

Santiago Munné, Ph.D.

Chief Scientific Officer, CooperGenomics

Originally from Barcelona, Dr. Munné gained his Ph.D. in Genetics from the University of Pittsburgh and in 1991, joined Dr. Jacques Cohen at the Cornell University Medical College located in New York City. It was at Cornell, he developed the first Preimplantation Genetic Screening (PGS) test to detect chromosome abnormalities, which resulted in the first PGS babies in 1993, for which he received prizes in 1994 and 1995 by The Society for Assisted Reproductive Technology (SART).

Dr. Munné became the Director of Preimplantation Genetic Diagnosis at The Institute for Reproductive Medicine and Science of Saint Barnabas in 1995 where he developed the first test to detect chromosome translocations in human embryos obtaining the SART prize for it in 1996, as well as demonstrating a significant decrease in spontaneous abortions after PGS, which obtained the 1998 prize paper of the Society for Assisted Reproductive Technology. His team and collaborators were the first to suggest and demonstrate higher implantation rates, lower rates of spontaneous abortions as well as trisomic offspring after PGS.

In 2001, Dr. Munné co-founded **Reprogenetics**, with Jacques Cohen and David Sable. He directed the company until 2016 and saw its expansion to four continents. Reprogenetics was the first commercial lab to offer PGS and PGD and was the market leader until it was sold to in 2015 to Cooper Companies (NYSE: COO). During this time Reprogenetics performed over 70,000 PGD cycles globally. Reprogenetics stayed in the forefront of research and development focusing in the use of comprehensive genetic analysis of embryos in order to improve pregnancy outcomes and diminish the risk of miscarriages in gene and chromosome inherited disorders. Munne and co-researchers were rewarded with SART prize papers in 2005, 2015 and 2016, and he has received The American Society for Reproductive Medicine Star Award consecutively for the years 2011-2016.

In 2011 Dr. Munné co-founded with Alex Bisignano the genomics company, **Recombine**. It's first test, CarrierMap screened for over 300 gene defects, allowing carrier couples to conceive unaffected children through PGD testing. Some of the assets of this company were sold in 2016 to Cooper Companies (NYSE: COO), and the rest were spun off into another genomics company, **Phosphorous**, also founded by Dr. Munné and Alex Bisignano. This company is developing FertilityMap, which aims to improve fertility outcomes by applying machine learning and genomics using "big data" generated through IVF records and patient sequencing.

Dr. Munné's research interests is on the prevention of genetic disease and infertility through pre-implantation testing of embryos and couples, understanding the impact of chromosome abnormalities in human reproduction, and developing personalized genetic tests for infertility and other conditions. Dr. Munné has published over 200 peer-reviewed scientific publications, and is a frequent lecturer, both nationally and

internationally. He is co-founder (2002) and member of the Board of Directors of the Preimplantation Genetic Diagnosis International Society (PGDIS) and served as president and other board of directors positions from 2002-2014.

With the purchase by **CooperSurgical** of Reprogenetics, Recombine and Genesis Genetics, in 10/2016 Dr. Munné's became the Chief Scientific Officer of **CooperGenomics**.