

CURRICULUM VITAE
Aurora Ruiz-Herrera Moreno
March 2019

1. PERSONAL DATA

Name: Aurora Ruiz-Herrera Moreno
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2. EDUCATION

- June 2003: **Ph.D. in Biological Sciences.**
Universitat Autònoma de Barcelona, Barcelona (Spain).
- June 1998: **Graduate in Biology** (equivalent to B.Sc.).
Universitat Autònoma de Barcelona, Barcelona (Spain).

3. CURRENT POSITION AND RELEVANT TASKS

- **Member, Board of Directors** of the **Spanish Genetics Society (Spain)**, since October 2018.
- **Full member** of the **Genetics Society (UK)**, since December 2016.
- **Coordinator** of the “Cytology and Histology Unit”. Department of Cell Biology, Physiology and Immunology, UAB. Since June 2016.
- **Associate Professor** (“Professora Agregada”) in Cell Biology. Department of Cell Biology, Physiology and Immunology, UAB. Since Dec 2013.
- **Group Leader.** Animal Genomics Group (<http://grupsderecerca.uab.cat/evolgenom>). Since 2009.
- **Coordinator** of the postgraduate course “Cytogenetics and Evolution” in the MSc program in Cytogenetics and Biology of Reproduction, UAB. Since 2009.

4. INSTITUTIONAL RESPONSABILITIES

- Member of the Faculty Committee, UAB, Spain. Since 2013.
- Faculty member, UAB, Spain. Since 2009.
- Member of the PhD in Cell Biology Committee. UAB, Spain. Since 2009.
- Member of the MSc in Biology of Reproduction Committee. UAB. Since 2009.
- Graduate and postgraduate student advisor, UAB, Spain. Since 2009.
- Coordinator of the PhD postgraduate course “Comparative Genomics”. MSc program in Cytogenetics and Biology of Reproduction, UAB. Since 2009.
- Coordinator of the course “Cell Biology and Histology” conducted in two Graduate Schools (Genetics and Microbiology), UAB. Since 2009.
- Member of the teaching team of (i) the postgraduate course “Principles of Human Evolution” in the PhD program in Human Biology, UAB (Spain) and (ii) several pre-graduate courses conducted in three Grad Schools (Graduate in Biology, Genetics and Microbiology), UAB. Since 2009.

5. PREVIOUS POSITIONS

- 2008-2013: Lecturer in Cell Biology. Department of Cell Biology, UAB, Barcelona (Spain).
- 2007-2008: Post-doctoral Fellow. Dipartimento de Genetica e Microbiologia. Università di Pavia, Pavia (Italy).

- 2005-2007: Post-doctoral Fellow. Evolutionary Genomics Group. Department of Botany and Zoology. University of Stellenbosch (South Africa).
- 2003-2004: Teaching assistant in Cell Biology. Dept. Cell Biology, Physiology and Immunology. Universitat Autònoma de Barcelona, Barcelona (Spain).
- 1999-2002: Pre-doctoral Fellow. Dept. Cell Biology, Physiology and Immunology. Universitat Autònoma de Barcelona, Barcelona (Spain).
- 2002: Postgraduate Researcher at Dr. E. Giulotto Lab, University of Pavia, Italia.
- 2002: Postgraduate Researcher at Dr. Aguilera Lab, University of Simon Bolivar, Venezuela.
- 2001: Postgraduate Researcher at Dr. R. Stanyon Lab, NIH, Frederick, USA.
- 2000: Postgraduate Researcher at Dr. E. Giulotto Lab, University of Pavia, Italia.
- 1998: Teaching assistant in Cell Biology. Dept. Cell Biology, Physiology and Immunology. Universitat Autònoma de Barcelona, Barcelona (Spain).

6. FELLOWSHIPS

- 2015: Scholarship for visiting professors. Università di Pavia, Italy.
- 2007-2008: Intra-European Fellowship. FP6 EURATOM. European Commission.
- 2006-2007: Post-doctoral fellowship. Spanish Ministry of Education and Science, Spain.
- 2005-2006: Post-doctoral fellowship. University of Stellenbosch, South Africa.
- 2004: Travel fellowship, XX Congress of the International Primatological Society, Italy.
- 2003: Travel fellowship, Four European Cytogenetics Conference, Italy.
- 2002: Travel fellowship for a research stage (2 months) at Dr. E. Giulotto Lab, Italy.
- 2001: Travel fellowship, Third European Cytogenetics Conference, France.
- 2001: Travel fellowship for a research stage (3 months) at Dr. R. Stanyon Lab, NIH, USA.
- 2000: Travel fellowship for a research stage (3 months) at Dr. E. Giulotto Lab, Italy.
- 1999-2002: Pre-doctoral fellowship (UAB). Barcelona, Spain.
- 1997: Fellowship to undergraduate students for attending the International School of Oncology "Severo Ochoa". Menéndez Pelayo University, Spain.

7. HONORS AND AWARDS

- 2015: "Acreditació de Recerca Avançada"
Full Professor Accreditation. Agència de la Qualitat Universitària (AQU), Spain.
- 2012: "Tram de Docència Autònomic"
Teaching Accreditation (period 2000-2011). AQU, Spain.
- 2011: "Tram de Recerca 2005-2010"
Research Accreditation (period 2005-2010) AQU, Spain.
- 2010: "Profesor Titular de Universidad"
Professor Accreditation, Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA), Spain.
- 2010: "Tram de Recerca 1999-2004"
Research Accreditation (period 1999-2004) AQU, Spain.
- 2009: "Acreditació de Recerca"
Associate Professor Accreditation, AQU, Spain.
- 2006: 1st Price for the best oral presentation at the Second Congress of the International Cytogenetic and Genome Society (ICGS). University of Canterbury, Kent (UK).
- 2006: Invited professor, Cell Biology PhD program, Universitat Autònoma de Barcelona, Spain.
- 2006: "Professor Lector". Lecturer Accreditation, AQU, Spain.
- 2003: "Professor Col.laborador". Assistant Professor Accreditation, AQU, Spain.
- 2003: Ph.D., Excellent *cum laude*, Universitat Autònoma de Barcelona.

8. LEADERSHIP AND MENTORING

Leadership

- **Principal investigator (PI) of the Animal Genomics Group.** Since 2009.
<http://grupsderecerca.uab.cat/evolgenom/>

Projects and Grants as PI

- Plan Nacional - Ministerio de Economía y Competitividad (CGL2017-83802-P) – **“Dissecting the conservation and function of the higher-order organization of mammalian genomes”**. Grant duration: 2018-2020.
- Plan Nacional - Ministerio de Economía y Competitividad (CGL2014-54317) - **“Exploring the high-level structural organization of mammalian genomes”**. Grant duration: 2015-2017.
- Projectes de doctorat industrial –**“Development of an integrative tool for the analysis of high-structural organization of mammalian genomes”**. Grant duration: October 2015-October 2017.
- Programa Marc del Zoo de Barcelona –**“Diversification of the CRYO-ZOO: exploring new strategies for immortalizing mammalian cell lines”**. Grant duration: January 2014-December 2014
- Programa Marc del Zoo de Barcelona –**“The CRYO-ZOO: A cell repository from the Zoo collection”**. Grant duration: January 2013- January 2014
- PRIC (Research and Conservation Programme) Fellowship. Zoo de Barcelona -**“The CRYO-ZOO: A cell repository from the Zoo collection”**. Grant duration: 2012-2014.
- Plan Nacional - Ministerio de Ciencia e Innovación (CGL2010-20170) - **“Evolutionary breakpoint regions in the germ line and their implications for the mammalian genomic architecture”**. Grant duration: 2011-2014.
- FINLOMBARDA SPA. Regione Lombardia. Collaborative project Italy-Spain – **“Telomeric RNA”**. Coordinator of the Spanish team. Grant duration: 2010-2012
- Programa Marc del Zoo de Barcelona -**“ Viability study for the creation of a cell repository from endangered species”**. Grant duration: 2010-2011.
- Beca-projecte Floquet de Neu. Zoo de Barcelona - **“Chromosomal territories in Primates”**. Grant duration: 2009-2010
- SGR-DGR, Agència de Gestió d'Ajuts Universitaris i de Recerca. **Recognition of new research groups (SGR89, Grup de Recerca Emergent)**. Grant duration: 2009-2013.

