

# SmartGene

## **SmartGene and the Institute of Medical Microbiology, University of Zurich expand their collaboration to address the sequence-based validation of mass spectrometry platforms for clinical microbiology**

**August 15<sup>th</sup>, 2011: Zug, Switzerland and Zurich, Switzerland:** SmartGene, a provider of innovative software services for the management and analysis of genetic data, and the Institute of Medical Microbiology (“IMM”), University of Zurich, Switzerland, today announced an expanded collaboration, under which the University of Zurich will make use of the SmartGene platform and its associated reference databases to validate and provide ongoing back-up for mass spectrometry analysis, for the identification of infectious pathogens in diagnostic routine procedures.

The parties already enjoy a long-standing relationship, under which SmartGene's advanced technology and integrated Web-based services are used by the IMM for the analysis and identification of bacterial, fungal and mycobacterial pathogens by sequence analysis. The IMM is one of Europe's leading centers of expertise for molecular and conventional diagnostic microbiology and serves as a national and international reference laboratory. Experts at IMM conduct various research projects and also curate an ITS sequence reference database for identifying yeasts and molds, which is available to other institutions via SmartGene's service platform.

Clinical microbiology is undergoing a paradigm shift, whereby novel technologies such as mass spectrometry will partially replace conventional culture-based methods for identification of bacterial pathogens. The introduction of mass spectrometry technology promises a shorter turn-around time for results, along with reduced labor and consumable expense per test. However, earlier studies suggest that mass spectrometry may partly not be sufficiently discriminatory, for which case sequence-based identification will serve as back-up and gold standard. The IMM plans to work out an optimized workflow for the routine clinical laboratory, hence taking advantage of its long-standing expertise in sequence-based identification.

Erik C. Boettger, MD, Professor of Medicine and Microbiology, and the Director and Chairman of the Institute of Medical Microbiology at the University of Zurich, stated that: “Our institution has a long term expertise in implementing new technologies in the diagnostic laboratory, and we have always paid attention to carefully optimizing the work flow. We will now evaluate how mass spec technologies and sequence-based identifications can work together in our laboratory, for best accuracy and efficiency in supporting patient care.

# SmartGene

“With mass spec platforms holding the promise of rapid identification of microorganisms, it is critical for the quality of our work, to be able to back-up and complement these results with our DNA sequencing routine and with our database cumulated from many clinical isolates over the years. Given the diversity of microorganisms, sequencing of microbial genes will play an important role in a modern microbiology laboratory. At our institution we appreciate SmartGene’s technology which helps us not only to streamline sequence analysis, but also to leverage the expertise gained with the analyzed isolates.”

“We are very happy to expand the scope of our collaboration with Professor Boettger and his team,” said Stefan Emler, MD, Chief Executive Officer of SmartGene GmbH. “It is very important for the community to position mass spectrometry methods for pathogen identification in the context of species diversity, evolution and changing taxonomy. The introduction of these new techniques, together with the increasing scarcity of expertise in conventional culture-based identification, reinforces the continuing importance of sequencing as the gold standard. SmartGene already facilitates the efficient and accurate identification of pathogens by sequencing; this expanded collaboration with IMM is another step towards our goal of ultimately providing solutions which address pathogenicity, drug resistance and host susceptibility for best management of challenging infections.”

## About SmartGene

SmartGene GmbH is a privately-held company based in Zug, Switzerland, with subsidiaries in Lausanne, Switzerland and Raleigh, North Carolina. SmartGene provides web-based suites of functionality worldwide to facilitate sequence-based analysis for a variety of clinical, medical research, and veterinary applications. Constant updates to reference data and interpretive algorithms keep SmartGene’s customers in step with evolving science and improve the accuracy of sequence interpretation. SmartGene’s integrated services increase the speed to result for sequence-based diagnostics and improve workflow in the laboratory. SmartGene’s modules address Bacteria, Fungi, HIV, HCV, MLST, Influenza, and HLA typing. Discover more at [www.smartgene.com](http://www.smartgene.com). Contact Phone: +41 41 711 1581; [contact@smartgene.com](mailto:contact@smartgene.com)

## About IMM

See institute’s website: <http://www.imm.uzh.ch/index.html>. Contact Phone: +41 44 634 2660; [boettger@imm.uzh.ch](mailto:boettger@imm.uzh.ch)