for TUFTS MEDICINE

\$5 million awarded for vaccine research

The Bill and Melinda Gates Foundation has awarded \$5 million to **Abraham** "Linc" Sonenshein, Ph.D., professor of microbiology, and his colleagues to support research into a new generation of vaccines to combat diphtheria, pertussis, tetanus and rotaviral diarrhea, a disease that kills 500,000 children in developing nations each year. Sonenshein is the principal investigator for the team that includes **Dr. Saul Tzipori**, D.Sc., Ph.D., professor of biomedical sciences and director of infectious diseases at the Cummings School of Veterinary Medicine at Tufts, and **Miguel Stadecker**, M.D., Ph.D., professor of pathology.

The researchers are working to develop a novel method of vaccine delivery using the spores of the non-pathogenic bacterium *B. subtilis*. Sonenshein—who has worked with the common soil bacterium for four decades—and his colleagues will attempt to genetically engineer the organism to express the antigens for the disease-causing pathogens on the surface of the harmless bacterium. The work could make inexpensive, needle-free, heat-resistant medications widely available in developing nations where poverty, the lack of trained personnel to give injections and inconsistent refrigeration means some 27 million children annually are not protected against common childhood diseases.

The Gates Foundation awarded 43 grants totaling more than \$436 million part of its Grand Challenges in Global Health initiative, designed to encourage scientists to seek innovative solutions to the major health problems in the developing world.

The power of science

As part of its goal to stimulate cutting-edge research at the medical school and its affiliated teaching hospitals, a gift from the Russo Family Charitable Foundation Trust has funded two more research proposals. Hans-Georg Klingemann, M.D., Ph.D., professor of medicine and a clinical faculty member at Tufts-NEMC, received support for his proposal, "Umbilical Cord Matrix (UCM) Stem Cells—An Alternate to Embryonic Stem Cells," and Douglas Vetter, Ph.D., assistant professor of neuroscience, was awarded funding for his project, "A Mass Spectrometric Approach to Quantifying Protein Expression and Protein-Protein Interactions."

Last year, Devette Russo, who had a distinguished career in biomedical technology and is the mother of an M.D./Ph.D. student at Tufts, donated \$250,000 through the Russo Trust in support of collaborative research. "These days, research problems are so complex that we can't rely on answers coming from a single area," she said.

HERE & THERE

Brian F. Gilchrist, M.D., A77, M84, associate professor of surgery and surgeon-in-chief at the Floating Hospital for Children at Tufts-New England Medical Center, was named the 2005 Teacher of the Year by the surgical residency program at Tufts.

Douglas W. Losordo, M.D., chief of cardiovascular research at Caritas St. Elizabeth's Medical Center and professor of medicine, has received a four-year NIH grant of \$412,500 to support his work treating vascular disease with stem cells.

Joeli Marrero, a molecular microbiology student at the Sackler School, has been awarded a Leadership Alliance/Schering-Plough Fellowship. Marrero used the \$4,000 fellowship to attend an advanced course in France on the cellular and molecular biology of membranes. She works in the laboratory of Matthew K. Waldor, M.D., Ph.D., doing research on bacterial DNA conjunction. That work was published recently in Developmental Cell.

On July 7, **Ananda Roy**, Ph.D., associate professor of pathology, served as co-chair for the Boston Gene Expression Club's symposium, held at Tufts. The day-long session covered regulation of gene expression by chromatin; transcriptional activators in development and disease; and RNA processing and RNAi.

LECTURE HONORS RETIRING NEUROSURGEON

After nearly three decades as professor and chair of neurosurgery at Tufts and neurosurgeon-in-chief at Tufts-NEMC, **William Shucart**, M.D., retired from both posts on June 30. On June 9, friends, colleagues and students attended the First William Shucart Neuroscience Lecture. For more on the story, go to https://tuftsjournal.tufts.edu/features/neuroscience_legend.shtml.

SCHWOB APPOINTED TO ENDOWED CHAIR

James Schwob, M.D., Ph.D., professor and chair of anatomy and cell biology, has been appointed the George A. Bates Professor of Histology at the medical school. This endowed professorship is named for a Tufts Dental alumnus who was one of the original faculty members at the medical and dental schools. Appointment to an endowed professorship is the highest honor accorded to a faculty member in higher education.

TOP DOCS

Tufts and Tufts-New England Medical Center physicians Sherry Gorbach, Marvin Konstam, Ron Perrone, Jay Duker, Michael Goldberg, Bill Shucart, Thomas Hedges, William Mackey, Tom O'Donnell, Dan Carr, Scott Shikora, Cynthia Kretschmar and Ron Lechan were recognized as among Boston's best doctors in the May 15 Sunday magazine supplement of *The Boston Herald*.

A national voice for family medicine

Joseph W. Gravel Jr., M.D., director of the Tufts University Family Practice Residency Program in Malden, Mass., and medical director of the Malden Family Health Center, was elected to the board of directors of the Association of Family Medicine Residency Directors on June 6. He was chosen by more than 400 of his colleagues to represent them on the national board. Gravel, a 1986 graduate of Tufts School of Medicine, has served as the director of the family medicine residency in Malden since 1995.

Legions of supporters

The School of Medicine and the Sackler School of Graduate Biomedical Sciences marked the another successful year of fund-raising, garnering \$11.3 million in capital gifts from nearly 3,500 alumni, parents, friends and corporations.

The Fund for Tufts Medicine broke a record for the second consecutive year, with annual fund contributions totaling more than \$1.8 million. As part of the annual fund achievement, more than 100 alumni joined the inaugural "Dean's Inner Circle" giving club by donating \$100 for every year they've been out of medical school. This resulted in a 22 percent increase in gifts of between \$1,000 and \$5,000.

Zucker research grants

Two members of the clinical faculty at Caritas St. Elizabeth's Medical Center are among the 10 researchers awarded grants by the Natalie V. Zucker Research Center for Women Scholars at the School of Medicine. Yun Wang, M.D., Ph.D., an assistant research professor of neurology, will study the effect of beta amyloid proteins on specialized neurons in the pre-frontal cortex in an experimental model of Alzheimer's disease. Mary C. Perianayagam, Ph.D., who works in St. E's Kidney & Dialysis Research Laboratory and is an instructor of medicine, will investigate two stress-related enzymes and their impact in patients with acute renal failure.

FEEDBACK

The *Dean's Letter for Tufts Medicine* is published nine times a year by the Office of the Dean of Tufts University School of Medicine. We welcome comments and story ideas. Contact Editor Jacqueline Mitchell at jacqueline.mitchell@tufts.edu or 617.636.3602.

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