



American Recovery and Reinvestment Act (ARRA) at Vanderbilt

October 22, 2009

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NIH grant bolsters search for new cancer drugs

By Bill Snyder | VUMC Reporter | Oct. 16, 2009

Researchers at Vanderbilt University Medical Center have received a two-year, \$4.7 million "Grand Opportunities" stimulus grant from the NIH to launch a ground-breaking cancer drug discovery program. The Vanderbilt Molecular Target Discovery and Development Center, a joint effort of the Vanderbilt Institute of Chemical Biology and the Vanderbilt-Ingram Cancer Center, initially will hone in on "triple-negative" breast cancer, a particularly deadly form of the disease. Researchers will try to identify genes that are the "drivers" for the different subtypes of triple-negative breast cancer, and then fashion drugs to block the action of the proteins encoded by the genes, with the intent of killing the cancer cells. [MORE](#)

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Personalized medicine study targets drug safety

By Bill Snyder | VUMC Reporter | Oct. 16, 2009

Can genetic information embedded in patients' electronic medical records help improve treatment outcomes and avoid adverse drug effects? That's the question researchers at Vanderbilt University Medical Center will try to answer thanks to a two-year, \$6.4 million "Grand Opportunities" stimulus grant they received last month from NIH. The study, called "VESPA," for "Vanderbilt Electronic Systems for Pharmacogenomic Assessment," will utilize Vanderbilt's massive DNA databank, "BioVU." The researchers will try to determine whether responses to certain drugs as detailed in medical records could have been predicted by changes or variations in the corresponding DNA samples. [MORE](#)

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Recovery Act gives boost to Vanderbilt's scientific and medical research

By David Salisbury | VUCast | Oct. 13, 2009

Since the American Recovery and Reinvestment Act of 2009 was signed into law in February, it has given a significant boost to scientific and medical research at Vanderbilt University and Vanderbilt University Medical Center. The Recovery Act committed \$787 billion in federal funds to help stimulate the national economy. From this, 2.5 percent was earmarked for support of scientific and medical research. As of Sept. 30, Vanderbilt researchers had received 180 grants totaling more than \$74 million in first-year funding. Of those, 165 grants were awarded by the NIH, 14 were awarded by the NSF and one came from Health and Human Services. About one-third of these grants support new projects while two-thirds provide supplemental funding for existing grants. Examples of the research projects that have received Recovery Act funding include: simulating how black holes grow and mentoring minorities and women in astronomy careers; studies of the electrical side of the human heart; a new instrument for analyzing protein structure and DNA damage; integrating genetic data with public databases; unraveling neural circuitry involved in visual attention; lighting up the synaptic gap; and probing the origins of supereruptions. [MORE](#)

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Vanderbilt biologist receives early career development award to study tree of life

By David Salisbury | VUCAST | Oct. 8, 2009

[Antonis Rokas](#), an assistant professor of biological sciences, has received a CAREER award from the National Science Foundation (NSF). The Faculty Early Career Development award is considered NSF's most prestigious honor for junior faculty members. Rokas will receive \$688,000 in Recovery Act funding for five years to develop new statistical methods that make it easier to accurately determine the relationships between various species. The award will support a post-doctoral fellow and a graduate student full time and an undergraduate for summer research. In addition, \$15,000 will go

- Grant aids clinical research training
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From the Agencies

- NIH Announces 115 Awards to Encourage High-Risk Research and Innovation
- NIDDK Recovery Grant Funds Innovative Kidney Research Project for Students
- Recovery Act Funding Supports 23 Fellowships for Early Career Scientists
- CAREER: Survival of the Privileged: Exploring the conditions that allow supermassive black holes and minority physicists to thrive

Resources

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toward the purchase of computer nodes for Vanderbilt's Advanced Computing Center for Research & Education. [MORE](#)

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Vanderbilt gets \$66.5M in stimulus research grants

By Getahn Ward | Tennessean | Oct. 1, 2009

Researchers at Vanderbilt University have received 154 NIH grants totaling \$57.5 million, two-thirds of the awards handed out in Tennessee by the federal agency that conducts and supports medical research. Vanderbilt also has received another 13 grants totaling \$8.9 million from the National Science Foundation, bringing its current share of stimulus grants to 167 totaling \$66.5 million. The NIH money is part of \$10.4 billion overall that the agency received in American Recovery and Reconstruction Act funds to dole out for cancer, genes and other health research. [MORE](#)

