JACKSON, Miss. – The record $85 million in grants and contracts that UMMC received in fiscal year 2011 is helping researchers unravel the mysteries of cancer, diabetes and other deadly diseases, paying stipends for students and improving Mississippi's health-care infrastructure through communication systems and outreach programs.

Over the past several years, total income from grants and contracts - collectively known as sponsored projects - rocketed from $39.7 million in FY 2008 to $75.7 million in FY 2010. The most recent figure of $85 million carries the trend and puts the four-year growth at 114 percent.

“A strong research program is the hallmark of all leading universities and academic health science centers,” said Dr. John Hall, associate vice chancellor for research. “Although increased grant funding is not the main goal of our efforts to strengthen UMMC research, it is a necessary tool. With it we are investigating the causes of health issues faced by people in Mississippi and internationally, we’re creating jobs and we’re training the next generation of scientific researchers.”

Grants, contracts and earmarks made to the Medical Center mean economic development. They invigorate the local and state economies by supporting new jobs for scientists, lab techs, study organizers and graduate and post-doctoral students.

The funding directly increases spending on materials from rebar to rubber gloves. And it creates ripple-effect purchases that include houses, cars and appliances. Those sales in turn generate tax revenue that helps keep state and local government services operating. A consultant hired by the Medical Center estimated the total economic impact of FY 2011 sponsored-project activity at $160.1 million.

More than doubling sponsored-project funding in four years doesn't happen by accident, said Hall. It's the fruit of years-long efforts to expand UMMC’s research mission by hiring scientists who arrive with funded grants and to incentivize current faculty members to apply for new grants.

It's also a result of programs to fortify the state's infrastructure with new facilities, scientific equipment, telecommunications and emergency technology. And it's because of partnerships and commitments to reach out to medically underserved residents through programs in the Mississippi Institute for the Improvement of Geographic Minority Health - or MIGMH - and the study of health-care disparities.

In FY 2011, which ended June 30, the Medical Center received 271 grants and contracts – down from the previous year’s 305, but an increase of nearly $9.3 million in value.

The majority of those – 186 totaling $76.6 million – came through the federal government. Of those, a vast majority came from the National Institutes of Health, the nation’s primary funding agencies for biomedical research.

“What’s important about federally sourced funding is that it's essentially new to Mississippi,” said Pamela Tazik, director of sponsored programs. “It’s not money that's just re-circulating within the state.”
Other awards came through grants and contracts with companies including pharmaceutical makers, non-profits such as the American Heart Association, and state and foreign agencies.

Though sponsored-project income jumped each of the last four years, the economic recession and political changes may take their toll this year. Congress has sworn off earmarks – a source of about $14 million in FY 2011 – and other federal budgets are tightening.

The largest single award received last fiscal year, a $17.5 million grant through the U.S. Department of Commerce’s National Telecommunications and Information Administration, will provide radio and broadband communications systems to every ambulance and emergency room in the state. The systems promise to shave valuable minutes in diagnosing, treating and directing sick and injured people to the most appropriate hospitals.

The radios will allow all emergency responders and emergency room staff to speak on the same encrypted network with complete interoperability, rather than using a patchwork of systems statewide that don’t always communicate with each other, said Jonathan Wilson, clinical director of emergency services.

During the project’s second phase, broadband links will let ambulance and ER crews transmit data and images.

“Imagine transmitting a patient’s heart-rhythm strip from the back of an ambulance, images of wrecks, fires or live-streaming video,” Wilson said. “We’ll be able to get the patient to definitive treatment more quickly.”

Gov. Haley Barbour’s office approached UMMC officials about the funding, part of $70 million it received to expand and upgrade the Mississippi Wireless Information Network, known as MSWIN. The funding quickly was made available through the American Recovery and Reinvestment Act.

“We wouldn’t be a part of the program if it weren’t for leadership from the Governor’s Office, the Department of Information Technology Services and the state Wireless Communication Commission,” Wilson said.

