

## **Mário Adolfo Barbosa**

Mário is Professor Catedrático at Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto.

For nearly 30 years biomaterials science and technology is the topic of Mario's research. He is internationally recognized for his contributions to biomaterials science, particularly in cell-biomaterial interactions. Natural and bioartificial matrices have been extensively studied by his group, with the purpose of delivering cells and proteins, namely in a context of repair/regeneration of tissues. The interaction of cells and proteins with biomaterials at the molecular level has been investigated over more than 10 years.

Mário was one of the founding members of Instituto de Engenharia Biomédica (INEB, <http://www.ineb.up.pt>), created in June 26, 1989. From 2000 to 2012 he was the Scientific Coordinator of the institute and its President in 2000-2006 and 2010-2012.

He is a Fellow of the International Union of Societies for Biomaterials Science and Engineering. In 2001 he received the George Winter Award of the European Society for Biomaterials (ESB), the ESB award for outstanding work of an established researcher. In 2009 he received the "Corino de Andrade" and "Seeds of Science" Prizes.

At INEB, he is a member of the NEW Therapies Group, whose goal is to develop tissue repair and regeneration strategies guided by biomaterials engineered at the molecular scale. He leads the Biomimic team, whose focus are biomimetic microenvironments for understanding and modulating inflammation and stem cell behaviour during intervertebral disc and osteoarticular regeneration.

Mário took part in numerous evaluation panels of research centers, doctoral programs and projects, (France, Germany, Italy, Spain, Sweden and United Kingdom) and has represented Portugal in several institutions and committees, namely ESF, European Commission and EUREKA. He has been the representative of the European Society for Biomaterials (ESB) for the Acta Biomaterialia Gold Medal award. He is also the chairman of the awards committee of the ESB.

At the post-graduate level he has taken a leading role in launching several programmes (e.g. Doctoral and MSc Programmes in Biomedical Engineering, in 1996). He coordinates the European Industrial Biological Biomaterials Doctorate, IB2 (ITN, Marie Curie) and the Doctoral Programme on Molecular and Cellular Biotechnology Applied to Health Sciences, to start in September 2013.

Mário has served in several academic and research bodies. For instance, from 1992 to 1994 he was President of the Portuguese national research council, Junta Nacional de Investigação Científica (JNICT). From 2002 to 2005 he was Chairman of the Engineering Sciences Scientific Council of the Foundation for Science and Technology (FCT).

He has been involved in research projects with financial support from the European Commission, European Science Foundation, Portuguese agencies, the Cariplo Foundation and the AO Foundation. The most recent ones can be found at <http://www.ineb.up.pt/> and involve collaborations with European, American and Chinese research groups, and also with hospitals and companies. They are related to tissue regeneration, protein adsorption, development of injectable materials for bone regeneration through minimally invasive surgery, development of artificial intervertebral disc substitutes capable of mimicking the natural disc, utilization of self-assembled monolayers as model surfaces to design materials with anti-clotting and anti-inflammatory properties, removal of heparin from dialyzed blood using selective surfaces

to heparin, and the improvement of biomaterials through the analysis of explanted prostheses.

He has supervised 15 PhD theses. In the last five years he published 38 papers referenced in the ISI. He is the coordinator of running projects worth 1.2 M€. He has over 2700 citations and an h index of 30. More details can be found at [http://www.ineb.up.pt/index.php?content=8&people\\_id=388](http://www.ineb.up.pt/index.php?content=8&people_id=388)