



### Prof. Fatima Bosch

Fatima Bosch is a Pharmacist (1980) and PhD in Biochemistry (1985) by the University of Barcelona, Spain. She conducted post-doctoral studies at Vanderbilt University (1985), Case Western Reserve University (1988-1990), and NCI-Frederick Cancer Research and Development Center (1991), USA. She is currently Full Professor of Biochemistry and Molecular Biology (1999) and Director of the Center of Animal Biotechnology and Gene Therapy (2003) at the Universitat Autònoma Barcelona (UAB), Spain. She has been granted, among others, with King Juan Carlos I (1985), Francisco Grande Covián (1998), Narcís Monturiol (2002), Sant Jordi Cross (2005), Alberto Sols (2006) and ICREA Academia (2013-2017 and 2019-2023) national awards and with the Norman Saunders Jacob's Ladder

International Research Prize, Canada (2019). She was Founding member of the European Society of Gene and Cell Therapy (1992), President of the Spanish Society of Gene and Cell Therapy (2007-2009), Vice-President of the European Association for the Study of Diabetes (2009-2012) and member of the Gene Doping Expert Group of the World Anti-Doping Agency (2013-present).

Her research focuses on studying the pathophysiological causes of diabetes mellitus using transgenic animal models and in developing gene therapy approaches for type 1 and type 2 diabetes, NASH and obesity by *in vivo* genetic manipulation of tissues using adeno-associated (AAV) vectors. In recent years, she has also applied her know-how on gene transfer technologies to the development of gene therapies for severe inherited metabolic and neurodegenerative disorders such as Mucopolysaccharidosis (MPS). Presently, four gene therapy medicinal products to treat MPSs have received the orphan drug designation by the European and North American authorities (EMA, FDA). The first Phase I/II clinical trial was initiated second quarter of 2018, with a gene therapy for the treatment of MPSIIIA patients.