



Dra. Laura Rueda



Responsible scientist for NIPT, SYNLAB Barcelona.

PhD research focused in cffDNA. Faculty staff in Molecular Genetics department Synlab Barcelona for more than 18 years, specialized in prenatal diagnosis, both invasive and NIPT.

ACTIVIDADES ACADÉMICAS

2016 Título de Doctora en Biología Celular

2004-2016 Doctorado en Biología Celular

2007 Master en Biología Celular (Suficiencia Investigadora)

Título DEA (Diploma de Estudios Avanzados)

2006-2009 PhD student en Special Non-Invasive Advances in Fetal and Neonatal Evaluation Network of Excellence (SAFE)

1996-2002 Licenciatura de Biología. Universitat Autònoma de Barcelona.

Título de Licenciada en Biología

ACTIVIDADES PROFESIONALES

2018-Actual Facultativo responsable de área.

Departamento de Biología y Genética Molecular, Synlab Diagnostics.

2004-2018 Facultativo.

Departamento de Biología y Genética Molecular, General Lab, LABCO Iberia. Synlab
Diagnostics.

2002-2006 Embrióloga.

Laboratorio de Reproducción Asistida, Servicio de Ginecología y Obstetría, Hospital
Materno-Infantil Vall d'Hebrón

ACTIVIDADES CIENTÍFICAS

PUBLICACIONES NACIONALES

Rueda L, Márquez C, Cirigliano V.

Desarrollo de un protocolo para el diagnóstico genético preimplantacional de la
enfermedad de Steinert o Distrófia Miotónica tipo 1.

Folia clínica en obstetricia y ginecología, ISSN 1137-2990, 59, 2006, pags. 35-46

PUBLICACIONES INTERNACIONALES

Bevilacqua E, Ordóñez E, Hurtado I, Rueda L, Mazzone E, Cirigliano V, Jani JC.

Screening for Sex Chromosome Aneuploidy by Cell-Free DNA Testing: Patient Choice and
Performance.

Fetal Diagn Ther. 2018;44(2):98-104. doi: 10.1159/000479507. Epub 2017 Aug 23.

Cirigliano V, Ordoñez E, Rueda L, Syngelaki A, Nicolaides KH.

Performance of the neoBona test: a new paired-end massively parallel shotgun sequencing
approach for cell-free DNA-based aneuploidy screening.

Ultrasound Obstet Gynecol. 2017 Apr;49(4):460-464. doi: 10.1002/uog.17386. Epub 2017 Feb 28.

Ordoñez E, Rueda L, Cañadas MP, Fuster C, Cirigliano V.

Evaluation of sample stability and automated DNA extraction for fetal sex determination using cell-free fetal DNA in maternal plasma.

Biomed Res Int. 2013;2013:195363. doi: 10.1155/2013/195363. Epub 2013 Oct 7

Ordoñez E, Rueda L, Cañadas MP, Fuster C, Cirigliano V.

Development and validation of multiplex real-time PCR assay for noninvasive prenatal assessment of fetal RhD status and fetal sex in maternal plasma.

Fetal Diagn Ther. 2013;34(1):13-8. doi: 10.1159/000346809. Epub 2013 Mar 14

Cirigliano V, Voglino G, Ordoñez E, Marongiu A, Paz Cañadas M, Ejarque M, Rueda L, Lloveras E, Fuster C, Adinolfi M.

Rapid prenatal diagnosis of common chromosome aneuploidies by QF-PCR, results of 9 years of clinical experience.

Prenat Diagn. 2009 Jan;29(1):40-9. doi: 10.1002/pd.2192

PÓSTERS

C.I. Rivera-Pedroza, L. Rueda, J. Lucena, S. Nicolás, A. Gisbert, M. Andres, I. Guerrero, R.

Alfaro, N. Hidalgo, B. Nuño, A. Pastor, A. Belinchón, J.A. García López Asenjo

Identificación de anomalías cromosómicas fetales mediante NIPT Genomewide

III Congreso interdisciplinar en Genética Humana, Valencia, 2021

V. Cirigliano, E. Ordoñez, L. Rueda, S. Nicolás, M. Grau, I. Castilla, C. Puertollano, M. Lechuga,
M. Cañadas

Clinical application of paired-end MPSS for cfDNA screening of common aneuploidies in
average risk pregnancies.