International Consortia

- Member of the **Chromosomic Network**. 2017-currently
- Member of the **MeioNet**. 2016-2017
- Member of the **Lynx Genome Project** – **“Unveling the Lynx Genome”**. 2013-2016
(<http://www.lynxgenomics.eu/research/416/candiles-the-genome-lynx>)
- Member of the **Great Ape Genome Project**. 2012-2015
(<https://eichlerlab.gs.washington.edu/greatape/participants.html>)

In the media

- Meiotic recombination

<https://www.uab.cat/web/sala-de-prensa/detalle-noticia/identifican-un-nuevo-fenomeno-en-la-formacion-de-las-celulas-germinales-como-estrategia-evolutiva-1345667994339.html?noticiaid=1345785530678>

- Exploring the chromosomal evolution in primates

(<http://www.uab.cat/servlet/Satellite?cid=1096481464166&pagename=UABDivulga%2FPage%2FTemplatePageDetallArticleInvestigar¶m1=1336632625160>)

- A genetic catalogue for great apes

(<http://www.uab.cat/web/noticies/detall-d-una-noticia/elaboren-un-detallat-cataleg-genetic-dels-grans-simis-1090226434100.html?noticiaid=1345657900081>)

- The Cryo-zoo: a new cell line repository for endangered mammalian species (http://ibb.uab.es/ibb/index.php?option=com_content&task=view&id=177&Itemid=130)
- Profile included in the 'Author spotlight' on the eLS homepage (www.els.net).
- The Iberian Lynx genome:
 - [https://archaeologynewsnetwork.blogspot.com.es/2016/12/scientists-sequence-genome-of-iberian.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+TheArcheologyNewsNetwork+\(The+Archeology+News+Network\)#W8DA12D9ylGSo379.97](https://archaeologynewsnetwork.blogspot.com.es/2016/12/scientists-sequence-genome-of-iberian.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+TheArcheologyNewsNetwork+(The+Archeology+News+Network)#W8DA12D9ylGSo379.97)
 - <http://www.sci-news.com/genetics/genome-iberian-lynx-04453.html>
 - <https://blogs.biomedcentral.com/on-biology/2016/12/14/genomics-conservation-species-insights-iberian-lynx/>
 - <http://www.madrimasd.org/informacionidi/noticias/noticia.asp?id=68051&origen=RS>
 - <http://www.uab.cat/web/sala-de-prensa/detalle-noticia/secuencian-el-genoma-del-lince-iberico-el-felino-con-mayor-peligro-de-extincion-1345667994339.html?noticiaid=1345716370433>

Mentoring

Since 2009, I have mentored, as a Group Leader, 6 PhD students (three in progress and three accomplished), 17 MSc students, 27 undergraduate students and two postdocs. Moreover I have hosted several international researchers in my lab, including researchers from South Africa, Brazil, Italy and Poland.

PhD students (date of registration):

- 2018-present Lucía Álvarez– Universitat Autònoma de Barcelona
- 2015-present Covadonga Vara– Universitat Autònoma de Barcelona. (FPI fellowship, MEC).
- 2015-2019 Andreu Paytuví– Universitat Autònoma de Barcelona – Sequentia Biotech S.L. (Industrial Fellowship, AGAUR)
- 2010-2015 Laia Capilla – Universitat Autònoma de Barcelona (FPI fellowship, MEC). Project: Chromosomal evolution and recombination rates in a wild Robertsonian population of *Mus musculus domesticus*. **Extraordinary Doctorate Award.**
- 2009-2014 Rita Reig – Universitat Autònoma de Barcelona (PIF fellowship, UAB). Project: Molecular characterization of telomeric RNA (TERRA) in the mammalian germ line. **Extraordinary Doctorate Award.**
- 2008-2012 Marta Farré – Universitat Autònoma de Barcelona (PIF fellowship, UAB). Project: Mammalian chromosomal evolution: from ancestral states to evolutionary regions.

MSc students:

- 2019 Laia Marín – “Unveiling the genome organization of the Tasmanian devil facial tumour disease”. MSc in Cell Biology (UAB, Spain).
- 2019 Ainoa Justicia – “Dissection of cell-specific intra-chromosomal long-range interactions in germ cells”. MSc in Cell Biology (UAB, Spain).
- 2018 Dale Abrahams – “Impacts of recombination rates of chromosomal speciation of vlei rat *Otomys irroratus*”. MSc in Zoology (Stellenbosch University, South Africa). Co-supervisor Dr. R.V. Rambau.
- 2018 Beatriu Florit – “Impacts of recombination rates in house mice with Robertsonian chromosomal fusions”. MSc in Cell Biology (UAB, Spain).
- 2018 Judit Salvà – “3D of the mouse germ line”. MSc in Cell Biology (UAB, Spain).

- 2017 Judith Bello – “Characterization of the Prdm9 gene in the Madeira house mouse population”. MSc in Cell Biology (UAB, Spain).
- 2015 Adrià Hernández– “Study of meiotic recombination variability in the Bovidae family (Artiodactyla, Mammalia)”. MSc in Cell Biology (UAB, Spain).
- 2015 Verónica Olmos– “Analysis of genomic signatures in Rodentia”. MSc in Bioinformatics (UAB, Spain).
- 2014 Marta Andres – “Characterization of immortalized mammalian cell lines”. MSc in Cell Biology (UAB, Spain). Co-supervisor Dra. F. Garcia.
- 2014 Jonathan Fernández – “Recombination rates in Bovidae”. MSc in Comparative Genomics (UB, Spain).
- 2013 Marta Vila – “Telomerase expression in the mouse germ line”. MSc in Cell Biology (UAB, Spain). Co-supervisor Dra. M. Garcia-Caldés.
- 2012 Joana Segura – “Dynamics of meiotic recombination rates across the mammalian tree.” MSc in Cell Biology (UAB, Spain).
- 2012 Anna Ullastres – “Delineation of evolutionary breakpoints in the rhesus macaque by whole genome comparisons.” MSc in Cell Biology (UAB, Spain).
- 2012 Lidia Anguiano– “Assessment of deleterious effects of ionizing irradiation in female oocytes.” MSc in Cell Biology (UAB, Spain). Co-supervisor Dra. M. Garcia-Caldés.
- 2010 Sarai Pacheco –“Recombination rates in three species of Platyrrhini monkeys.” MSc in Cell Biology (UAB, Spain). Co-supervisor Dra. M. Garcia-Caldés.
- 2010 Rita Reig –“Characterization of telomeric RNA (TERRA) human oocytes.” MSc in Cell Biology (UAB, Spain). Co-supervisor Dra. M. Garcia-Caldés.
- 2010 Laia Capilla – “Molecular characterization of evolutionary breakpoints between human and chimpanzee.” MSc in Cell Biology (UAB, Spain). Co-supervisor Dra. M. Ponsà.

