

UMBERTO MORBIDUCCI is Full Professor of Industrial Bioengineering at the Department of Mechanical and Aerospace Engineering of Politecnico di Torino, Turin, Italy. He has obtained a Master Degree in Electronic Engineering from the University La Sapienza, Rome, Italy, and has obtained a PhD degree in Mechanical Engineering from the Università Politecnica delle Marche, Ancona, Italy.

From 2018 to 2021 he was the Coordinator of the BS and MS programs in Biomedical Engineering at Politecnico di Torino. He is member of the board of governors of PoliToBIOMed Lab, the Interdepartmental Center of Biomedical Engineering of the Politecnico di Torino (about 80 people involved). He was responsible for the Politecnico di Torino of the Bilateral Scientific Agreements between Politecnico di Torino and the School of Biological Science and Medical Engineering, Beihang University, Beijing, China, and the Cyprus University of Technology, Cyprus. He has participated to the activity of tens international, national, and regional scientific research projects. Since 2012 he has supervised 16 PhD students, 9 post-doctoral research fellows and more than 190 MSc students. Since 2012 he heads the Biomedical Simulations Unit.

Apart from teaching (Biofluid Mechanics; Cardiovascular Biomechanics; Bioreactors; Artificial Organs), research and administrative activities at the University, he has acted as an Editor for the following journals: Journal of Biomechanics (since 2022, Associate Editor); Annals of Biomedical Engineering (since 2014, Associate Editor), Frontiers in Cardiovascular Medicine - Pediatric Cardiology (since 2017, Associate Editor); Scientific Reports (since 2022). Since 2020 he is member of the Editorial Board of the peer-reviewed international journals "Computers in Biology and Medicine" and "Mathematics". He has served as a reviewer for 90 scientific journals from all continents and has reviewed over 350 manuscripts. He has served as a track/session chair/organizer in 20 international and national conferences.

His research activities have concentrated on in vivo, in vitro, and in silico cardiovascular fluid mechanics, design and characterization of medical devices, transport phenomena, multiscale modelling from the atomistic scale to the continuum, cardiovascular engineering, design of dynamic culture devices (bioreactors) for tissue engineering and regenerative medicine applications.

In 2018, he was awarded with the Jack Perkins Prize by the Institute for Physics and Engineering in Medicine (IPEM). He is author of more than 400 publications, 188 of them in peer-reviewed international journals.