DURHAM, N.H. – The New Hampshire Industrial Research Center (NHIRC) at the University of New Hampshire has provided a grant to a new company focused on developing instruments designed to speed the analysis of proteins, which scientists believe will have a profound impact on the drug development process.

The NHIRC has awarded Sentry BioScience Inc., with locations in Nottingham, N.H. and Knoxville, Tenn., a grant for $49,990. Sentry is focused on developing low-cost instruments that have the potential to accelerate the analysis of proteins, called proteomics. Proteomics is a fledgling industry, with most companies focused on drug discovery tools. The instrumentation market for proteomics is expected to grow from $720 million in 2001 to $1.7 billion by 2006 -- an 18 percent annual growth rate.

Sentry is collaborating with Tom Laue, professor of biochemistry and molecular biology, and the Center to Advance Molecular Interaction Science (CAMIS). “Proteomics is the next horizon for developing new drugs. Pharmaceutical companies are keenly interested in having instruments that will provide rapid, accurate measurements of the molecular interactions that are at the heart of proteomics. CAMIS's expertise in developing instruments is a great match with Sentry's expertise in producing commercially viable instruments,” Laue said.

The company’s initial focus on proteomics takes advantage of microfluidic technology, prototypes of instruments and a detection system that has a patent pending. Sentry also is in the process of raising $15 million from venture capitalists to commercialize integrated microfluidic methods and instruments for biological applications, which will streamline the drug testing process, shorten the time to receive results and reduce the cost per drug test.

“The expertise of Dr. Tom Laue and CAMIS offer a unique opportunity to further advance proteomic research, advance instrumentation development as well as uses the expertise of the CAMIS staff in developing analytical assays and experience with protein electrophoresis,” said Diane Kozwich, chief science officer of Sentry BioSciences.

Formed by NanoDetection LLC and WRF, Sentry has more than seven years and $6.5 million vested in the development of an Application Specific Integrated Circuit (ASIC) biochip (investment comes from NanoDetection LLC).

Since 1992 the NHIRC has impacted the state's economy with $225 million in new sales and more than 3,170 new jobs. Created by the New Hampshire Legislature, the center provides the means for improving the competitiveness of New Hampshire industry and the upgrading and development of new and old products through the support and cooperation of the state with industry and business. The supported research, innovation and technology transfer activities preserve and increase the number of jobs in New Hampshire. For more information on the NH Industrial Research Center, visit http://www.nhirc.unh.edu or call 603-862-0123.