Pre-graduate students:

- 2019 Alberto Lozano – Universitat Autònoma de Barcelona
- 2019 Lucía Barbadilla – Universitat Autònoma de Barcelona
- 2019 Blanca Lucas – Universitat Autònoma de Barcelona
- 2018 Xing Luo – Universitat Autònoma de Barcelona
- 2018 Olatz Arnold – Universitat Autònoma de Barcelona
- 2018 Candela Rosado – Universitat Autònoma de Barcelona
- 2018 Guillermo Albert – Universitat Rovira i Virgili
- 2017 Marta Pla – Universitat Autònoma de Barcelona
- 2017 Cinta Macià – Universitat Autònoma de Barcelona
- 2017 Guillermo Albert – Universitat Rovira i Virgili
- 2017 Laura Palacios – Universitat Autònoma de Barcelona
- 2016 Carla Roca – Universitat Autònoma de Barcelona
- 2016 Marta Marín – Universitat Autònoma de Barcelona
- 2016 Iván Martínez – Universitat Autònoma de Barcelona
- 2016 Ariadna Cortina – Universitat Autònoma de Barcelona
- 2015 Guillermo Grijalba– Universitat Autònoma de Barcelona
- 2014 Cristina Pardo – Universitat Autònoma de Barcelona
- 2014 Gisela Serrano– Universitat Autònoma de Barcelona
- 2014 Guillem Borràs– Universitat Autònoma de Barcelona
(collaborative fellowship from the Spanish Ministry of Education, Culture and Sports)
- 2013 Sara Corella – Universitat Autònoma de Barcelona
- 2013 Maria Martínez – Universitat Autònoma de Barcelona
- 2012 Meritxell Saperas – Universitat Autònoma de Barcelona
- 2011 Guillem Parrado – Universitat Autònoma de Barcelona
- 2011 Marta Vila – Universitat Autònoma de Barcelona
(collaborative fellowship from the Spanish Ministry of Education, Culture and Sports)
- 2011 Adrià Voltes – Universitat Autònoma de Barcelona

2010 Marta Vila – Universitat Autònoma de Barcelona
2010 Joana Segura – Universitat Autònoma de Barcelona
(collaborative fellowship from the Spanish Ministry of Education, Culture and Sports)

Post-docs:

2013-2015 Dr. Rosa Ana Sánchez Guillén– Universidad de Vigo (Spain)
2009-2010 Dr. Cristina Carbajales – Universidad de Oviedo (Spain)

Visiting researchers:

2019 Prof. Terence J. Robinson – University of Stellenbosch (South Africa)
2018 Marina Bambi – MSc student in Molecular Biology. Università di Pavia (Italy)
2015 Prof. Terence J. Robinson – University of Stellenbosch (South Africa)
2014 Claudia Biadale – PhD student. Università di Pavia (Italy)
2014 Natalia Gablo – MSc student. Rzeszowski University (Poland)
2014 María Isabel Velásquez Vélez – PhD student. Universidad de los Andes (Colombia)
2012 Prof. Terence J. Robinson – University of Stellenbosch (South Africa)
2012 Dr. Marcelo B. Cioffi – Universidad de San Carlos (Brazil)

9. PARTICIPATION IN RESEARCH PROJECTS

As Principal Investigator

- **“Dissecting the conservation and function of the higher-order organization of mammalian genomes”**. Grant duration: 2018-2020. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Ministerio de Economía y Competitividad (Spain)
- **“Exploring the high-level structural organization of mammalian genomes”** (CGL2014-54317). Grant duration: January 2015-December 2017. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Ministerio de Economía y Competitividad (Spain)
- Projectes de doctorat industrial –**“Development of an integrative tool for the analysis of high-structural organization of mammalian genomes”** (2015 DI 003). Grant duration: October 2017- October 2017. Funding organization: Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR)
- **“Diversification of the CRYO-ZOO: exploring new strategies for immortalizing mammalian cell lines”** Grant duration: January 2014- December 2014. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Zoo de Barcelona (Spain)
- **“The CRYO-ZOO: A cell repository from the Zoo collection”**. Grant duration: January 2013- January 2014. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Zoo de Barcelona (Spain)
- **“Evolutionary breakpoint regions in the germ line and their implications for the mammalian genomic architecture”** (CGL2010-20170). Grant duration: January 2011- December 2014. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Ministerio de Ciencia e Innovación (Spain)
- **“Viability study for the creation of a cell repository from endangered species”**. Grant duration: March 2010- March 2011. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Zoo de Barcelona (Spain)
- **“Chromosomal territories in Primates”**. Grant duration: November 2009-November 2010. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Zoo de Barcelona (Spain)
- **“Animal Genomics Group”** (SGR89, Grup de Recerca Emergent), SGR-DGR, Agència de Gestió d'Ajuts Universitaris i de Recerca. Recognition of new research groups . Grant duration: 2009-

2013. Principal Investigator: Dra. Aurora Ruiz-Herrera. Funding organization: Agència de Gestió d'Ajuts Universitaris i de Recerca (Spain)

As Participant

- **“Regain of arm and hand movements in cervical spinal cord injury patients by means of spinal electrical neuromodulation assisted with an arm exoskeleton”**. Grant duration: 2017-2020. Principal Investigator: Dr. G. García. Funding organisation: Fundació La Marató.
- **“Red Temática “Biología Funcional de la Red Meiotica” (MEIONet)”**. Grant duration: 2015-2017. Principal Investigator: Dr. A. Pendás. Funding organization: Ministerio de Economía y Competitividad (MINECO) - Acciones de Dinamización "Redes de Excelencia".
- **“Historia evolutiva de la musaraña de campo, *Crocidura suaveolens*, en la Península Ibérica y estado genético de las poblaciones del Golfo de Cádiz”**. Grant duration: 2015-2016. Principal Investigator: Dr. J.A. Godoy. Funding organization: Estación Biológica de Doñana, Programa Severo Ochoa (Spain).
- **“Genomic Instability Group”**. Recognition of consolidated research groups (2014 SGR 570, Grup de Recerca Consolidat). Grant duration: 2014-2018. Coordinator: Dr. Ignasi Roig. Funding organization: Agència de Gestió d'Ajuts Universitaris i de Recerca (SGR-DGR) (Spain)
- **“Telomeric RNA”**. Grant duration: 2010-2012. Principal Investigator: Professor E Giulotto. Funding organization: FINLOMBARDA SPA. Regione Lombardia (Italy)
- **“ReproTox: Test *in vitro* de genotoxicitat reproductiva humana.”** Grant duration: 2009-2011. Principal Investigator: Professor. M. Garcia Caldés. Funding organization: ACC10. CIDEM/COPCA (Spain)
- **“Relative contribution of homologous recombination and non-homologous end-joining to spontaneous and radiation-induced gene amplification”**. Grant duration: June 2007-November 2008. Principal Investigator: Professor E Giulotto. Funding organization: FP6 EURATOM program supported by the European Commission (Italy)
- **“Dissecting mammalian genomes: Phylogenomics, genomic architecture and chromosomal evolution”**. Grant duration: January 2007-December 2011. Principal Investigator: Professor TJ Robinson. Funding organization: NRF (South African National Research Foundation) #FA2006022200003. Period of participation: January 2007-June 2007 (South Africa)
- **“Phylogenomics: Combining chromosomal evolution, comparative gene mapping and segmental homology with cladistics”**. Grant duration: January 2002-December 2006. Principal Investigator: Professor TJ Robinson. Funding organization: NRF (South African National Research Foundation) #GUN2053812. Period of participation: July 2005-December 2006 (South Africa)
- **“Comparative genome evolution and the origin of placental mammals: In search of molecular cytogenetic signatures for an endemic African clade of mammals.”** Grant duration: May 2002-June 2005. Principal Investigator: Professor TJ Robinson. Funding organization: Wellcome Trust CRIG (UK) #066643/Z/01/Z. Period of participation: January 2005-June 2005 (South Africa)
- Project **AIRE** (Financial support for researcher mobility). 140122-Cooperation programme between Universitat Autònoma de Barcelona (Spain) and Universidad Simón Bolívar (Venezuela). Principal Investigator: Professor M. Ponsà. Funding organization: DURSI. Period participation: 2002-2003 (Spain)
- Member of **Thematic Network for Biodiversity studies**. Principal Investigator: Professor M. Ponsà. Funding organization: 1998XT 00063/2000XT 00049. Period participation: 1999-2000/2001-2002 (Spain)
- **Financial support for qualified research groups**. Principal Investigator: Professor J. Egozcue. Funding organization: SGR (2001/SGR/00202). Period participation: 2001 (Spain)

