



Dottorato in Genetica, Biologia Molecolare e Cellulare
Scuola di Dottorato in Scienze della Vita "Camillo Golgi" - Università degli Studi di Pavia

Doctoral Course:
Evolution - from the phenotype to molecular approaches
Academic year 2017-2018

***The Emerging Field of Paleogenomics and its Variegated Applications
in Life Science***

Organizers:

Prof. Alessandro Achilli and Prof. Anna Olivieri, Dipartimento di Biologia e Biotecnologie, Università di Pavia.

Synopsis:

During the last decade genomics and palaeogenomics took off uncovering the genetic treasure contained in countless remains from pre-history to modern times. These data are unlocking the information embedded in the genomic sequences and, together with emerging archeological and paleontological discoveries, are reshaping our understanding of humankind's history and evolution as well as the past of many other species. By fostering this new research avenue, the course will focus on recent and upcoming data from ancient DNA analysis to reconstruct human and animal evolutionary history and migrations and the ecology and evolution of ancient pathogens.

Program:

Wednesday May 2, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

14:00 - 16:00

Prof. DAVID CAMELLI

Department of Biology, University of Florence, Italy

Title: "Ancient DNA in the XXI century"

Wednesday May 2, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

16:00 - 18:00

Prof. CLAUDIO OTTONI

Laboratory of Forensic Genetics and Molecular Archaeology, Leuven, Belgium.

Title: "When the cat goes away - a paleogenetic perspective into past distributions and patterns of dispersal of *Felis silvestris*"

Thursday May 3, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

14:00 - 16:00

Prof. ALBERT ZINK

Institute for Mummy Studies. Eurac research, Bolzano, Italy

Title: "Paleogenomics of mummies: Insights into genetic ancestry, pathogen evolution and disease predisposition"

Friday May 4, 2018

Aula Falaschi – Istituto di Genetica Molecolare del CNR, Via Ferrata 9

10:00 - 12:00

Dr. LUCA PAGANI

Department of Biology, University of Padua, Italy

Title: “Digging ancient haplotypes out of modern human genomes”

Friday May 4, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

14:00 - 16:00

Dr. CHRISTIANA LYN SCHEIB

Estonian Biocentre, University of Tartu, Estonia

Title: “Into the unknown: ancient DNA and the first Americans”

Monday May 7, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

10:00 - 12:00

Prof. DOMINGO SAVIO RODRÍGUEZ BAENA

Department of Computer Science, Pablo de Olavide University, Spain

Title: “Data mining 1: from raw data to useful knowledge”

Monday May 7, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

14:00 - 16:00

Prof. DOMINGO SAVIO RODRÍGUEZ BAENA

Department of Computer Science, Pablo de Olavide University, Spain

Title: “Data mining 2: examples of current biological data analysis researches”

Thursday May 10, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

14:00 - 16:00

Prof. CRISTINA CATTANEO

Dipartimento di Scienze Biomediche per la Salute, University of Milan, Italy

Title: “People from Bones: from archaeology to forensic sciences”

Friday May 11, 2018

Aula Falaschi – Istituto di Genetica Molecolare del CNR, Via Ferrata 9

10:00 - 12:00

Dr. COSIMO POSTH

Max Planck Institute for the Science of Human History, Jena, Germany

Title: “Paleogenetic investigations of hominin diversity and dispersals in Eurasian prehistory”

Friday May 11, 2018

Aula Buzzati-Traverso – Building of Genetics and Microbiology, Via Ferrata 9

14:00 - 16:00

Dr. MARIA SPYROU

Max Planck Institute for the Science of Human History, Jena, Germany

Title: “A molecular approach towards understanding ancient plagues”