

Single Cell Omics 2011

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Abstracts

The single cell Omics revolution is the potential transformation of cellular heterogeneity from a source of noise to a source of new, as yet hidden discoveries. No longer will the variability from one cell to the next confound researchers and force them to average results into irrelevance. Researchers may find, in fact, that this variability is critical for cells to respond to and interact with their environments. But even without the complete revolution, single cell Omics offer significant evolutionary advances in fields of biology and medicine that are already based on single cell analysis, such as immunology, neurobiology, stem cell biology, circulating tumor cells and preimplantation genetic diagnosis. Moreover, the ongoing evolution of single cell Omics technologies provides improvements in sensitivity and throughput that will enable researchers to generate more data from smaller numbers of cells, which can be enabling in cases of precious samples. The result of this (r)evolution is a market for Omics technologies that is projected to grow from \$60 million in sales in 2010 to \$525 million in 2016, according to *Single Cell Omics 2011*, a new report published by Select Biosciences and written by BioPerspectives.

Survival of the fittest requires a detailed understanding of this emerging market. *Single Cell Omics 2011* explains the key technologies, applications, unmet needs and trends. The 167-page report includes an Internet survey administered to a large stratified database; analyses of front-end separation technologies, back-end Omics technologies and integrated platforms to bridge the gap; profiles of 30 companies; and a quantitative market model segmented by technologies. In addition, the report comes with a reprint of the Trends in Biotechnology cover article written by two of the report authors. Moreover, the report also comes with one hour of consulting (in the form of a conference call) with report authors Dr. Bodovitz, Principal of BioPerspectives or Antje Plaschke-Schluetter, Head of Application at Molecular Machines & Industries AG.

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