- **Financial support for qualified research groups.** Principal Investigator: Professor J. Egozcue. Funding organization: SGR (2000/SGR/67) Period participation: 2000 (Spain)
- **“Analysis of hot-points for chromosomal changes in non-human primate genomes.”** Principal Investigator: Professor M. Ponsà. Funding organization: DGES (BXX 2000-0151). Period participation: 2001-2003 (Spain)
- **“Heterochromatin characterization and chromosomal changes in evolution and diseases”.** Principal Investigator: Professor M. Ponsà. Funding organization: DGES (PB96/1170). Period participation: 1999-2000 (Spain)

10. CURRENT SCIENTIFIC COLLABORATIONS

- 2018-present: Paul Waters (The University of New South Wales, Sydney, Australia).
- 2018-present: Irene Tiemann-Boege (Johannes Kepler University, Linz, Austria).
- 2017-present: Alberto M. Pendás (Centro de Investigación del Cáncer, Universidad de Salamanca-CSIC, Spain).
- 2017-present: Janine Deakin (Camberra University, Australia).
- 2015-present: Maria da Luz Mathias (Universidade de Lisboa, Portugal).
- 2015-present: Jeremy Searle (Cornell University, USA).
- 2014-present: Lukáš Kratochvíl (Charles University in Prague, Czech Republic).
- 2014-present: Marc Marti-Renom (Centre Nacional d'Anàlisi Genòmic, Barcelona, Spain).
- 2014-present: Jose A. Godoy (Estación Biológica de Doñana, Sevilla, Spain).
- 2013-present: Mario Cáceres (UAB, Barcelona, Spain).
- 2013-present: Jiri Rubes (Veterinary Research Institute, Brno, Check Republic).
- 2012-present: Tomás Marques-Bonet (Institut de Biologia Evolutiva, UPF-CISC, Spain).
- 2012-present: Denis Larkin (Aberystwyth University, Wales, UK).
- 2009-present: Jacint Ventura (Universitat Autònoma de Barcelona, Spain).
- 2005-present: Terence J Robinson (University of Stellenbosch, South Africa).
- 2000-present: Elena Giulotto (Università di Pavia, Italy).

11. RESEARCH CONTRACTS WITH COMPANIES (technology/knowledge transfer)

- **Sequentia Biotech S.L. (Spain).** Development of an integrative tool for the analysis of high-structural organization of mammalian genomes.
- **Barcelona Zoo (Spain).** Creation of a new cell repository from the Zoo animal collection: the CRYO-ZOO. Total amount granted: 18,000.00 euros. Since 2009. This new cell line resource is unique of its kind in Spain and has already been probed to have important implications in genomic and conservation studies.
- **Clinic of sterility and infertility FecunMed, Granollers (Spain).** An assessment study of the influence of telomeres and telomeric RNA in human fertility. 2010-2014.

12. PUBLICATIONS

Publications in international scientific journals (*corresponding author):

1. S. Wang, C. Veller, F. Sun, A. Ruiz-Herrera, Y. Shang, H. Liu, T. Hassold, D. Zickler, Z. Chen, N. Kleckner, L. Zhang. *Per-Nucleus crossover covariation and implications for evolution.* **Cell** **177**, **1-13**, **2019** (IF= 31.398, Q1 Cell Biology).
2. D. Vicente-Salvador, M. Puig, M. Gayà-Vidal, D. Izquierdo, A. Martínez-Fundichely, A. Ruiz-Herrera, X. Estivill, C. Aguado, J. I. Lucas-Lledó, M. Cáceres. *Validation, population analysis and origin of inversions between independently assembled human genomes.* **Human Molecular Genetics**, **26** (3): **567-581**, **2017** (IF= 4.902, Q1 Genetics and Heredity).

