

## **The NJSBDC Technology Commercialization Center (TCC)**

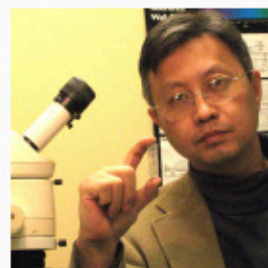
**Joseph Zhili Huang, Ph.D., Founder and President  
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MicroDysis is an instrumentation company that manufactures chemical, biomedical, and environmental devices and equipment. Over the last five years, MicroDysis has designed, developed, and patented innovative products based upon its unique microfabrication and nanofabrication platform technologies.

Dr. Joseph Zhili Huang came to the US from China in 1997. He launched MicroDysis in 2003 in the Trenton Business and Technology Center incubator with one US patent application, but no money or contacts. While there, he received business guidance from Loraine Allen, Regional Director of the NJSBDC at The College of New Jersey (TCNJ), which resulted in an Incubator Seed Grant from the NJ Commission on Science and Technology (NJCST) in 2005. With subsequent help from NJSBDC Technology Commercialization Center consultant Randy Harmon, MicroDysis prepared a business plan and application for the NJCST Entrepreneur Partnering Fund. In November of 2006, Dr. Huang received a \$391,000 award and was the NJSBDC at TCNJ 2006 Success Award recipient.

In 2007 Dr. Huang moved the company to the Rutgers EcoComplex Incubator. Through the Partnering Fund award, MicroDysis has successfully developed a new generation of fluidic biochip and the related fluidic workstation for biological processing, both of which have been sent to the Center For Applied Genomics at the UMDNJ, for validation of the biochip and sample analysis.

In order to increase the detection sensitivity of the biochip, early in 2008 MicroDysis developed a unique nanofabrication technique to create a carbon nanotube surface. An unanticipated benefit of this research is that it has led to the development of nanoCuvette, which is a disposable device for detection of chemical ions, biological organisms, and biotoxins in near real-time. The company sees broad application of the nanoCuvette and is currently fundraising in order to commercialize the technology, which it expects to begin selling in 2009.

Through the NJCST's support of the EcoComplex Incubator, Randy has continued to work with MicroDysis. He introduced Dr. Huang to the MBA Team Consulting Program at Rutgers Business School, whose students developed a market entry plan for the nanoCuvette, and also helped Dr. Huang obtain a contract from the Army's Picatinny Arsenal to build a remote automated synthesis system for producing explosive and radioactive materials. With Randy's guidance, MicroDysis recently received a \$106,000 Phase I grant from the National Cancer Institute to study the feasibility of applying its biochip technology to the early detection of prostate cancer. MicroDysis also has an SBIR application pending review at the Environmental Protection Agency (EPA).