Brief CV of Francesca Romana Grati, Ph.D. , ErCLG

Francesca Romana Grati Ph.D. is a Biologist, Medical Geneticist, and European registered Clinical Laboratory Geneticists (ErCLG, European Board of Medical Genetics). She is the R&D Director and Head of the Molecular Cytogenetics Diagnostics Unit at TOMA, Advanced Biomedical Assays S.p.A. laboratory (Busto Arsizio, Varese, Italia). She is also Contract Professor at Graduate School of Medical Genetics (University of Milan).

Dr. Grati's special interests are in prenatal diagnosis and fetal genetics. She has published several articles in peer-reviewed journals including Ultrasound in Obstetrics and Gynecology, Prenatal Diagnosis, Genetics in Medicine and contributed to scientific books. She is an invited speaker at national and international scientific meetings and she also serves as a regular reviewer for numerous international journals, including Prenatal Diagnosis, Journal of Translational Medicine, American Journal of Pathology and American Journal of Medical Genetics.

Her research is mainly focused on the genetics and epigenetics of placenta, specifically the characterization of fetoplacental mosaicisms and their impact on prenatal cfDNA testing technologies and the understanding of the epidemiology of chromosome abnormalities in prenatal population; she is also committed in the scientific evaluation of new diagnostic technologies, their setup and their laboratory and clinical validations (eg: preimplantation genetic screenings (PGS), chromosomal microarray (CMA), and cfDNA testing).

In 2000 Dr. FR Grati completed her graduation (*summa cum laude*) in Medical Genetics at University of Pavia in collaboration with the University of Milan (Dept. Medical Genetics, San Paolo Hospital) with a thesis on genetics and epigenetics of head and neck cancers. Thereafter, she trained as a Ph.D. at University of Pavia and, in 2004, she graduated *summa cum laude* with a thesis on the genetics and epigenetics of intrauterine growth restriction (IUGR) developed in collaboration with the University of Milan (Dept. Medical Genetics, San Paolo Hospital). In 2011 she collaborated with the European Joint Research Community (JRC) on a project for the European harmonization for NIPT technologies and wrote the 'Applied Genomics in the Clinic' Policy Report by the JRC of the European Commission .

She is currently active member of the cytogenetics working group of the Italian Society of Human Genetics (SIGU) contributing to the development of the Italian Guidelines on CMA in prenatal diagnosis and on cytogenetics. She is also ISPD, ACMG and ESHG member.