

Ilaria Rago earned a MS in Nanotechnology Engineering from Sapienza University of Rome and a PhD in Nanotechnology from University of Trieste. Before enrolling in the PhD program in Trieste she served as a research fellow at CNIS (Sapienza Research Center on Nanotechnology Applied to Engineering). After the PhD, she worked as PostDoc Research Associate at Elettra Synchrotron Light Source Trieste S.C.p.A. Her research interests include the synthesis and characterization of nanomaterials and devices for biomedical and tissue engineering applications. In particular, she dealt with 2-D and 3-D Carbon nanotubes (CNTs)-based architectures synthesized via Catalytic Chemical Vapour Deposition (CCVD), controlling the route in a nano-micro-fabrication context by patterning the catalytic layer via lithographic techniques or by decorating porous iron-based materials (e.g. sintered iron foam) with CNTs for cardiac and neuronal applications. In parallel, she developed expertise in the realization of 3D porous Poly(dimethylsiloxane) (PDMS)based scaffolds having controllable stiffness and topology, which can promote cell adhesion and specific chemical interactions to regulate cellular growth and functional development in a genuine three-dimensional fashion.