HAMILTON

Life Science Robotics - Press Release

The new Hamilton NGS Application Lab

Basel & Bonaduz, 8th June 2016

Hamilton Bonaduz AG - a leading provider in the design and manufacture of manual and automated liquid handling, process measurement, and storage solutions - has entered a strategic partnership agreement with the **Human Genomics Research Group at the Department of Biomedicine at the University of Basel** to develop new and innovative automation solutions for Next Generation Sequencing sample preparation.

Under this agreement Hamilton Life Science Robotics, the Automated Liquid Handling branch of Hamilton Bonaduz AG will develop and validate new automated sample preparation protocols for the Next Generation Sequencing (NGS) market. The Human Genomics Research Group under the leadership of **Prof. Sven Cichon** will act as a consultant for the development, and verify the methods by analyzing real proband samples.

"*The combination of our leadership in the liquid handling market with the worldwide reputation and expertise of Prof. Cichon's Genomics Research Group represents a milestone in our company history*" says **Dr. Mario Arangio**, Director of Product Management and Partnering at Hamilton. "*The complexity of NGS library preparation, paired with the kit quality and the time consuming steps do represent big hurdles to the establishment of consistent and reproducible protocols. Our liquid handlers are key tools for users who want to overcome these challenges as they enable high reproducibility, full monitoring of the processing of the valuable samples and easy upscaling of throughput. We already have established strategic partnerships with major suppliers of sequencing instruments and kits such as Illumina Inc., NEB (New England Biolabs) and Coastal Genomics, to develop validated automation protocols. The collaboration with Prof. Cichon is the next logical step: The deep and continuous exchange directly with the users will enable us to further increase our know-how and produce even more user friendly and reliable automated solutions for NGS library preparation.*"

"*The combination of our scientific and laboratory knowledge with Hamilton's know how in automated liquid handling will enable significant advances in this field*", adds **Prof. Sven Cichon**. "*The capability to perform high-throughput NGS applications, ranging from gene panels, whole-exome and whole-genome sequencing to RNA sequencing and DNA methylation analysis, is playing an increasingly important role in biomedical research. The collaboration enables us to tackle the core NGS library preparation challenges in for our users, such as reproducibility, process control and throughput, enabling us to boost our science*".