Project Proposal

Genomic medicine: analysis of omics data for personalized medicine

Project Description (*max 500 words*)
Our group works on the Medical Genomics of Rare Disease and employs genomic, transcriptomic and epigenomic data for the identification of the molecular causes of disease. Our analytic workflow is based on the identification of DNA variants by exome or genome sequencing and on the interpretation of variants considering phenotypic, transcriptomic and epigenomic data. The workflow benefits from natively digital patient clinical and molecular data and is composed by classical and machine learning software tools. Our group is connected with local and international institutions and is involved in European consortia focused on bioinformatics and rare disease.
The ideal candidate is someone interested in the study of the genetics mechanisms with the tools of computer data analysis.

Supervisor(s), Lab/Group details, other additional info.

Prof. Sergio Cocozza, Dipartimento di Medicina molecolare e Biotecnologie mediche, Università degli Studi di Napoli "Federico II"

Dr Michele Pinelli, Telethon Institute of Genetics and Medicine (TIGEM), Telethon Undiagnosed Diseases Program (http://www.telethon.it/cosa-facciamo/malattie-senza-diagnosi)

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