Delta Search Labs Spin-off Solutions Labs Awarded US Air Force Contract to Develop Technology for Detecting Soldiers' Exposure to Toxins Before They Show Symptoms

CAMBRIDGE, Mass., Nov. 13 /PRNewswire-FirstCall/ -- Solution Labs, the company spun off from Delta Search Labs, a leading innovative technology R&D lab, announced that it has been awarded a Phase II SBIR Contract by the United States Air Force to develop a state-of-the-art technology for detecting soldiers' exposure to toxins before they show symptoms.

According to the leading project scientist of Solutions Lab, "an Expert System will be capable of quantifying, interpreting, and integrating complex, time-related changes in gene, protein, and metabolite expression profiles associated with low-level toxic exposure. We will start by creating a database of dosage-dependent biomarker candidates associated with model toxins impacting various organ functions." He added, "Statistics, biology, biochemistry, and bioinformatics will all contribute equally. Together with rigorous statistical significance and crossvalidation tests, we will avoid misleading results that have often plagued the 'omics' technology-based biomarker discovery community."

The ultimate technology will be a software system that can take as input multiple multivariate data types, e.g. microarray, antibody array, LC-MS, NMR, etc. collected on related specimens, and then can integrate the information using advanced statistical and bioinformatics modeling along with the expertise in analytic chemistry and physics necessary to preprocess the data prior to analysis. Applications of this technology include drug discovery research, disease diagnosis and prognosis, nutritional studies, environmental monitoring, and agricultural research.

Solutions Labs, the company spun off from Delta Search Labs, specializes in mathematical modeling, data analysis, and scientific computation for biotechnology. It will support the efforts of the Air Force Research Laboratory's Applied Biotechnology Branch and will commercialize high performance of an Expert System.

Delta Search Labs is a groundbreaking Research and Development Foundation incorporating unique technology realization capabilities. Delta Search Labs is a state-of-the-art supercomputing, and advanced visualization facility located in Tech Square and active in developing proprietary technologies and products across the five sectors in which it is active. Delta Search Labs' quality management system is ISO 9001:2000 certified, recognition that the company is committed to high-quality products. According to Kamal Jaffrey, CEO of Delta Search Labs, "We make every effort to build innovative technology that will overcome complex problems and give customers/partners a strong return on their investment dollars."

For more information, please go to http://www.solutionslabs.com/