

Seminar Series 2021

June 17th

Population genomics

A.G.I.
Associazione Genetica Italiana

SOCIETA' ITALIANA GENETICA AGRARIA

16:00 **Alessandro Achilli**



Unveiling the genetic history of Indigenous Americans: archaeogenomic distinctiveness of the Isthmo-Colombian area

Alessandro Achilli is currently Associate Professor of Genetics at the University of Pavia (Italy) and visiting Scientist at the University of Huddersfield (UK). His research activity is mainly dedicated to the analysis of modern and ancient genomes (investigating both mitochondrial and nuclear DNA) with the aim of better defining origins, evolution, and dispersal patterns of human and animal populations. Recently, to refine the human genetic history of the Isthmo-Colombian area, for the first time his group has directly tested and analyzed autosomal markers of both pre-Hispanic human remains and contemporary Indigenous groups from Panama. Evaluation of the ancient low-coverage genomes made it possible to address long-standing anthropological questions and revealed a previously-unknown Pleistocene ancestry.

16:45 **Roberto Papa**



Adaptation to novel environments during domestication and crop diversification: the case of common bean

Full Professor of Agricultural Genetics at the D3A, Università Politecnica delle Marche, Ancona (Italy). His research interests are conservation of Plant Genetic Resources and crop evolution, mostly focusing on conservation genetics and using population genomics approaches to study legumes and cereals to promote agrobiodiversity conservation and its use in agriculture. He contributed to elucidate the evolutionary history of crop species, particularly Phaseolus ssp., durum wheat, and barley. By applying genomics approaches and molecular phenotyping (with pioneer study in evolutionary metabolomics and transcriptomics) he has significantly contributed to knowledge on the current levels and organisation of genetic diversity of crop germplasm and on crucial processes, such as crop domestication and adaptation to different environments. Among others, he coordinates the H2020 INCREASE project.