



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. The use of these complex instruments poses, at the same time, problems related to samples, ranging from accurate, rapid, and efficient preparation to how to manage and interpret the huge 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 novel developments in several physical techniques 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.

Web site: www.nanobioschool.com (in progress)

Scientific committee

Anderle M., PAT Education, University and Research Department (Trento)
Bussolino F., Torino University
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Domingues F., EURAC - Center for Biomedicine (Bolzano)
Furlanello C., FBK – Information Technology Centre (ICT) Trento
Gasparini P., Trieste University/IRCCS Burlo Garofalo
Ghodssi R., Institute for Systems Research, University of Maryland (Baltimore, USA)
Paulmichl M., Paracelsus Medical University, Salzburg (Austria)
Pederzoli C., FBK – Materials and Microsystems Centre (CMM) Trento
Pirri F., Polytechnic of Torino and Center for Space Human Robotics – IIT@POLITO
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Scheffer H., Department of Human Genetics, Nijmegen (Holland)
Scoles G., Udine University/S. Maria Misericordia Hospital
Valbusa U., Genova University and Nanomed Labs
Velasco R., FEM - Department of Genomics and Crop Biology (S. Michele, Trento)



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Organizing committee

Bertorelli R., De Sanctis V., Trento University - CIBIO
Bianchi M., Liuti N., PAT Education, University and Research Department
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Malesardi S., FBK - Event management, Communication Unit
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