Thomas Jefferson University Hospital Contracts with SmartGene, Inc. to Enable Faster, More Precise Identification of Bacteria and Fungi by Sequence Analysis

April 23rd, 2007 - Raleigh, NC - SmartGene, Inc., a provider of novel services for the management and analysis of genetic data, today announced an agreement with Thomas Jefferson University Hospital (TJUH), under which TJUH will utilize SmartGene’s advanced technology and integrated Web-based services to support more rapid and precise identification of bacterial and fungal pathogens.

Traditional microbiology procedures sometimes cannot identify bacteria and fungi accurately and quickly enough to support timely decisions for best patient care. Therefore, identification of pathogens based on gene sequencing is increasingly being considered and implemented in a variety of clinical laboratories. SmartGene’s technology facilitates efficient identification of pathogens, following the sequencing of specific portions of an organism’s DNA, by integrating a number of tasks, including sequence proofreading, alignment, interpretation and the creation of dendrograms and reports online. DNA sequences are interrogated using SmartGene’s constantly updated reference databases, which take account of newly characterized and emerging pathogens. SmartGene’s databases are constructed using proprietary algorithms to extract and filter useful sequences from vast public repositories, and are complemented by additional private, curated reference databases. SmartGene’s technology allows its customers to manage and more fully utilize their genetic sequence data over time, completely independent of laboratory instrumentation and reagent systems.

“SmartGene’s support services and technology have enabled us to fast forward our development of ribosomal DNA sequencing of hard-to-identify bacteria and fungal pathogens involved in serious infections. Conventional identification techniques are often slower and sometimes not as accurate as analysis of the DNA fingerprint of a pathogen. However, DNA sequence analysis, usually a research technique, can be difficult to transition to routine clinical use. The SmartGene online software and organism database have helped us improve and speed up our alignment and analysis of the DNA sequence so that the process becomes more user friendly and realistic for a tertiary care medical hospital.” said Donald L. Jungkind, Ph.D., Professor, Departments of Pathology, Anatomy and Cell
Biology and Microbiology and Immunology at Jefferson Medical College of Thomas Jefferson University and Director of the Clinical Microbiology Laboratory at Thomas Jefferson University Hospital in Philadelphia, PA.

“We are delighted to count Professor Jungkind and the Jefferson team amongst our first academic medical center customers in North America,” said David Ellis, President of SmartGene, Inc. “It is essential for us to communicate the benefits of our technology through the academic medical community; and an institution of international reputation such as Jefferson will surely help us with this challenge. We look forward to continuing to learn from the professionals at Jefferson how we should configure our services to be most compelling for such institutions.”

About Thomas Jefferson University Hospital

Thomas Jefferson University Hospital has major programs for heart disease, cancer treatment, neuroscience, high-risk childbirth, genetics, radiology, orthopaedics, digestive diseases and many other areas of medicine and surgery. It is one of only a few hospitals in the United States that is both a Level I Trauma Center and a federally designated regional spinal cord injury center. The Kimmel Cancer Center at Jefferson is designated as a clinical cancer center by the National Cancer Institute. U.S. News and World Report has consistently ranked many of Jefferson's services as among the best in the nation. These include rehabilitation, cardiology/cardiac surgery, orthopaedics, digestive disorders (gastroenterology), geriatrics, gynecology, neurology and neurosurgery (both of which are based at Jefferson Hospital for Neuroscience), otolaryngology - head and neck surgery, and urology.

About SmartGene, Inc.

SmartGene, Inc. is the North American subsidiary of SmartGene GmbH, a privately-held company based in Zug, Switzerland, which provides its services worldwide. Through its proprietary Integrated Database Network System (IDNS™) platform, SmartGene offers its customers web-based suites of functionality to facilitate sequence-based molecular identification and typing for a variety of clinical, medical research and veterinary applications. Constant updates to reference data and algorithms keep SmartGene’s customers in step with evolving science and improve accuracy of sequence interpretation. SmartGene’s integrated services improve laboratory workflow for sequence-based diagnostics. Current modules from SmartGene address Bacteria, Fungi, HIV, HCV, and Influenza. Discover more at www.smartgene.com.