



Alp Nano bio International School 3

January 23-27, 2012, Sterzing (Bolzano, Italy)



Next generation technology systems and life sciences interface research: an integrative approach

The 3rd edition of the International Winter School on Nano and Biotechnology, co-organized by the Latemar consortium (www.latemar.polito.it), the Education, University and Research Department of the Trento Province (PAT), and the Trentino System of Higher Education and Research (STAR: University of Trento, Foundations and Research Centers) is focused on Next-Generation DNA sequencing technologies. “-omics” approaches and biomedical research benefit from recent advances and novel techniques for high-throughput analysis. Thanks to these new technologies, the physiological and pathological mechanisms of diseases can be investigated quantitatively and at the highest achievable genomic resolution. Nevertheless the use of these complex instruments also presents challenges with regard to efficiency and speed of sample preparation as well as regarding the management and interpretation of the large volume of data obtained. During the school an introduction to state-of-the-art methods for producing -omics data by NGS techniques will be followed by an in-depth examination of the related advances in micro and nano-biotechnologies, and finally by a session devoted to -omics data analysis. Also an overview of the input coming from imaging studies of cell structure (high content analysis) in future diagnostics will be offered. Aim of the school is to provide a common language platform to young scientists coming from different fields such as life sciences, chemistry, engineering and informatics where the top research activity demands high interdisciplinarity. The programme will be structured to allow free time in the afternoon (snow-time) and lectures with timetabled events in the morning, late afternoon and evening. The lectures will be accessible to PhD students, postdoctoral fellows and others interested in this newly emerging interdisciplinary field. Participants will have the opportunity to present their research in the form of a poster. <http://nanobioschool.com>

Scientific committee

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Pederzoli C., FBK – Materials and Microsystems Centre (CMM) Trento
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Velasco R., FEM - Department of Genomics and Crop Biology (S. Michele, Trento)



Provincia Autonoma di Trento
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Organizing committee

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