3. [A. Ruiz-Herrera*](#), M. Vozdova, J. Fernández, H. Sebestova, L. Capilla, J. Frohlich, A. Hernández-Marsal, T.J. Robinson, J. Sipek, J. Rubes. *Recombination correlates with synaptonemal complex length and chromatin loop size in ruminants - insights into mammalian meiotic chromosomal organization*. **Chromosoma**, **126(5):615-631**, **2017** (IF= 4.602, Q1 Genetics and Heredity).
4. L. Capilla, M. Garcia-Caldés, [A. Ruiz-Herrera*](#). *Meiotic recombination in mammals: a toolbox for evolution*. **Cytogenetics and Genome Research**, **150(1):1-16**, **2016** (IF=1.638, Q3 Genetics and Heredity).
5. L. Capilla, R.A. Sánchez-Guillén, M. Farré, R. Malinverni, J. Ventura, D. Larkin, [A. Ruiz-Herrera*](#). *Comparative analysis of rodent genomes reveals evolutionary signatures of genome reshuffling*. **Genome Biology and Evolution**, **8(12):3703-3717**, **2016**. (IF= 4.098, Q1 Genetics and Heredity).
6. F. Abascal, T. Alioto, F. Cruz, A. Corvelo, J.L. Villanueva-Cañas, A. Vlasova, M. Marcet-Houben, B. Martínez-Cruz, P. Prieto, J. Yu Cheng , V. Quesada, B. Lorente-Galdos, G. Li , F. García, J.L. Rodríguez, L. Frias, P. Ribeca, F. Câmara , E. Lowy, L. Cozzuto, I. Erb, M.L. Tress, M. Rubio-Camarillo, S. Capella-Gutiérrez, J.L. Rodríguez-Alés, J. Ruiz-Orera, F. Reverter, M. Casas-Marce, L. Soriano, J. Rodríguez-Arango, X.S. Puente, S. Derdak, B. Galán, J. Blanc, M. Gut, J. Quilez, M. Andrés-Nieto, T. Mailund, W.J. Murphy, C. Notredame, G. Roma, T. Gabaldón, M.M. Albà, C. López-Otín, [A. Ruiz-Herrera](#), T. Marques-Bonet, A. Valencia, I. Gut, J.L. García, R. Guigó, J.A. Godoy. *Extreme genomic erosion in the highly endangered Iberian lynx*. **Genome Biology** **17(1):251**, **2016**. (IF= 13.214, Q1 Genetics and Heredity).
7. M. Vozdova, [A. Ruiz-Herrera](#), J. Fernández, H. Cernohorska, J. Frohlich, H. Sebestova, S. Kubickova, J. Vahala, J. Rubes. *Meiotic behaviour of evolutionary sex-autosome translocations in six bovid species*. **Chromosome Research** **24(3):325-38**, **2016** (IF=2.478, Q3 Genetics and Heredity).
8. R. Reig-Viader, M. Garcia-Caldés, [A. Ruiz-Herrera*](#). *Telomere homeostasis in mammalian germ cells: a review*. **Chromosoma** **125(2):337-51**, **2016**. (IF= 4.602, Q1 Genetics and Heredity).
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17. R. Reig-Viader, M. Vila-Cejudo, V. Vitelli, E. Giulotto, M. Garcia-Caldés, [A. Ruiz-Herrera*](#). *Telomeric Repeat-Containing RNA (TERRA) and Telomerase Are Components of Telomeres During Mammalian Gametogenesis*. **Biology of Reproduction** **90(5)103:1-13, 2014** (IF= 4.020, Q1 Reproductive Biology). **One of the Most-Read Articles of the journal during April 2014**.
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22. M. Farré, D. Micheletti, [A. Ruiz-Herrera*](#). *Recombination rates and chromosomal reorganizations between human and chimpanzee genomes - a new twist in the chromosomal speciation theory*. **Mol Biol Evol** **30(4):853-64, 2013** (IF= 14.308, Q1 Genetics and Heredity).
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*corresponding author

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2. **A. Ruiz-Herrera**, M. Ponsà, M. Garcia. *¿Cómo han evolucionado los cromosomas humanos? Un guiño a la citogenética comparativa*. *Omnisciel.lula* 10:12-18, 2006.
3. **A. Ruiz-Herrera**. *Implicaciones de los lugares frágiles y las secuencias teloméricas intersticiales en la evolución cromosómica de los Primates*. *Boletín de la Asociación Primatológica Española* 11(2), 2004.
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Book chapters:

1. **A. Ruiz-Herrera**. Chromosomal rearrangements in Primates. eLS (encyclopaedia of Life Science, contribution by invitation) John Wiley & Sons, Ltd: Chichester, 2015. DOI: 10.1002/9780470015902.a0005805.pub3.
2. M. Farré and **A. Ruiz-Herrera***. Role of chromosomal reorganisations in the human-chimpanzee speciation. eLS (encyclopaedia of Life Science, contribution by invitation) John Wiley & Sons, Ltd: Chichester, 2014. doi: 10.1002/9780470015902.a0025534.
3. Mammalian chromosomal evolution: from ancestral states to evolutionary regions. T.J. Robinson, **A. Ruiz-Herrera**. In: "Evolutionary Biology – Concepts, Molecular and Morphological Evolution". P. Pontarotti (eds). Springer Heidelberg, 2010, Germany. ISBN: 978-3-642-12339-9.

4. Are fragile sites breakpoints for karyotype evolution? **A. Ruiz-Herrera**, F. Garcia, J. Egozcue, M. Ponsà, M. Garcia. In: "Primate Cytogenetics and comparative genomics". L. Sineo and R. Stanyon (eds). Firenze University Press. 85-93, 2006. Italy. ISBN: 88-8453-385-6.
5. Atlas of Mammalian Chromosomes. **A. Ruiz-Herrera's** contributions: pp 156 and 160. S.J. O'Brien, J.C. Menninger and W.G. Nash (eds). Wiley. 2006. Canada. ISBN: 978-0-471-35015-6.

Congress communications published in international scientific journals:

1. **A. Ruiz-Herrera**, L. Capilla, C. Vara, G. Albert-Lizandra, JB Searle, J. Ventura. The plasticity of meiotic recombination and its implications for mammalian genome evolution. *Comparative Cytogenetics*, 12 (3):315, 2018. ISSN: 1993-0771 Online ISSN: 1993-078X
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4. R.A. Sanchez-Guillén, L. Capilla, R. Reig-Viader, M. Martínez-Plana, C. Pardo-Camacho, M. Andrés-Nieto, J. Ventura, **A. Ruiz-Herrera**. *Telomere length diversity in wild house mice*. *Chromosome Res*, 23(2): 393-394, 2015.
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7. T.J. Robinson, M. Farre, **A. Ruiz-Herrera**. *Chromosomal evolution and signatures of phylogenetic diversification*. *Chromosome Res*, 20(6): 797-798, 2012.
8. M. Farre, **A. Ruiz-Herrera**. *Genomic shuffling and recombination rates during human and chimpanzee diversification*. *Chromosome Res*, 20(6): 798-798, 2012.
9. L. Capilla, J. Segura, N. Medarde, J. Ventura, **A. Ruiz-Herrera**. *An assessment of the recombination rate in a wild Robertsonian population of *Mus musculus domesticus**. *Chromosome Res*, 20(6):788-789, 2012.
10. R. Reig-Viader, M. A. Brieño-Enríquez, N. Toran, Ll. Cabero, E. Giulotto, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Description of the telomeric RNA, TERRA, in human oocytes*. *Human reproduction* 26 (Sup 1): I244-I244 (2011).
11. N. Camats, F. Garcia, **A. Ruiz-Herrera**, M. Garcia-Caldes. *Chromosomal instability in the rat: a trans-generational study*. *Chromosome Res* 18, 6: 742 (2010)
12. **A. Ruiz-Herrera**, R. Garcia-Cruz, M.A. Brieno, S. Pacheco, E. Steinberg, M. Mudry, M. Garcia-Caldes. *Pairing and recombination in primates: lessons from evolution*. *Chromosome Res* 18, 6:730 (2010).
13. T.J. Robinson and **A. Ruiz-Herrera**. *Phylogenomics, ancestral karyotypes and the effects of lineage sorting in constructing chromosomal phylogenies: contributions from chromosome painting and genome sequence assemblies*. *Chromosome Res* 16: 1042 (2008).
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16. P.D. Waters, **A. Ruiz-Herrera**, G. Dobigny, M. Garcia, T. J. Robinson. *Sex chromosomes of basal placental mammals*. *Chromosome Research* 15 (suppl 2): 75 (2007).
17. **A. Ruiz-Herrera**, F. García, M. Aguilera, M. Garcia, M. Ponsà. *Heterochromatin polymorphisms in *Cebus nigrivittatus* from Venezuela*. *Folia Primatol* 76 (1): pg 63 (2005).