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Vanderbilt Dominates Stimulus Grant Money for Medical Research in TN

By Nina Cardona | Nashville Public Radio | Sept. 30, 2009

Vanderbilt University has claimed the lion's share of stimulus funds spent on health research in Tennessee to date. Under the recovery program, the National Institutes of Health have awarded 260 grants in Tennessee. Of those, 154 went to projects at Vanderbilt. They range in size from 2-thousand dollars—for the prevention of vein graft failure—to more than 5 million—for a consortium of biologists doing insulin-related research, which is headquartered at the university. Every grant in the state that tops the million dollar mark is going at least in part to Vanderbilt. [MORE](#)

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Stimulus funds keep TN colleges afloat

By Jennifer Brooks | Tennessean | Sept. 28, 2009

While [Tennessee] state universities see the stimulus as a temporary delay of the imminent budget cuts, private universities like Vanderbilt are celebrating the fringe benefits of the stimulus . . . Vanderbilt University physicist John Wikswo was out of research funding and on the verge of shelving his project entirely when the NIH offered him a \$1.1 million stimulus research grant. For the next two years, Wikswo and a dozen other researchers around the country will use the stimulus grant to study the complex electrical and chemical changes that occur when a once-healthy heart starts beating erratically. Meanwhile, Vanderbilt astronomer Kelly Holley-Bockelmann plans to use her \$1.1 million, stimulus-backed [NSF] career grant -- the largest sum ever awarded to an astronomer [to study black holes]. She estimates her grant will provide stipends to seven graduate students and researchers, not to mention the hundreds of students who will get to see the rocket club demonstrations over the next few years. [MORE](#)

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Disabilities study to focus on parents' stress

By Leslie Hast | VUMC Reporter | Sept. 25, 2009

Elisabeth Dykens, Ph.D., Vanderbilt Kennedy Center director, has received a two-year Challenge Grant from the NIH to compare stress management techniques in parents raising children with disabilities. Part of the federal stimulus package, the NIH has allotted \$200 million to the Challenge Grants, which provide "jumpstart funds" to projects in biomedical and behavioral research. As one of the only recipients at Vanderbilt, Dykens said she feels an urgency to get started as soon as possible. [MORE](#)

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High-fat diet's impact on brain explored

By Bill Snyder | VUMC Reporter | Sept. 25, 2009

Does fast food mess with your brain? That's one of the questions Vanderbilt scientists Kevin Niswender, M.D., Ph.D., and Aurelio Galli, Ph.D., hope to answer with the help of a \$5.2 million "transformative" research grant from the NIH. Their hypothesis: consumption of high-fat, high-sugar foods can disrupt insulin signaling in the brain, and its regulation of neurotransmitters involved in mood and behavior. This may explain "food addiction," and could lead to new ways to treat obesity and diabetes. Niswender and Galli's grant is one of 42 "transformative R01" grants awarded nationwide for the first time this fall by the NIH -- and one of two awarded to Vanderbilt scientists. [MORE](#)

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Contact Us

Vanderbilt University Office of Federal Relations

750 First Street, N.E.
Suite 1110

Washington, DC 20002

Phone: (202) 216-4361

Fax: (202) 216-9124

[http://www.vanderbilt.edu/
publicaffairs/federalrelations](http://www.vanderbilt.edu/publicaffairs/federalrelations)

[Christina West](#)

Director, Federal Relations

[Janelle St. Croix](#)

Legislative Analyst

Vanderbilt University Medical Center - Federal Affairs

[Mel Bass](#)

Director, Federal Affairs

The Curb Center for Art, Enterprise, and Public Policy

[Paula Cleggett](#)

Associate Director for Policy

Grant boosts study of energy-producing mitochondria

By Bill Snyder | VUMC Reporter | Sept. 25, 2009

In the movie "Cocoon," older people regain the vigor of youth when they swim in a pool filled with alien cocoons. That idea, minus the aliens, might not be so far-fetched. Vanderbilt scientist Deborah Murdock, Ph.D., has received a five-year, \$1.8 million "transformative" R01 grant from the National Institutes of Health to answer fundamental questions about mitochondria, which produce energy for the cell, and which are linked to muscle wasting disorders. "We lose mitochondria in our muscle as we age," said Murdock. "If we could find a way to alleviate that depletion, we might find a way to age better."

