

Giancarlo Pennati received his master degree in Mechanical Engineering from the Politecnico di Milano in 1989 and his PhD in Bioengineering from the Politecnico di Milano in 1995.

At the present he is Associate Professor in Industrial Bioengineering at the Politecnico di Milano (Department of Chemistry, Materials and Chemical Engineering "Giulio Natta") where he is professor of the courses of "Biomechanical Design" for the students of Biomedical Engineering and of "Experimental Biomechanics" for PhD students.

Research fellows at the Department of Chemical Engineering in the period 1990-1992 and at the Department of Bioengineering of Politecnico di Milano since 1991. In the period 1994-1999 he collaborated with the "Bioengineering Center for Innovation in Cardiac Surgery" at the San Raffaele Hospital. From 2006 to 2012 he was at the Department of Structural Engineering of Politecnico di Milano.

His main research activity is in the area of the design of medical devices and prostheses, biomechanics of the cardiovascular system and surgical corrections (using also patient-specific modelling based on clinical images and measurements), mechanical properties and fatigue behaviour of biological tissues and biomaterials. These activities are developed through scientific collaborations with several Italian and international centres.

He is involved in funded researches from the European Commission (MeDDiCA - Medical Devices Design in Cardiovascular Applications, RT3S - Real Time Simulation for Safer vascular Stenting), the Foundation Leducq (Five years project Multi-scale modeling of single ventricle hearts for clinical decision support) and a number of public and private Italian National programs.

He is Associate Editor of the peer-reviewed Journal of Applied Biomaterials & Functional Materials (JAB-FM) and member of the Review Editorial Board of Frontiers in Pediatric Cardiology. Moreover, he is a member of European Society of Biomechanics (ESB).

He is author of more than 200 scientific works, of which 85 on peer-reviewed international journals.