**Lluis Montoliu**, Ph.D. CSIC Research Scientist at the Spanish National Centre for Biotechnology (CNB-CSIC); and Researcher at the Biomedical Research Networking Centre on Rare Diseases (CIBERER-ISCIII); Campus de Cantoblanco, Darwin 3 28049 Madrid, Spain

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**Short Biography**

Lluis Montoliu (Barcelona, Spain, 1963) graduated (MSc) in Biological Sciences (University of Barcelona, 1986) and obtained his PhD in Biological Sciences "Molecular Genetics" (University of Barcelona, 1990) working at the Centre for Research and Development (CID-CSIC, Barcelona) on maize molecular genetics. He then moved to mouse molecular genetics and spent two postdoctoral periods, at the German Cancer Research Centre (DKFZ, Heidelberg, Germany, 1991-95) and at the Autonomous University of Barcelona (1995-96). In 1997 he joined the CNB-CSIC, in Madrid, as a group leader. In 2006, he contributed to the foundation and became a member of ALBA, the Spanish association in support of people with albinism. In 2007, he joined the Spanish Rare Disease initiative (CIBERER). In 2016, he became coordinator of the CIBERER Neurosensory Disorders area and member of the CIBERER Steering committee. He was Honorary Professor at UAM for 20 years (1998-2018) and is the Director of the European Mouse Mutant Archive (EMMA/INFRAFRONTIER) Spanish node since 2007. He is the President of the CSIC Ethics Committee and a member of the ERC Ethics Panel in Brussels (EU). In 2006, he founded the International Society for Transgenic Technologies (ISTT) and served as its President from inception to 2014. He currently also serves at the boards of the International Federation of Pigment Cell Societies (IFPCS), Spanish Society of Genetics (SEG) and Spanish Society of Biochemistry and Molecular Biology (SEBBM) and is the current President of the European Society for Pigment Cell Research (ESPCR) and the President of the Association for Responsible Research and Innovation in Genome Editing (ARRIGE).

**Research Interests**

Lluis Montoliu is a biologist, geneticist and biotechnologist based in Madrid, Spain, at the CNB-CSIC, where he has been leading his laboratory since 1997. His laboratory is interested in understanding how genes are organized within mammalian genomes and has used different genetically-modified animals (mostly mice and zebrafish) to investigate the role of several non-coding DNA regulatory elements of the mouse tyrosinase gene. He has also generated numerous animal models to study human rare diseases, such as albinism, and pioneered novel technologies such as artificial chromosomes or gene editing (CRISPR) tools for the production of new mouse models of different types of albinism. Since 1993 he has been investigating the visual alterations associated with albinism, using genetically modified animals, mice and rabbits. In 1996 he described key elements regulating the mouse tyrosinase gene, mutated in oculocutaneous albinism type 1 (OCA1). In 2006, his group discovered that the visual abnormalities associated with albinism are independent of pigmentation and can be rescued upon providing L-DOPA genetically. Since 2009 his group is leading the albinochip project, aiming to genetically diagnose all people with albinism in Spain. He has co-authored over 120 scientific publications and six patents. He has organized numerous congresses, courses, seminars, workshops and symposiums on animal transgenesis, cryopreservation, animal models to study human rare diseases, pigmentation, animal welfare, biotechnological applications of genetically modified animals, bioethics and albinism, including the biennial European Days of Albinism (EDA) conference series, since 2012.