Virtual SORS: Unravelling the Electrocardiogram for Cardiovascular Risk Prediction

Objectives

Abstract: Cardiovascular death is the main cause of mortality in developed countries. Current diagnosis and predictive tools are still insufficient due to low cost-accuracy ratios. The electrocardiogram (ECG) is a widely available and cheap tool that reflects the electrical activity of the heart. In this talk, I will give an introduction to the ECG, describe how it can be used to non-invasively quantify cardiovascular risk, and how genetic analyses can unravel key biological mechanisms reflected on the ECG.

Short biography: Julia Ramírez is a Marie Sk?odowska-Curie Research Fellow and Lecturer in Cardiovascular Data Science at Queen Mary University of London (QMUL, London). Julia received a M.Sc. degree in Telecommunications Engineering from the University of Zaragoza, Spain, in 2011, followed by a M.Sc. degree in Biomedical Engineering in 2013 and a Ph.D. in Biomedical Engineering from the same university in 2017. The main objective of her PhD was to extract information from the electrocardiogram (ECG) to non-invasively quantify cardiovascular risk. She, then, moved to QMUL to investigate the genetics of ECG markers and their role in assessing cardiovascular risk. Julia has 27 publications, and her research has been awarded with two European postdoctoral fellowships (WHRI-ACADEMY COFUND International Fellowship, 2017, and Marie Sk?odowska-Curie Individual Fellowship, 2018, by the Marie Curie Actions, H2020, European Commission), three Young Investigator Awards (2013, 2014 and 2016), two Clinical Needs Translational Awards (2018 and 2019) and three mobility grants (2012, 2015 and 2016).

Speakers

Julia Ramírez Ph.D. in Biomedical Engineering, currently a Marie Curie Individual Fellow.
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