

Colloquia

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Genomic landscape of the Mediterranean basin and beyond

day

OCT 5, 2016 WED

location

EE01

time

15:40

ABSTRACT

Scientists reported the genomic landscape of the Mediterranean basin and the Greater Middle East, a central hub for ancient civilizations and home to approximately 10 percent of the World population, in an article published in the September 2016 issue of Nature Genetics¹. Project results provide important insights into two major areas of human genetics, namely the identification of disease-associated genes and the elucidation of the human migration pathways from Africa to Asia and Europe. The high consanguinity rates, a characteristic of Middle Eastern populations, enhance disease gene identification by 4 to 7 fold.

The Project was first proposed by Dr. Tayfun Özçelik from the Department of Molecular Biology and Genetics and an international group of scientists who convened at Bilkent University in 2009 and 2010-4. More than 180 scientists from Algeria, Egypt, France, Israel, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Pakistan, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, United Arab Emirates and United States contributed to the project. Rockefeller, Harvard, MIT, California, Cornell, INSERM, Alfaisal and İstanbul Universities were amongst the partners. In his presentation, Dr. Özçelik will discuss the implication of this project and propose a new disease gene identification scheme called "reverse phenotyping", which was published as a "news and views" article⁵ in the same issue of Nature Genetics.