European Society of Human Genetics Annual Conference, Barcelona, 2018

V. Cirigliano, E. Ordoñez, L. Rueda, I. Castilla, M. Grau, C. Fuster, M. P. Cañadas

Clinical validation of the Neobona test, a new paired-end MPSS approach for cfDNA based
aneuploidy screening.

European Society of Human Genetics Annual Conference, Barcelona, 2016

V. Cirigliano, E. Ordoñez, L. Rueda, I. Castilla, M. Grau, C. Fuster, M. P. Cañadas

First clinical application of paired-end MPSS for cfDNA based prenatal screening of
aneuploidies.

European Society of Human Genetics Annual Conference, Barcelona, 2016

Vincenzo Cirigliano, Elena Ordoñez, Laura Rueda, Paz Cañadas, Maria Moreno, Bibiana
Palao

cfDNA based aneuploidy screening in Spain, results of one-year clinical application. ISPD
18th International Conference on Prenatal Diagnosis and Therapy, Brisbane, 2014

E. Ordoñez, L. Rueda, E. Lloveras, A. Plaja, V. Cirigliano

Prenatal Diagnosis by aCGH on Uncultured Prenatal Samples. Validation Study. European Society of Human Genetics Annual Conference, París, 2013

Vincenzo Cirigliano, Elena Ordoñez, Laura Rueda, Maijo Ejarque, María Moreno, Bibiana Palao, M^a Paz Cañadas

Introduction of cfDNA based screening for common trisomies in Spain. ISPD 17th International Conference on Prenatal Diagnosis and Therapy, Lisboa, 2013.

L. Rueda, E. Ordoñez, P. Cañadas, C. Mediano, C. Fuster, V. Cirigliano

Non invasive prenatal diagnosis of chromosome abnormalities of paternal origin by STR analysis of fetal DNA in maternal plasma. ECA, Estocolmo Julio 2009

Vincenzo Cirigliano, Gianfranco Voglino, Elena Ordoñez, Laura Rueda, Elisabet Lloveras, Carmen Mediano, Carmen Fuster

Alternative testing strategy for first trimester prenatal diagnosis in CVS. ECA, Estocolmo Julio 2009

V. Cirigliano, G. Voglino, E. Ordoñez, P. Cañadas, L. Rueda, C. Fuster, M. Adinolfi

Large scale application of QF-PCR for rapid prenatal diagnosis of common chromosome aneuploidies, results of nine years clinical experience. European society of Human Genetics Conference (ESHG). Viena Mayo 2009

E. Ordoñez, L. Rueda, P. Cañadas, C. Mediano, C. Fuster, V. Cirigliano.

Evaluation of automated DNA extraction for non invasive prenatal diagnosis using free fetal DNA in maternal plasma. European society of Human Genetics Conference (ESHG 2009). Viena Mayo 2009

E. Ordoñez, L. Rueda, M. Lozano, P. Cañadas, C. Fuster, V. Cirigliano.

Non invasive prenatal detection of two RHD gene exons and fetal sex using cell free fetal DNA in maternal plasma. European Society of Human Genetics Annual Conference. Barcelona, 2008

Rueda L, Ordóñez E, Cañadas MP, Puszyk WM, Crea F, Old RW, Hultén MA, Fuster C and Cirigliano V.

Screening for different chromosome 18 methylation patterns between placenta and whole blood. 40th European Human Genetics Conference (ESHG 2008), Barcelona 2008

Rueda L, Márquez C, Cirigliano V.

Development of a single cell protocol for the detection of myotonic dystrophy type 1, sex and chromosome 21 copy number. 8th International Symposium on Preimplantational Genetic Diagnosis. Barcelona, Abril 2008

E. Ordoñez, P. Cañadas, M. Ejarque, L. Rueda, A. Plaja, A. Sánchez, C. Mediano, I. Farran, C. Fuster and V. Cirigliano.



CIEL⁹

Curso de Indicación e Interpretación
de Exámenes de Laboratorio

Rapid prenatal detection of common chromosome aneuploidies and zygosity in multiple pregnancies by Quantitative Fluorescent PCR (QF-PCR). 5th European Cytogenetics Conference. Madrid, 2005