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Device to give peek into protein structures

By Bill Snyder | VUMC Reporter | Sept. 11, 2009

Vanderbilt University researchers have received a \$3.9 million federal stimulus grant to purchase a powerful analytical instrument that will greatly accelerate their studies of complex protein structures. The ultra-high field, 900 megahertz nuclear magnetic resonance spectrometer is a much more powerful version of instruments that have been used for years to determine the three-dimensional structures of proteins and protein complexes. Charles Sanders, Ph.D., is principal investigator of the grant, one of 13 stimulus grants, totaling \$8.9 million, which have been awarded to Vanderbilt by the NSF since June. [MORE](#)

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'Aspironauts' get chance to assist researchers on study

By Will Peters | VUMC Reporter | Sept. 4, 2009

This summer, Billy Hudson, Ph.D., took 12 high school students from rural Arkansas on an "Expedition through the Animal Kingdom" at Vanderbilt University Medical Center. The eight-week-long summer research program was an extension of the Aspironaut Initiative, a program that Hudson and his wife, Julie Hudson, M.D., created in 2007 to stimulate students' interest in science. The program was supported by \$103,000 in federal funding, part of a \$320,000 stimulus grant that Hudson received this year from the National Institute of Diabetes and Digestive and Kidney Diseases. The grant not only supported Hudson's research, but it provided stipends to 10 "Aspironauts," four students from Berea College in Kentucky, eight Vanderbilt undergraduate students . . . [MORE](#)

*** See also: [Video: Aspironaut Program](#)

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\$37M in federal stimulus for Tennessee could yield cures

By Christina E. Sanchez | Tennessean | Aug. 31, 2009

Middle Tennessee's biomedical researchers are getting a two-year financial boost as they seek cures for HIV, autism and cancer. More than \$37 million in federal stimulus money is flowing into the state through the National Institutes of Health. Vanderbilt University claimed the most in the first year -- \$22 million for research and job creation . . . Vanderbilt researchers just got their funding in hand and many have yet to hire, though 35 jobs have been created. [MORE](#)

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Federal loan program aids nursing students who want to teach

By Kathy Rivers | VUMC Reporter | July 31, 2009

Becoming a nursing professor just got a little easier for Vanderbilt University School of Nursing students thanks to a \$512,800 grant from the U.S. Health Resources and Services Administration (HRSA). The grant will help fund a loan forgiveness program for nursing students who want to become full-time faculty upon graduation. The HRSA nurse faculty loan program provides a loan of up to \$30,000 per year to students that can be used for tuition, fees and books. The program will forgive 20 percent of the total loan amount each year for the first three years that the student works as full-time faculty following graduation.

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Stimulus funds spur VMC research efforts

By Will Peters | VUMC Reporter | July 24, 2009

Marylyn Ritchie, Ph.D., will be able to accelerate her research at Vanderbilt Medical Center and nearly double her lab staff, thanks to \$923,000 in federal stimulus money she will receive over the next two years. Ritchie's funding is among the first stimulus grants awarded in Tennessee by the NIH under the American Recovery and Reinvestment Act.

This grant will fund four or five new positions in the Ritchie lab. [MORE](#)

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Grant aids clinical research training

By Bill Snyder | VUMC Reporter | July 24, 2009

The largest of the NIH stimulus grants received by Vanderbilt, \$3 million, will be used to expand an international clinical research fellowship program coordinated through the Vanderbilt University Institute for Global Health. The grant will support a year of mentored clinical research training in the developing world for an additional 23 research fellows over the next 18 months. Ten fellows will be able to continue their projects for a second year. Additional stimulus funding will be used to enhance logistical support for the program, and to put on a major conference on global health research, said Sten Vermund, M.D., Ph.D., the institute's director. [MORE](#)

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Vanderbilt Gives Boost to Middle Tennessee's Economy Thanks to National Institutes of Health Stimulus Funding

By Bill Snyder | VUMC Reporter | July 24, 2009

As of July 21, Vanderbilt University has received the lion's share of NIH stimulus grants in Tennessee - 49 of 88 grants, totaling nearly \$14 million over two years. These grants are funding at least 50 new jobs at the Medical Center. [MORE](#)

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American Recovery and Reconstruction Act (ARRA) at Vanderbilt is a service of the Vanderbilt University Office of Federal Relations.

For questions, please contact [Christina West](#).

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