Spontaneous coronary artery dissection (SCAD) is a poorly understood cause of acute coronary syndrome that predominantly affects women. Evidence to date suggests a complex genetic architecture, while a family history is reported for some cases. In this talk I will present our investigations of the genetic causes of SCAD. We have explored monogenic causes as well as the role of polygenic risk in sporadic and familial cases of SCAD.

Eleni Giannoulatou graduated with a Masters of Computer Engineering and Informatics from the University of Patras, Greece. She next received her Master of Philosophy in Computational Biology from the University of Cambridge, UK and her Doctor of Philosophy in Bioinformatics from the University of Oxford, UK. She undertook postdoctoral work at the Wellcome Trust Centre for Human Genetics in Oxford as part of the Wellcome Trust Case Control Consortium and the Weatherall Institute of Molecular Medicine in Oxford, UK. Since 2016, she has been leading the Computational Genomics Group at the Victor Chang Cardiac Research Institute in Australia. Her research focuses on identifying the underlying genetic determinants and causes of cardiovascular disease. Her team develops and applies computational approaches to analyse high-throughput genomics data aiming to advance our understanding of disease causation.