey will conduct a set of experiments designed to address the mechanism, significance and clinical applications of asymmetric cell division in human stem cells and cancer cells, building on his lab's remarkable finding that cells with different life spans are produced through asym-

metric cell division. "Our goal is to test whether cellular longevity contributes to human life span, as we believe aging is more like a curable disease rather than an inevitable pre-programmed process," said Doxsey.

Dr. Tissenbaum, associate professor of molecular medicine, and Dr. Walhout, assistant professor of molecular medicine, are among a small group of co-principal investigators to receive an Ellison award for a collaborative project, in their case *Dissecting C. elegans Insulin Networks Using a Systems Approach*. The genome of the

Heidi Tissenbaum, PhD, (left) and Marian Walhout, PhD, join a select group of researchers who received Ellison Foundation awards for collaborative projects.



roundworm *C. elegans* encodes 39 different insulin peptides, which Walhout and Tissenbaum hypothesize regulate life span and fat biology, perhaps in a coordinated manner. Combining the Tissenbaum lab's linear approach with the Walhout lab's systems approach, they aim to characterize all of the *C. elegans* insulin genes. "We hope to understand aging as a global process," said Tissenbaum. With their Ellison-funded project reflecting the collaborative and innovative research culture at UMMS,

Walhout concluded, "We are very gratified that this grant is the result of the synergy between our labs."

Doxsey, Tissenbaum and Walhout join previous UMMS recipients of Ellison Foundation awards Michael H. Brodsky, PhD, assistant professor of molecular medicine; Neal Silverman, PhD, assistant professor of medicine; and Stephen Lyle, MD, PhD, assistant professor of cancer biology, who received his award prior to joining UMMS. ■

Psychiatry Research Day keynote speaker Nora Volkow, MD, (front right) with Jean King, MD, (left) and (back, left to right) Terry Flotte, MD, Doug Ziedonis, MD, MPH and Michael Collins, MD



achievements

Seventeen SOM '08 students have been elected to the UMass Medical School chapter of Alpha Omega Alpha in recognition of their academic excellence and demonstrated promise for becoming leaders in medicine. They are: **Rachael Blake, Stephanie Carter, Kelly Holland, Alexandra Kazanovich, Andrea Klayman, Noah Kolb, Amanda Malgari, Jacob Mandell, Candice McElroy, Mark McKeen, Kristen Miranda, Vilas Patwardhan, Rachel Roditi, Jennifer Rosenberg, Magdalena Slosar, Michael Sylvia and Hilary Womble.**

Following are faculty who have joined UMMS as professors or associate professors or who have been promoted to those positions, as documented by the Office of Faculty Administration:

- **Victor Ambros**, PhD, appointed professor of molecular medicine
 - **Eric Baehrecke**, PhD, appointed associate professor of cancer biology
 - **Joseph Ferrucci**, MD, appointed professor of radiology
 - **Terence R. Flotte**, MD, appointed professor of pediatrics
 - **Marci Jones**, MD, appointed clinical associate professor of orthopedics & physical rehabilitation
 - **J. Lance Lichtor**, MD, appointed professor of anesthesiology
-
- **Zheng Z. Bao**, PhD, promoted to associate professor of medicine and cell biology
 - **Manisha S. Desai**, MBBS, promoted to clinical associate professor of anesthesiology
 - **Shubjeet Kaur**, MBBS, promoted to clinical professor of anesthesiology
 - **Young Hwan Kim**, MD, PhD, promoted to associate professor of radiology
 - **Kendall L. Knight**, PhD, promoted to professor of biochemistry & molecular pharmacology
 - **Leslie M. Shaw**, PhD, promoted to associate professor of cancer biology
 - **John M. Solomonides**, MD, promoted to clinical associate professor of medicine and pediatrics
 - **Dennis A. Tighe**, MD, promoted to professor of medicine
 - **Scott Waddell**, PhD, promoted to associate professor of neurobiology
 - **David A. Wilner**, MD, promoted to clinical associate professor of medicine

NIDA director keynotes psychiatry research day

The Department of Psychiatry at UMass Medical School hosted its annual research symposium, "Translational Research in Psychiatry: Bridging Basic Science, Clinical and Health Services Research." The half-day program showcased current UMMS research in addiction and mental disorders, and the expansion of translational research to bridge basic scientific, clinical and health services investigations into understanding and treating psychiatric disorders.

Interim Chancellor Michael F. Collins, MD, Executive Deputy Chancellor and Dean of the School of Medicine Terry Flotte, MD, and Vice Chancellor for Research John Sullivan, MD, joined Chair of Psychiatry Douglas Ziedonis, MD, MPH, to welcome symposium keynote speaker Nora Volkow, MD, director of the National Institute on Drug Abuse (NIDA). A component of the National Institutes of Health, NIDA supports research on the health aspects of drug abuse and addiction. Dr. Volkow presented her own research, *The neurobiology of free will in addictive disorders*, which has yielded insights into differences in brain function between drug-addicted and non-addicted individuals.

