



CENTRAL MICHIGAN UNIVERSITY
RESEARCH CORPORATION

MEDIA CONTACT: Ryan Buckley, (989) 774-1355, or buckl1rm@cmich.edu November 9, 2004
CONTACT: T.V. Moorthy, (306) 975-9161, or bioid@bio-id-diagnostic.com

BIOTECHNOLOGY FIRM JOINS CMU'S EMERGING NANOTECHNOLOGY CLUSTER

MOUNT PLEASANT – Beginning in January 2005, a new start-up company at Central Michigan University will provide detection and diagnostic commercial testing services to a wide range of local and regional organizations, such as medical, clinical and veterinary offices, public health institutions, and the agricultural food industry.

MultiGEN Diagnostic Inc. is a subsidiary of Bio-ID Diagnostic Inc., a Saskatchewan-based firm that specializes in the development of new DNA-based technologies used for detection and diagnosis of microbes and biological threats. MultiGEN, which will be housed in CMU's Health Professions Building, is the latest addition to a growing field of nanotechnology researchers on the CMU campus.

T.V. Moorthy, Bio-ID Diagnostic Inc. president and chief executive officer, said CMU's research environment was a key factor in the decision.

"There is some exciting work being done in the field of dendrimer nanotechnology on the campus of Central Michigan University," said Moorthy. "We're confident we can leverage that technology in a way that will yield some very positive results."

MultiGEN Diagnostic technology is used to analyze DNA sequences and identifies the microbe by matching it against a database of known pathogens.

"The current technology used to detect biological threat agents, both naturally occurring and man-made, is time-consuming and expensive," said Moorthy. "Samples often have to be sent away to a lab, where results may take days, and accuracy is not always guaranteed. We envision the use of this technology in a mobile unit where testing is done on-site and results are generated immediately."

Once perfected, there is vast potential for the technology in both the military and private sectors, said Brent Case, technology business development manager for the CMU Research Corp.

"In case of a bio-terror attack, a quick response is vital," said Case. "The problem is often in the identification of how and where that pathogen was delivered — whether it's airborne or in our food or water. MultiGEN Diagnostic will work with federal health agencies, as well as the Department of Homeland Security, to develop tests designed to allow emergency and medical personnel to rapidly analyze a wide range of samples simultaneously to identify both the type and source of the pathogen."

"The same is true for naturally occurring outbreaks," added Moorthy. "With modern travel, outbreaks can quickly move from country to country – even jumping from continent to continent. Last year's SARS outbreak is a good example of why it's so important that we develop these types of technologies."

MultiGEN technology also holds significant potential in the pharmaceutical industry. The technology may be used to determine genetic variants among the human population, significantly improving drug discovery, design, evaluation and treatment, a process known as personalized medicine. This novel approach is known as rational drug development and may lead to greater success rates and reduce costs associated with bringing a drug to market, said Moorthy.

"What we're finding is that viruses and diseases often have subtle genetic variants," said Moorthy. "For instance, in the case of HIV, there are slight variants in the virus that means some patients will respond well to a treatment, while others may not respond at all. MultiGEN technology can identify specific subtypes of the same condition, which allows for rational drug development and ultimately, better treatment for the patient."

Bio-ID collaborated with local researchers in a nanotechnology research initiative funded through U.S. Department of Defense appropriations totaling \$5.9 million over the past two years. CMU, in partnership with the CMU Research Corp. and Mount Pleasant-based Dendritic NanoTechnologies Inc., has been designated as a Dendritic Nanotechnology Center of Excellence by the U.S. Army Research Labs.

Moorthy's arrival on campus reflects the central Michigan region's growing reputation in the field of nanotechnology, said James Hageman, CMU Research Corp. interim CEO.

"Nanotechnology is an emerging science that is gaining momentum through breakthroughs that are being made in the field," said Hageman. "Some of these breakthroughs are being made right here on campus. It's great to see other companies taking notice of our efforts."

To learn more about MultiGEN Diagnostic, visit www.bio-id-diagnostic.com.