

## WHAT IS THE MEMPHIS RESEARCH CONSORTIUM?

Memphis has a wealth of institutions, organizations, agencies, companies, and individuals who contribute various ways to our knowledge economy. Each is effective in its own efforts. Sometimes, though, individual institutions bump up against resource restraints they cannot overcome alone. That's why the Memphis Research Consortium was created—to find ways for Memphis institutions to overcome limitations and grow new endeavors by partnering with other Memphis agencies.

For example, in 2010 our research institutions (SJCRC, UTHSC, U of M, Bioworks, LeBonheur) knew we were outgrowing our data connections with the outside world. We knew there were research tools and partners at Oak Ridge and other distant institutions if we could communicate with them reliably and robustly. So we put aside questions of ownership, developing novel, cross-institutional administrative systems, and built the Memphis Advanced Network. Together we connected all our institutions to each other and to the world at 10 gigabits per second. The 501c3 built to administer the Memphis Advanced Network matured into today's Memphis Research Consortium.

Until recently, most inter-institutional collaborations were grass-roots research partnerships among individual scientists. In 2010, however, Dr. Shirley Raines of the University of Memphis recognized the growth premium to be derived from institutional cooperation, interaction, and collaboration. That's why she and an ever-growing number of her colleagues and peer institutions established policies in their respective organizations to foster inter-institutional research collaborations wherever possible. These policies, and the inter-institutional discourse and action that result, are the core of the Memphis Research Consortium.

In November, 2011 the Consortium began establishing a formal MRC organization. It is a development corporation. By design, much of MRC's activity is accomplished through our partners. In its most basic form, MRC nurtures relationships among researchers and institutions, whether from universities or publically-traded companies. With the support of each institution's research administrations, we develop new research opportunities, bring resources when restraints are discovered, encourage translation of findings into practice, and coordinate the efforts of economic development agencies to turn science into companies and jobs.

Early on, our Consortium identified obesity as an area Memphis could effectively tackle by orchestrating joint and complementary programming. Focusing on the causes and treatment of obesity organizes our efforts as we build on our strengths, like our growing UM School of Public Health, our expertise in musculoskeletal medicine and devices, our assets in human genomics, and our excellence in pediatric research and clinical care. Similarly, it gives us a framework within which to concentrate investments where we need improved basic capabilities, like computational science, clinical research, and clinical informatics.

## WHAT IS THE MEMPHIS RESEARCH CONSORTIUM DOING?

Because the State of Tennessee believes in MRC's vision, we have funds to invest in programs and infrastructure. Here's how we've been investing these resources:

- Making a health IT survey of the local health information exchange, both to understand its value as a research tool and to create strategies for Memphis to excel in this high growth, high value arena
- Implementing Memphis Research Profiles, a research social network where researchers can build relationships with potential collaborators at partner institutions
- Supporting a genomics pilot project to inform Memphis human genomics development strategy
- Developing a model for preclinical assessment of medical device joint loading under stress
- With the Memphis Shelby Growth Alliance, coordinating a collaboration of all the Memphis entrepreneurship development agencies to provide a winning proposal to the state's Entrepreneurship Accelerator Program
- Facilitating planning for a joint industry/University of Memphis program in FDA quality review
- Investigating a broad variety of policies and procedures by which our partner institutions will implement their policies of collaboration promotion

- Establishing formal forums for researchers and administrators to build their joint research agendas and program development strategies
- Establishing formal controls and guidelines for administration of the MRC INCITE fund
- Helping to design a joint development strategy between Memphis agencies and Bartlett Chamber of Commerce to serve the life science clusters in each of these communities
- Assisting in securing final permissions and approvals to build the UT-Baptist Research Park Special Labs
- and more

In the next few months, MRC will begin a new phase of INCITE-funded investments. Proposed investments, in various stages of approval, include:

- Entrepreneurship training and venture development support programs at UTHSC and UM
- Joint public/private device prototype fabrication service and training facilities (tentative)
- Startup support and lab renovation for two senior scientists in the UM/UTHSC joint orthopedics and biomedical engineering program who will focus on advanced bone material science
- Startup support for senior scientists who will build clinical and preclinical research units in partnership with Campbell Clinic, Memphis hospitals, UTHSC, UM, and Bioworks
- Startup support for three associate professors in public health disciplines
- Major capital investment in a shared, next-generation genomic sequencing center
- Startup support for two senior TN Governor's Chairs in health informatics
- Startup support for two associate professors in health informatics and bioinformatics
- Seed investment for the Memphis Centers for Metabolic Disorders (tentative)
- Seed investment for the Memphis Centers for Translational Informatics (tentative)