Volkow is a member of the National Academy of Science's Institute of Medicine. Focusing on addicted, obese and aging individuals, her work has been instrumental

in demonstrating that drug addiction is a disease of the brain, with studies documenting changes in the dopamine system affecting the actions of frontal brain regions involved with motivation, drive and pleasure. She has also made important contributions to the neurobiology of obesity and the behavioral changes that occur with aging.

Additional talks by eight psychiatry faculty focused on two themes, "Addressing Tobacco Addiction: From Bench to Community," and "The Interplay of Trauma and Aggression: From Pre-clinical Models to Service." The talks were complemented by 59 poster presentations from dozens of faculty representing every clinical and research division of the department. Contributions from Commonwealth Medicine, the Shriver Center, Community Healthlink and UMMS adult and adolescent inpatient psychiatry programs at Westborough State Hospital reflected the department's commitment to community service and translational research design.

Dr. Ziedonis closed the formal presentations with an overview of new initiatives to develop faculty and support expanded research in the department, including establishing academic interest groups in a range of topics, a mentoring program for all new and mid-career faculty and a dedicated vice chair for research initiatives in psychiatry. ■

Environmentally conscious choices

For UMass Medical School, being a good neighbor to the people of Central Massachusetts requires a respect for the resources we all share. For a number of years, UMMS has been exploring ways to seize opportunities for growth while at the same time being a good steward of the natural resources of our campus and our community.

One of the ways UMMS is accomplishing this is through environmentally conscious choices in construction. Recent building projects have incorporated energy efficient materials and design, such as the double-wall glass façade on the school renovation and hospital addition and energy-saving lighting choices in the new South Road garage and the Lazare Research Building. The recent Power Plant upgrade was also a model in energy efficiency and places UMMS in the enviable position of being able to produce more than a third of its own power.

ance green buildings have been met. “From materials acquisition to construction waste disposal, and including heating and cooling and site planning choices, ACCES is being designed and built to have the smallest possible impact on the environment that the budget and location will allow,” said UMMS Facilities Director John Baker. The institution is also committed to meeting even higher standards of LEED certification for future building projects.

UMMS also explores and initiates other ways of sustaining the environment through its Sustainability



Design of the Advanced Center for Clinical Education and Science incorporates enhanced energy performance, sustainable site design, recyclables collection and storage, and low-emitting paint and carpets.

The Sustainability Committee’s

recommendations have led to increased recycling opportunities on campus including a new can and bottle recycling program that will begin soon; the use of environmentally friendly cleaning products; and an increase in awareness of sustainability actions on campus.

Current construction of the Advanced Center for Clinical Education and Science (ACCES) is taking the school’s effort for responsible building a step further by meeting standards for LEED (Leadership in Energy and Environmental Design) certification from the Green Building Rating System, a non-profit coalition of building industry leaders committed to “responsible, profitable and healthy places to live and work.” Receiving LEED certification signifies that standards for a nationally accepted benchmark for design, construction and operation of high perform-

Committee, which was established in 2004 and includes representatives from Facilities, Purchasing, Environmental Health and Safety, Environmental Building Services, Auxiliary Services, Public Affairs and the Green Team, made up of UMMS community members personally committed to raising awareness and adoption of earth-friendly practices. The Sustainability Committee meets regularly to assess and reduce the environmental and energy impact of current operations, guided by the Governor’s 2007 Energy Policy and the State Sustainability Program established in

2004. Its recommendations have led to increased recycling opportunities on campus including a new can and bottle recycling program that will begin soon; the use of environmentally friendly cleaning products; and an increase in awareness of sustainability actions on campus. Among initiatives the committee is studying for possible future application are guidelines for sustainable purchasing and rainwater reclamation for irrigation.

The committee is also overseeing an energy study to identify and implement changes that will further reduce energy consumption and is outlining the plan for compliance with the American College and University President’s Climate Commitment.

For additional information about environmentally friendly campus initiatives, visit inside.umassmed.edu/facilities. ■

Five things you can do to help

1. Turn your office/lab lights and computer off at night and on weekends.
2. Use the revolving doors—they help maintain a constant indoor temperature, which reduces fuel consumption.
3. Print only the documents you need in hard copy.
4. Carpool—not only will you save on gas, you’ll save on parking (call the Parking Office at ext. 6-3630 for details).
5. Recycle white paper waste.

employees infocus

November Employee of Distinction Award

Vitals

James Steinwachs

Sergeant

Department of Public Safety

Year started: 1994

Hometown: Bellingham

Professionally Speaking

Sergeant James Steinwachs is dedicated to helping ensure the safety and well-being of each member of the UMass Medical School and UMass Memorial Medical Center community at the University campus, including patients and visitors.

