



RESEARCH TRIANGLE PARK, NC -- Paradigm Genetics, Inc. (Nasdaq: PDGM), a biotechnology company, announced today that it has received a second Fast Track Small Business Innovation Research Phase I/II contract from the National Institutes of Health (NIH), this one entitled "Metabolomics: Alcohol Induced Toxicity." The funding for this second contract supports the application of biochemical profiling to the discovery of biomarkers for alcohol-related diseases. "Fast Track" refers to a mechanism used by the NIH to expedite the decision and award of applications that have a high potential for commercialization.

The first phase, a six-month study that commences September 1, 2004, is funded by NIH's National Institute of Alcohol Abuse and Alcoholism and will be undertaken in collaboration with the University of North Carolina at Chapel Hill. Phase I includes preclinical studies examining the acute and chronic effects of high doses of ethanol, an addictive toxin that is primarily processed by the liver. Using mass spectrometry, Paradigm Genetics will identify key biochemicals in liver, brain, and plasma that are altered in association with changes in tissue pathology and other traditional measures of disease, such as elevated serum enzyme levels. Paradigm will map the altered biochemicals to their relevant biochemical pathways as a means of determining a mechanism and assessing a causal linkage to disease. Upon successful completion, the Phase I study will be extended into a Phase II study where the metabolomic assessment of plasma, liver, and brain metabolites will also include the integrated analysis of gene expression.

"We are happy to see our pioneering work in the area of biochemical profiling and data integration acknowledged through this fast track award. This research should enable us to find better ways of diagnosing the diseases often attributable to alcohol abuse," said Thomas J. Colatsky, PhD, Vice President of Human Health Research at Paradigm Genetics. "Liver disease continues to be a major health problem and is often difficult to diagnose until its later stages. This award will not only help in the continued building of our biomarker discovery program but also in extending our relationship with UNC-CH. We have been collaborating with UNC-CH in ongoing clinical studies on novel biomarkers for liver injury."

"I am excited that this collaboration with Paradigm Genetics will provide us with the opportunity to discover unique metabolic biomarkers that relate to and predict pathological changes induced by acute alcohol abuse and alcoholism in liver, brain, and perhaps in other critical target organs," said Fulton T. Crews, PhD, director of the Bowles Center for Alcohol Studies and UNC-CH professor of pharmacology and psychiatry.

The fast track contract is worth up to approximately \$850,000, with \$100,000 funded for the six-month Phase I part of the study and up to \$750,000 over two years for Phase II, upon the successful completion of Phase I. This project has been funded in whole or in part with federal funds from the National Institute of Alcohol Abuse and Alcoholism, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN281200410004C.

About Paradigm Genetics

Paradigm Genetics is a biotechnology company applying its proprietary systems biology platform to the discovery of safer, more effective drugs and agrichemicals. Paradigm Genetics has major collaborations with the National Institute of Environmental Health Sciences, Bayer CropScience, the Monsanto Company, Pioneer Hi-Bred International, the National Institute of Standards & Technology's Advanced Technology Program, and L'Oréal Inc. For more information, visit www.ParadigmGenetics.com.