

Giulia Pederzani

A postdoctoral researcher at the Computational Science Lab at the University of Amsterdam. She studied Mathematics at Padua University for her BSc and Leiden University for her MSc. She obtained a PhD in Computer Science from the University of Sheffield with a thesis on "Mathematical and Computational Modelling of Arterial Mechanobiology: Application to Cerebral Vasospasm". Before joining the University of Amsterdam, she held a postdoc position at the Department of Cardiovascular Disease at the University of Sheffield, working within the INSIGNEO Institue for in silico Medicine and the SANO Centre for Computational Personalized Medicine.

Her main research interest is computational multi-scale modelling of the cardiovascular and cerebrovascular systems. She developed a mechanobiologically motivated model of cerebral vasospasm to help improve treatment selection. She also worked on numerical methods for medical image processing and 3D geometry reconstruction, as well as contribute to the development of a digital phantom of coronary arteries to standardise validation of computational models of coronary physiology.

She is also part of the EDITH project, a EU-funded consortium to foster the adoption of digital twins in healthcare and thus realise true personalised medicine.