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19. **A. Ruiz-Herrera**, F. García, M. Aguilera, M. Garcia, M. Ponsà. *New results in Platyrrhini chromosome evolution based on comparative chromosome painting: the case of Aotus*. Chromosome Research 12 (suppl 1): pg 54 (2004).
20. **A. Ruiz-Herrera**, F. García, E. Giulotto, C. Attolini, J. Egozcue, M. Ponsà, M. Garcia. *Intrachromosomal telomeric-like repeats on Cebus apella (Primates) chromosomes*. Folia Primatology 75 (suppl 1): pg 5 (2004).
21. M. Ponsà, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Aguilera, M. Garcia. *Heterochromatin polymorphisms and fragile site analysis in Cebus nigrovittatus (F. Cebidae, Primates) from Venezuela*. Annales de Génétique 46 (2-3): pg 294 (2003).
22. **A. Ruiz-Herrera**, F. García, L. Frönicke, M. Ponsà, J. Egozcue, M. Garcia, R. Stanyon. *Molecular cytogenetics conservation of human aphidicolin-induced fragile sites in Papionini (Primates) species*. Annales de Génétique 46 (2-3): pg 290 (2003).
23. **A. Ruiz-Herrera**, F. García, M. Garcia, M. Ponsà. *Chromosome homologies of Cebus apella and Cebus nigrovittatus revealed by Zoo-FISH technique*. Actas del IV congreso de la Asociación Primatológica Española (APE). Pgs: on line (<http://www.uam.es/ape>) (2001).
24. **A. Ruiz-Herrera**, F. García, C. Azzalin, E. Giulotto, J. Egozcue, M. Ponsà, M. García. *Intrachromosomal telomere repeats (ITS) on M. fascicularis (Primates) chromosomes*. Annales de Génétique 44(1) (2001).
25. M. García, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Ponsà. *A comparative study of fragile sites on Homo sapiens and Macaca fascicularis (Primates) chromosomes*. Annales de Génétique 44(1): pg s32 (2001).
26. F. García, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Ponsà. *Chromosome homologies among Cebus apella (CAP), Ateles belzebuth hybridus (ABH) and Homo sapiens (HSA)*. Annales de Génétique 44(1): pg s31 (2001).

13. INVITED CONTRIBUTIONS TO CONFERENCES AND ACADEMIC PRESENTATIONS

1. Invited lecture at the International Colloquium on Animal Cytogenetics and Genomics, Toulouse (France). July 2016.
2. Invited lecture at the Université Pierre et Marie Curie, Paris (France). June 2015.
3. Invited lecture at the Instituto de Biología Funcional y Genómica (IBFG), CSIC-University of Salamanca (Spain). March 2015. Host: Dra. Cristina Martin-Castellanos.
4. Lecture included in the Master Course “Architecture, Function and evolution of the eukaryote chromosome” in Molecular Biology and Genetics. PhD Program in Genetics Molecular Biology and Cellular Biology, University of Pavia (Italy). February 2014. Host: Prof. E. Giulotto.
5. Invited lecture at the Department of Genetics and Microbiology. University of Pavia (Italy). February 2014. Host: Prof. E. Giulotto.
6. Invited lecture at the Department of Zoology and Botany. Stellenbosch University (South Africa). October 2013. Host: Prof. C. Mathee.
7. The Fifth International MELODI (Multidisciplinary European Low Dose Initiative) Workshop, Brussels (Belgium), October 2013. Invited speaker.
8. Lecture included in the series of the Vienna Graduate School of Population Genetics (Austria). July 2013. Host: Prof. C. Schlotterer.
9. Invited lecture at the Evolutionary Biology Institute (IBE-UPF, Spain). Feb. 2013. Host: Prof. A. Navarro.
10. Invited lecture at the Biotechnology and Biomedicine Institute. Universitat Autònoma de Barcelona (Spain). January 2013. Host: Dr. M. Cáceres.
11. Invited lecture at the Department Cell Biology, Physiology and Immunology. Universitat Autònoma de Barcelona (Spain), January, 2013.

12. Invited lecture at the Department of Zoology, University of Cambridge, Cambridge (UK), November 2011. Host: Dr. RJ Asher.
13. VIth European Congress of Mammology. Paris (France), July 2011. Invited speaker.
14. 19th Evolutionary Biology Meeting at Marseilles (France). September 2009. Invited speaker.
15. IX Jornadas de Biología Evolutiva. Barcelona (Spain). June 2009. Invited speaker.
16. 16th International Chromosome Conference. Amsterdam (Netherlands), August 2007. Invited speaker.
17. Invited lecture at the Universitat Autònoma de Barcelona (Barcelona). March 2007. Host: Prof. M. Garcia-Caldés
18. Invited lecture at the Max Planck Institute for Molecular Genetics, Berlín (Germany). January 2003. Host: Dr. H. Sherthan
19. Invited lecture at the BIOEVO (Grupo de Biología Evolutiva). División de Ciencias Biológicas, Universidad Simón Bolívar, Caracas (Venezuela). March 2002. Host: Dr. M. Aguilera

14. COMMUNICATIONS IN SCIENTIFIC MEETINGS

1. C. Vara, A. Paytuví Gallart, Y. Cuartero, F. Le Dily, F. Garcia, J. Salvà, E. Julià, O. Fornás, M. Marti-Renom, **A. Ruiz-Herrera**. *Exploring chromatin dynamics during mouse spermatogenesis*. 22nd International Chromosome Conference, 2-5 September 2018, Prague (Czech Republic). Oral.
2. **A. Ruiz-Herrera**, A. Paytuví Gallart, C. Vara. *Testing the Integrative Breakage Model: A multidisciplinary approach for the study of genome plasticity*. 22nd International Chromosome Conference, 2-5 September 2018, Prague (Czech Republic). Oral.
3. C. Vara, L. Capilla, R.A. Sánchez-Guillén, S.I. Gabriel, L. Ferretti, M. Pla-Bagaria, J. Bello-Rodríguez, L. Palacios-Fernández, J. Ventura, J.B. Searle, M.L. Mathias, **A. Ruiz-Herrera**. *Natural diversity at fine geographical scale of the recombination modifier Prdm9 reveals contrasting evolutionary patterns in wild Robertsonian house mice*. II Joint Congress on Evolutionary Biology – Montpellier 2018. Poster.
4. **A. Ruiz-Herrera**, M. Vozdova, L. Capilla, J. Fernández, C. Vara, H. Sebestova, J. Frohlich, J. Rubes, T.J. Robinson. *Genome organization influences recombination rates in mammals*. II Joint Congress on Evolutionary Biology – Montpellier (Francia) 2018. Poster.
5. **A. Ruiz-Herrera**, A. Paytuví Gallart, C. Vara. *Testing the Integrative Breakage Model: A multidisciplinary approach for the study of genome plasticity*. 6th Asia-Pacific Chromosome Colloquium, July 4-5, 2018, Camberra (Australia). Oral.
6. C. Vara, L. Capilla, R.A. Sánchez-Guillén, S.I. Gabriel, L. Ferretti, M. Pla-Bagaria, J. Bello-Rodríguez, L. Palacios-Fernández, J. Ventura, J.B. Searle, M.L. Mathias, **A. Ruiz-Herrera**. *PRDM9 diversity at fine geogrphical scale in chromosomal races of house mouse*. XVII Jornada de Biología Evolutiva. 25 June, 2018. Barcelona (Spain).
7. B. Florit , G. Albert-Lizandra, C. Vara, C. Rosado, L. Capilla, N. Medarde, J. Ventura ,F. Pardo-Manuel de Villena, J. Searle, **A. Ruiz-Herrera**. *Chromosomal fusions modulate recombination rates in wild house mice*. 4th Meeting of the Spanish Meiosis Network. Madrid, June (Spain), 20-22, 2018, Poster.
8. C. Vara, A. Paytuví-Gallart, Y. Cuartero, F. Le Dily, F. Garcia, J. Salvà-Castro, E. Julià, O. Fornás, M.A. Marti-Renom, **A. Ruiz-Herrera**. *Exploring chromatin dynamics during mouse spermatogenesis*. 4th Meeting of the Spanish Meiosis Network. Madrid (Spain), June, 20-22, 2018, Oral.
9. B. Florit , G. Albert-Lizandra, C. Vara, C. Rosado, L. Capilla, N. Medarde, J. Ventura ,F. Pardo-Manuel de Villena, J. Searle, **A. Ruiz-Herrera**. *Chromosomal fusions modulate recombination rates in wild house mice*. X Jornadas científicas del Departament de Biología Cel.lular, Fisiología i Immunologia. Campus UAB (Spain), June, 5, 2018, Poster.
10. C. Vara, A. Paytuví-Gallart, Y. Cuartero, F. Le Dily, F. Garcia, J. Salvà-Castro, E. Julià, O. Fornás, M.A. Marti-Renom, **A. Ruiz-Herrera**. *Exploring chromatin dynamics during mouse*

