

## Prof. Dr. Manuela Teresa Raimondi

### Personal information

- Family name, First name: Raimondi, Manuela Teresa
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### Brief presentation

I am currently a full professor of Bioengineering at Politecnico di Milano. From 2003 to 2008 I have directed a Biomechanics lab inside the research hospital I.R.C.C.S. Galeazzi Orthopaedic Institute in Milano. Since 2009 I established the group of Mechanobiology at Politecnico di Milano. I have founded two labs at the campus Leonardo (the “[Mechanobiology lab](#)” and the “[Live Cell Imaging lab](#)”) where I based my team. We develop frontier tools for research in biology, such as nanoengineered stem cell niches, microfluidic bioreactors and miniaturised windows for imaging *in vivo*. Our long-term goal is to develop the potential of these tools in cell modelling, drug discovery and regenerative medicine. I teach the course “Technologies for regenerative medicine” at the MS program in Biomedical Engineering. I am the PI of 3 projects funded by the European Research Council (ERC), one Consolidator of fundamental research in stem cell bioengineering and two Proof-of-Concept for the technology transfer of the tools developed within the Consolidator. I am the founder of a start-up company that commercialises these tools.

### Key career information

- University degree: 1993, 5-year Master of Science (MS) in Mechanical Engineering, School of Engineering, Dept. of Bioengineering, Politecnico di Milano, Italy.
- Ph.D. title: 2000, Ph.D. in Bioengineering, School of Engineering, Dept. of Bioengineering, Politecnico di Milano, Italy.
- Academic position: 2018-: Full Professor of Bioengineering, School of Engineering, Politecnico di Milano, Italy.
- Grant management: 2004-: Principal Investigator of 9 competitive grants in the field of Industrial Bioengineering, 3 of which funded by the European Research Council (ERC); total funds managed: 3.2 Million Euro.
- Industrial research: 2006-: holder of 5 contracts, total funds managed: 0.42 Million Euro.
- Honors and Awards: I won a startup competition, a young investigator award, a PhD fellowship and 3 travel grants.
- Scientific appointments: Board member of the Italian Society of Bioengineering (GNB) and Scientific advisory board member of I.R.C.C.S. Galeazzi Orthopaedic Institute (Milano, Italy)
- Academic appointments: Lecturer, PhD courses “Bioreactors for Regenerative Medicine” and “Mechanobiology”; MS courses “Biomimetics and Tissue Engineering” and “Technologies for Regenerative Medicine”; Degree courses “Technological Evaluation of Prostheses and Implantable Devices” and “Reconstructive Engineering in Orthopaedics”; didactic coordinator of the MS program “Engineering in Surgery”; vice-coordinator of the PhD program in Bioengineering
- Grant peer review: External Reviewer for the European Research Council (ERC), the European Commission (EC), the American National Science Foundation (NSF), the Dutch technology Foundation and the Portuguese Science and Technology Foundation.
- Membership to scientific societies: European Society for Artificial Organs (ESAO), European Society of Biomechanics (ESB) and Tissue Engineering and Regenerative Medicine International Society (TERMIS).
- Supervisor of: 1 Assistant Prof, 11 post-docs, 10 PhD students, 1 visiting PhD student and 1 visiting Professor
- Professional appointments: 1995-2006: Technical consultant of the public prosecutor in 4 suits for the failure of implantable heart valves and hip prostheses; 1993-1995: hip product manager at Zimmer Italy Srl (Milano, Italy).
- Scientific Editing: Section Editor, area Tissue engineering, Regenerative medicine and Tissue Transplantation, *International Journal of Artificial Organs* (SAGE); Advisory Editor, *Journal of Immunology and Regenerative Medicine* (Elsevier), Review Editor, area Nanobiotechnology, *Frontiers in Bioengineering and Biotechnology*, *Frontiers in Materials*, *Frontiers in Molecular Biosciences*, Peer Reviewer of 16 Journals with Impact Factor.
- International Publications: 9 patent applications (5 granted), 82 articles on ISI journals, 2 books, 10 book chapters, 102 Conference proceedings; current H-index: 29 (Google Scholar, January 2020).
- Conferences: Program Chair of 2 conferences, Organizer of 6 symposia, 23 invited talks (2 Keynote).