Miguel Torres trained in *Drosophila* Genetics during his PhD (1991, CIB-CSIC, Madrid) and later in Mouse Developmental Genetics during his Postdoc at the MPI, (1992-96. Goettingen, Germany). He established an independent research group at the National Center for Biotechnology, (CSIC, Madrid 1996) and moved in 2007 to the National Center for Cardiovascular Research (CNIC, Madrid), where he coordinates the Cardiovascular Regeneration Program. His group has a strong focus on understanding organ development and regeneration and characterized the role of homeobox genes and signaling pathways in establishing positional information during organ development and regeneration. They also demonstrated the conservation of cell death pathways in metazoan evolution and showed the relevance of cell death and cell competition in mammalian tissue homeostasis and cardiac regeneration. The group has also developed clonal analysis strategies and live imaging tools that re-define cell lineage relationships and tissue dynamics in cardiovascular development.