- spermatogenesis*. X Jornadas científicas del Departament de Biología Cel.lular, Fisiología i Immunologia. Campus UAB (Spain), June, 5, 2018, Poster
11. **A. Ruiz-Herrera**, L. Capilla, C. Vara, G. Albert-Lizandra, J.B. Searle, J. Ventura. *The plasticity of meiotic recombination and its implications for mammalian genome evolution*. 23rd International Colloquium on Animal Cytogenetics and Genomics (ICACG). June 9-12th 2018, St Peterburg (Russia). Oral.
 12. A. Paytuví, I. Anzar, W. Sanseverino, R. Aiese, C. Vara, **A. Ruiz-Herrera**. *New insights into the analysis of Hi-C data*. Plant and Animal Genome XXV Conference. San Diego (USA), January, 2018, Poster.
 13. A. Paytuví Gallart, R. Aiese Cigliano, W. Sanseverino, C. Vara, **A. Ruiz-Herrera**. *New Insights into the Analysis of Hi-C Data*. V Bioinformatics and Genomics Symposium, Barcelona, December 2017, Poster
 14. F. Serra, Y. Cuartero, M. Brassó-Vives, F. Garcia, D. Izquierdo, F. Le Dily, M. Cáceres, **A. Ruiz-Herrera**, A. Navarro, T. Marques-Bonet, M. Marti-Renom. *Comparative study of the three-dimensional genomic structure in primates*. EMBO Nuclear Estructure and Dynamics. L'Isle sur la Sorgue (France), October 4-8, 2017. Poster.
 15. **A. Ruiz-Herrera**, M. Vozdova, L. Capilla, J. Fernández, C. Vara, H. Sebestova, J. Frohlich, A. Hernández-Marsal, J. Rubes, T.J. Robinson. *Exploring the variation in recombination rates in eutherian mammals*. XVI Congress of the European Society of Evolutionary Biology, 20-25 August, 2017, Groningen (Netherlands), Oral.
 16. L. Capilla, C. Vara, S.I. Gabriel, C. Roca, J.B. Searle, M.L. Mathias, **A. Ruiz-Herrera**. *Natural diversity in the reproductive isolation gene Prdm9: Lessons from Madeiran Robertsonian house mice*. XVI Congress of the European Society of Evolutionary Biology, 20-25 August, 2017, Groningen (Netherlands), Poster.
 17. C. Vara, A. Paytuví, Y. Cuartero, F. Le Dily, F. Garcia, W. Sanseverino, R. Aiese-Cigliano, M. Martí-Renom, **A. Ruiz-Herrera**. *Catching chromosome conformation in the act: the mammalian nucleome*. Meionet -3rd Meeting of the Spanish Meiosis Network. Madrid, June, 14-16, 2017, Oral.
 18. L. Capilla, C. Vara, S.I. Gabriel, J. Bello, L. Palacios, J.B. Searle, M.L. Mathias, **A. Ruiz-Herrera**. *Diversity in the reproductive isolation gene Prdm9: lessons from Madeiran Robertsonian house mice*. Meionet -3rd Meeting of the Spanish Meiosis Network. Madrid, June, 14-16, 2017, Poster.
 19. C. Vara, A. Paytuví, Y. Cuartero, F. Ledily, F. Garcia, W. Sanseverino, R. Aiese-Cigliano, M. Martí-Renom, **A. Ruiz-Herrera**. *Exploring chromatin dynamics during mouse spermatogenesis*. IX Jornadas científicas del Departament de Biología Cel.lular, Fisiología i Immunologia. Campus UAB, June, 9, 2017, Oral.
 20. L. Capilla, C. Vara, S.I. Gabriel, J. Bello, L. Palacios, J.B. Searle, M.L. Mathias, **A. Ruiz-Herrera**. *Diversity in the reproductive isolation gene Prdm9: lessons from Madeiran Robertsonian house mice*. Meionet - IX Jornadas científicas del Departament de Biología Cel.lular, Fisiología i Immunologia. Campus UAB, June, 9, 2017, Poster.
 21. A. Paytuví, I. Anzar, W. Sanseverino, R. Aiese, C. Vara, **A. Ruiz-Herrera**. *HiCloud: a new pipeline for a more inclusive way to analyze Hi-C data*. Plant and Animal Genome XXIV Conference. San Diego (USA), January, 2017, Poster.
 22. A. Paytuví Gallart, R. Aiese Cigliano, W. Sanseverino, C. Vara, **A. Ruiz-Herrera**. *HiCloud: A Pipeline for a More Inclusive Way to Analyze Hi-C Data*. XIII Symposium on Bioinformatics, Universitat Politècnica de València (UPV), València (Spain), May 2016, Poster
 23. L. Capilla, R.A. Sánchez-Guillén, M. Farré, J. Alföldi, K. Lindblad-Toh, R. Malinverni, J. Ventura, D.M. Larkin, **A. Ruiz-Herrera**. *Comparative genomics in rodents: genomic signatures of evolutionary reshuffling*. 15th Rodent et Spatium – International Conference on Rodents Biology. July 25-29, 2016, Olomouc, Czech Republic. Oral.
 24. I. Pérez, F. García, A. Cortina, F. Cortés, L.E. Biedma, J.A. Godoy, J. Román, J. Calzada, **A. Ruiz-Herrera**. *Chromosomal characterization of the lesser white-toothed shrew, Crocidura suaveolens (Pallas, 1811) in the south of the Iberian Peninsula*. V Jornadas científicas del

