

RNA-Seq Symposium

Centre for Genomic Regulation (CRG) Wednesday, 22th of April 2015 10.30-13.00h

SMARTer Solutions for Next Generation Sequencing



Abstract. Next-generation sequencing [NGS] has increased our understanding of biology by enabling highly sensitive RNA expression analysis across a wide dynamic range. As NGS applications continue to grow, so does the need for more powerful tools to work with less-than-ideal samples. As the core of the SMARTer kits for transcriptome analysis, Clontech's patented SMART[®] technology utilizes the template switching activity of reverse transcriptase to enable researchers to analyze their most challenging samples, such as single cells, low-input RNA, noncoding RNA, and RNA from degraded samples. In parti-

cular, single-cell RNA-seq is one of the more difficult, and fastest growing, applications of NGS. The high sensitivity and dT- primed protocol of the SMARTer Ultra™ Low family has made these kits the industry standard for single-cell analysis. Applications of SMART technology are constantly expanding and now include a novel, ligation-free method for generating ChIP (chromatin immunoprecipitation) sequencing libraries. The purpose of this symposium is to take a deeper look into the new technologies being developed for single-cell RNA-seq and other sensitive NGS applications.

10.30-11.00h: "Novel methods for RNA and DNA-Seq analysis using SMARTMT Technology". Presented by Dr. Irit Paz. GLocal Sales Manager at Takara Clontech, France.

11.00-11.30h: "Signatures of tumor evolution reveal cancer driving genes and networks". Presented by Dr. Stephan Ossowski. Genomic and Epigenomic Variation in Disease, Group Leader at the Centre for Genomic Regulation (CRG), Barcelona.

11.30-12.00: Coffee break

Work SMARTer not harder! Learn by listening to the researchers who are already using the SMARTer kits.

12.00-12.30h: "Gene expression analysis of the proepicardium during zebrafish heart development". Presented by Dr. Alberto Benguria. Support Scientist at the Genomics Unit at National Centre for Cardiovascular Research (CNIC), Madrid.

12.30-13.00h: "RNA-seq protocols for low input compromised samples and single-cell experiments". Presented by Dr. María Méndez-Lago. Single-cell Genomics, Team Leader at National Center for Genome Analysis (CNAG), Barcelona.









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Venue

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