As sergeant, Steinwachs patrols the campus and is responsible for investigating crimes, enforcing rules and regulations and conducting security-related duties for the Medical School. He also oversees the Medical Center’s security and safety provisions by monitoring the Joint Commission on

Accreditation of Healthcare Organizations requirements, with which Public Safety must comply.

“Sgt. Steinwachs handles his duties with expertise and is an excellent example and role model for going above and beyond the call of duty,” said UMMS Director of Public Safety and Chief of Police William Carey, who nominated Sgt. Steinwachs. “He takes great pride in his work and consistently offers his time, energy and skills in making this community a safer place.”

Points of Pride

Emergency preparedness is a priority for UMMS and UMass Memorial, and Steinwachs has been active in emergency response plans since 1999. He began by developing contingency plans for Y2K, and since that time, has served on numerous safety and violence prevention committees and participated in emergency preparedness courses throughout the country. During emergency situations and drills, he

is often called upon to serve in the Incident Command Center as a safety officer or communications manager. Steinwachs has also been involved in the wider community, delivering safety and violence prevention lectures at the YMCA in Worcester.

“This career is very rewarding,” said Steinwachs. “Every day is different, and from the moment I started working here, I have been given opportunities to help change people’s lives, as well as the Medical School and UMass Memorial, for the better.”



Calendar

information infocus

Registration for Workplace Learning courses

The Human Resources Workplace Learning and Performance Group is accepting registrations for courses offered throughout the 2007–08 academic year. For complete course offerings and online registration, visit inside.umassmed.edu/hr/training/wlwg.aspx.

ID badge exchange update

The twice-weekly ID badge exchange for Worcester campus employees that's been taking place in the old Medical School Lobby since July has ended. If you work on the Worcester campus, participate in the paid parking program and still have your old ID badge, you must visit the Parking and Access Control Office (HA-531) to pick up your new badge. It won't be long before the old badges will no longer allow you to access parking areas.

In the coming weeks and months, Parking and Access Control will be scheduling ID badge exchanges at other UMMS sites. Look for updates in future issues of *Focus* and on the UMMS intranet.

■ The 2007 Nursing Schools Expo, hosted by the Worcester Nursing Pipeline Consortium and the GSN, will be held on Monday, Nov. 5, from 4 to 8 p.m. in the Medical School Lobby. This event is designed for high school students interested in nursing careers and their parents, as well as teachers and guidance counselors. Area nursing schools will participate. For more information, contact Jill Terrien at x6-6622 or via global e-mail.

■ Benefits open enrollment for UMMS employees continues through Friday, Nov. 9. Employees have the opportunity to enroll in any of the following benefits effective Jan. 1, 2008: Delta Dental, Davis Vision and UMass Sick Leave Bank (Non-Unit, SHARE and NAGE employees); Flexible Spending Accounts HCSA and DCAP (benefited employees); and Child Care Scholarship (Non-Unit benefited employees and employees represented by NAGE). For additional information, visit inside.umassmed.edu/hr.

■ "One if by Land, Two if by Sea: Topside and underwater images capturing the colorful creations of nature" by Jessica Vasale, GSBS student, is the latest installment

in the Lamar Soutter Library's Artist in Residence Series. The exhibit begins on Thursday, Nov. 1, and runs through Friday, Dec. 14. There will be an opening reception on Tuesday, Nov. 13, at 5 p.m.

■ The Second Annual International Craft Sale sponsored by School of Medicine students will take place on Saturday, Nov. 17, from 10 a.m. to 2 p.m. at the Worcester Center for Crafts, 25 Sagamore Road. After completing their first year of medical school, a number of students in Pathway on Serving Underserved and Multicultural Populations performed service in developing countries and purchased crafts, jewelry and other items from local artisans using \$50 from their stipends. The Craft Sale will feature these items, with all proceeds returning to the developing countries to benefit artisans and community programs. Last year \$4,400 was raised.

■ The Human Resources Workplace Learning Group is sponsoring an open information session about the Assumption College graduate and undergraduate programs offered at a reduced price to UMMS employees. Representatives from Assumption will be on hand to answer questions and provide information on Friday, Nov. 16, from 11:30 a.m. to 2 p.m. in the old Medical School Lobby. For more information, visit inside.umassmed.edu/hr/training/wlep/assumption.aspx.

■ On Thursday, Nov. 29, from 5 to 7 p.m., the Office of Medical History and Archives of the Lamar Soutter Library will be hosting a wine and cheese reception to inaugurate the opening of the UMass Medical School Authors' Collection, a permanent collection of books authored by members of the UMMS community. Opening remarks will be made by Executive Deputy Chancellor and Dean of the School of Medicine Terry Flotte, MD. For more information, contact Ellen More at x6-7633 or via global e-mail.