Chief Administrative Officer Dr. David Powe, and the grant's principal investigator, said UMMC’s team of experts was well equipped to jump on the governor’s offer.

“They’re proficient on the technology and have built relationships with medical personnel throughout the state. We used that proficiency and expertise to put together this portion of the MSWIN project,” Powe said.

Major NIH grants the Medical Center received in FY 2011 included funding to keep three long-term projects going. Hall received $2.2 million for the 43-year-running Cardiovascular Dynamics and Their Controls, a program that funds more than a dozen scientists and postdoctoral researchers who investigate a range of diseases, including diabetes, preeclampsia, obesity and heart disease.

Dr. Craig Stockmeier received $2.2 million for the Center for Psychiatric Neuroscience. Researchers in it investigate issues at the intersection of basic neurobiology and clinical psychiatry, including depression, alcoholism, sleep and bipolar disorders, schizophrenia and other diseases and disorders.

Dr. Tom Mosley received a $1.9 million contract and a $1.8 million grant for continued work on two related population studies, the 20-year-plus Atherosclerosis Risk in Communities (ARIC) Study, and a new branch to investigate neurodegenerative diseases, the ARIC Neurocognitive Study.
A $3.6 million contract from the Eunice Kennedy Shriver National Institute of Child Health and Human Development – part of the NIH – continued funding UMMC’s five-year ongoing role in the National Children’s Study.

Fiscal 2011’s funding initiated local enrollment of 100 Hinds County women into the Vanguard Study. The Vanguard is a pilot version of the larger main study that will enroll 1,000 local pregnant women or women contemplating pregnancy and follow them for the next 21 years.

Collectively, the nationwide study aims to follow more than 100,000 children from before birth to age 21 to gauge the effects of environment – including water and air quality, religion, ethnicity, family education, culture, diet and social structure – on development and a massive range of health factors and diseases.

Dr. Sharon Wyatt, professor of nursing and principal investigator for the Hinds County study location at UMMC, said the funding already created about 40 jobs in Hinds County – people to recruit, interview and follow up with enrolled moms.

In August, UMMC Cancer Institute researchers moved into new labs on the sixth and seventh floors of the newly completed Arthur C. Guyton Research Center. Nearly $8 million in federally targeted funds – congressional earmarks – from FY 2011 paid for the completion of the building’s top three floors.

“Since UMMC started asking for congressional appropriations in 1999, we’ve received about $76 million,” said Dr. David Dzielak, director of strategic research alliances. “Virtually all of that – 99.4 percent – went into infrastructure projects, most directly related to research.”

Funding for about half of the building’s $72 million cost came through earmarks over several years.

Dzielak also secured $6 million in earmarks for the initial phase of the Mississippi Biotechnology Research Park, a project planned at the old Farmers Market property at Woodrow Wilson Avenue and West Streets in Jackson. However, with the deflated economy and lack of congressional earmarks, the project remains on hold.

Several grants address health care in the state’s rural, minority and disadvantaged populations. Dr. Warren Jones, executive director of the Medical Center-housed MIGMH, received a $4 million grant to continue programs in outreach, health-care awareness and access, and health disparities modeling.

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10/6/2011

Please forward this message to colleagues who might be interested. If you wish to be removed from this list or know of a colleague to add, send an e-mail message to: LAGriffin@umc.edu.

The University of Mississippi Medical Center, located in Jackson, is the state’s only academic medical center. University of Mississippi Health Care represents the clinical programs of the Medical Center and includes University Hospitals and Health System and University Physicians, the faculty group practice. UMMC encompasses five health science schools, including medicine, nursing, health related professions, dentistry and graduate studies, as well as the site where University of Mississippi pharmacy students do their clinical training. The Medical Center's threefold mission is to educate tomorrow's health-care professionals, conduct innovative research to improve human health, and to provide the highest quality care available to the state's citizens. A major goal of the Medical Center is the improvement of the health of Mississippians and the elimination of health disparities. For more information, contact the Division of Public Affairs at 601-984-1100 or visit us on the Web at http://publicaffairs.umc.edu/