Federal contract team to visit UMMS

Sometime this fall, a team from the U.S. Department of Labor's Office of Federal Contract Compliance Program (OFCCP) will be at UMass Medical School to conduct a review of the institution's performance under federal employment laws. OFCCP regularly conducts such audits for all employers that receive federal funding in order to examine historical compliance with regulations that support a fair workplace.

During its visit, the OFCCP team will be working out of the Shaw Building and receiving administrative support from the Diversity and Equal Opportunity Office (DEOO) and Human Resources, but will also be visiting the main Medical School building, generally accompanied by Associate Vice Chancellor Marian Wilson, PhD, and staff from DEOO. Members of the team may approach employees and ask questions about the institution, its mission and values. As you would any visitors to the Medical School, feel free to introduce yourself, explain your role here and answer any questions they have. ■

grants infocus

□ **Robert A. Baldor**, MD, professor of family medicine & community health: *Predoctoral Training in Primary Care*, Department of Health and Human Services, Health Resources and Services Administration, one year, \$189,647; recommended for two more years, \$337,101.

□ **Roger J. Davis**, PhD, the *H. Arthur Smith Chair in Cancer Research*, Howard Hughes Medical Institute Investigator and professor of molecular medicine and biochemistry & molecular pharmacology: *Functional Analysis of JNK in Beta Cells*, American Diabetes Association, two years, \$90,000.

□ **Dale L. Greiner**, PhD, professor of medicine: *Diabetogenic Function of Autoimmune Donor Splenocytes*, Juvenile Diabetes Research Foundation International, three years, \$330,000.

□ **Charles D. Hamad**, PhD, associate professor of pediatrics: *University Center for Excellence in Developmental Disabilities*, Department of Health and Human Services Administration for Children and Families, one year, \$490,000; recommended for four more years, \$2 million.

□ **Lawrence J. Hayward**, MD, PhD, associate professor of neurology and physiology, and **Ashutosh Tiwari**, PhD, research assistant professor of neurology: *Mapping the Aberrant Hydrophobicity of Misfolded SOD1 Mutants that Cause ALS*, ALS Therapy Alliance, one year, \$77,996.

□ **Anthony N. Imbalzano**, PhD, associate professor of cell biology: *Spatial Changes in Gene Organization During Adipogenesis*, National Institute of Diabetes and Digestive and Kidney Diseases, one year, \$203,125; recommended for one more year, \$243,750.

□ **Paul Kaufman**, PhD, associate professor of molecular medicine: *Chromatin Proteins that Ensure DNA Replication Fork Stability*, National Science Foundation, \$130,000; recommended for two more years, \$269,000.

□ **C. Robert Matthews**, PhD, the *Arthur F. and Helen P. Koskinas Professor* and chair of biochemistry & molecular pharmacology, and **Osman Bilsel**, PhD, research assistant professor of biochemistry & molecular pharmacology: *Folding Mechanisms of Dihydrofolate Reductase and the Response Regulators*, National Science Foundation, two years, \$380,000; recommended for one more year, \$170,000.

□ **Bharath Nath**, AB, MD/PhD student in the lab of **Gyongyi Szabo**, MD, PhD, professor of medicine: *HIF Dependent Pathways and Acetylation Events in Alcohol Mediated Liver Injury*, Ruth L. Kirschstein National Research Service Award, National Institute on Alcohol Abuse and Alcoholism, one year, \$28,637; recommended for three more years, \$95,052.

□ **Joel D. Richter**, PhD, professor of molecular medicine: *Translational Control in Early Mammalian Development*, National Institute of Child Health and Human Development, one year, \$384,236; recommended for four more years, \$1.4 million.

□ **Michael J. Sanderson**, PhD, professor of physiology: *Airway Hyper-responsiveness: From Molecule to Organ*, National Heart, Lung and Blood Institute, one year, \$228,571; recommended for two more years, \$473,799.

□ **Raymond M. Welsh**, PhD, professor of pathology and molecular genetics & microbiology: *B Cell Activation During Viral Infection*, National Institute of Allergy and Infectious Diseases, one year, \$406,250; recommended for four more years, \$1.6 million.

□ **Zuoshang Xu**, MD, PhD, professor of biochemistry & molecular pharmacology and cell biology: *Transgenic Models of ALS Caused by VAPB Mutation*, Muscular Dystrophy Association, Inc., one year, \$95,000; recommended for one more year, \$95,000.

ALS Modeling Based on ANG Deficiency, The Amyotrophic Lateral Sclerosis Association, two years, \$159,854.

focus

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