- Departament de Biologia Cel.lular, Fisiologia i Immunologia. Campus UAB, June, 2016. Poster.
25. L. Capilla, R.A. Sánchez-Guillén, M. Farré, J. Alföldi, K. Lindblad-Toh, R. Malinverni, J. Ventura, D.M. Larkin, **A. Ruiz-Herrera**. *Comparative genomics in rodents: insights into reproductive isolation genes*. Plant and Animal Genome XXIV Conference. San Diego (USA), January, 2016, Poster.
 26. M. Farré, Ana Ullastres, L. Capilla, **A. Ruiz-Herrera**. *Role of chromosomal rearrangements in speciation and adaptation in primates- new tools into human welfare studies?* Plant and Animal Genome XXIV Conference. San Diego (USA), January, 2016, Oral presentation.
 27. L. Capilla, R.A. Sánchez-Guillén, M. Farré, J. Alföldi, K. Lindblad-Toh, R. Malinverni, J. Ventura, D.M. Larkin, **A. Ruiz-Herrera**. *Comparative genomics and gene-specific genotyping in mouse: new insights into reproductive isolation genes*. Annual Meeting of the Society of Molecular Biology and Evolution (SMBE2015), Vienna (Austria). July, 12-16, 2015, Poster.
 28. L. Capilla, R.A. Sánchez-Guillén, M. Farré, J. Alföldi, K. Lindblad-Toh, R. Malinverni, J. Ventura, D.M. Larkin, **A. Ruiz-Herrera**. *What can we learn from comparative genomics: new insights into reproductive isolation genes in the house mouse*. XV Jornadas de Biologia Evolutiva, Barcelona (Spain), June 23, 2015, Oral presentation.
 29. L. Capilla, R.A. Sánchez-Guillén, M. Farré, J. Alföldi, K. Lindblad-Toh, R. Malinverni, J. Ventura, D.M. Larkin, **A. Ruiz-Herrera**. *What can we learn from comparative genomics: new insights into reproductive isolation genes in the house mouse*. Fundación Ramon Areces International Symposium. The biology of meiosis: implications for fertility and genetic disorders, Salamanca (Spain), June 4-5, 2015, Poster.
 30. J. Fernández, M. Vozdova, L. Capilla, A. Hernández, H. Sebestova, J. Frohlich, J. Rubes, **A. Ruiz-Herrera**. *Recombination dynamics in Bovidae*. Fundación Ramon Areces International Symposium. The biology of meiosis: implications for fertility and genetic disorders, Salamanca (Spain), June 4-5, 2015, Poster.
 31. M.A. Enríquez-Brieño, F.C. Reis, R. Reig-Viader, M. Vila-Cejudo, L. Cabero, N. Toran, F. Garcia, **A. Ruiz-Herrera**, M. Garcia Caldés. *Exposure to ionizing radiation disrupts meiotic progression and recombination during in vitro human oocyte development*. The sixth International MELODI (Multidisciplinary European Low Dose Initiative) Workshop, Barcelona, 7-9 October 2014, Poster.
 32. J. Fernández, M. Vozdova, L. Capilla, R.A. Sánchez-Guillén, H. Sebestova, J. Frohlich, T.J. Robinson, J. Rubes, **A. Ruiz-Herrera**. *Recombination dynamics in Bovidae*. 20th International Chromosome Conference, September, 1-5, 2014, Kent, UK. Poster
 33. R.A. Sanchez-Guillén, L. Capilla, R. Reig-Viader, M. Martínez-Plana, C. Pardo-Camacho, M. Andrés-Nieto, J. Ventura, **A. Ruiz-Herrera**. *Telomere length diversity in wild house mice*. 20th International Chromosome Conference, September, 1-5, 2014, Kent, UK. Poster
 34. L. Capilla, R.A. Sanchez-Guillén, M. Farré, D. Larkin, J. Ventura, **A. Ruiz-Herrera**. *Genomic signatures of evolutionary reshuffling in mammals*. 20th International Chromosome Conference, September, 1-5, 2014, Kent, UK. Oral communication.
 35. L. Capilla, R.A. Sánchez-Guillén, J. Ventura, **A. Ruiz-Herrera**. *Meiotic recombination is modulated by chromosomal translocations and influenced by Prdm9 allelic diversity: lessons from a wild mice polymorphic Robertsonian population*. 14th Rodent et Spatium – International Conference on Rodents Biology. July-August 2014, Lisboa, Portugal. Oral communication.
 36. L. Capilla and **A. Ruiz-Herrera**. *Meiotic recombination and its implications for the mammalian genomic architecture*. VIII Seminario de Citogenética. 24-26 June 2014, Alcalá de Henares, Spain. Oral communication.
 37. M. Andrés-Nieto, F. Garcia, R.A. Sánchez-Guillén, H. Fernández-Bellon, **A. Ruiz-Herrera**. *The CRYOZOO: Creation and characterization of a cell line repository of species of endangered mammals*. IV Jornadas científicas del Departament de Biologia Cel.lular, Fisiologia i Immunologia. Campus UAB, June, 20, 2014. Poster.
 38. L. Capilla, N. Medarde, A. Alemany-Schmidt, M. Oliver-Bonet, J. Ventura, **A. Ruiz-Herrera**. *Genetic recombination variation in wild Robertsonian mice: on the role of chromosomal fusions*

- and *Prdm9* allelic background. I Congreso de la Red Española de Meiosis. 18-20 June 2014, El Escorial, Madrid, Spain. Oral communication.
39. R. Reig-Viader, M. Vila-Cejudo, V. Vitelli, E. Giulotto, M. Garcia-Caldés, **A. Ruiz-Herrera**. *TERRA and TERT are components of mammalian germ cells telomeres*. I Congreso de la Red Española de Meiosis. 18-20 June 2014, El Escorial, Madrid, Spain. Oral communication.
 40. L. Capilla, N. Medarde, A. Alemany-Schmidt, M. Oliver-Bonet, J. Ventura, **A. Ruiz-Herrera**. *Prdm9 variability and its effect on genetic recombination in a Robertsonian house mouse natural population*. IV Congreso de la Sociedad Española de Biología Evolutiva (SESBE2013). November 2013, Barcelona, Spain, Poster.
 41. **A. Ruiz-Herrera**, J. Segura, L. Capilla, M. Farré, F. Reis, M. Oliver-Bonet, H. Fernández-Bellon, T.J. Robinson, M. Garcia-Caldés. *Evolution of recombination in eutherian mammals*. IV Congreso de la Sociedad Española de Biología Evolutiva (SESBE2013). November 2013, Barcelona, Spain, Poster.
 42. **A. Ruiz-Herrera**, F. Garcia, M. Garcia-Caldés. *Trans-generational Radiation-Induced Chromosomal Instability in the Female Enhances the Action of Chemical Mutagens*. The Fifth International MELODI (Multidisciplinary European Low Dose Initiative) Workshop, Brussels, 7-10 October 2013. Oral communication.
 43. L. Capilla, N. Medarde, A. Alemany-Schmidt, M. Oliver-Bonet, J. Ventura, **A. Ruiz-Herrera**. *Prdm9 variability and its effect on genetic recombination in a Robertsonian house mouse natural population*. 27th International Mammalian Genome Conference (IMGC), September 15-18, 2013, Salamanca, Spain. Oral communication.
 44. M. Farré, L. Capilla, **A. Ruiz-Herrera**. *Genomic Shuffling and Recombination: Implications for Mammalian Chromosomal Evolution*. 27th International Mammalian Genome Conference (IMGC), September 15-18, 2013, Salamanca, Spain. Poster.
 45. M. Farré, L. Capilla, **A. Ruiz-Herrera**. *On how the study of genetic recombination is providing new insights into mammalian chromosomal evolution*. 19th International Chromosome Conference, September, 2-6, 2013, Bolonia, Italy. Oral communication.
 46. L. Capilla, N. Medarde, J. Ventura, **A. Ruiz-Herrera**. *Recombination plasticity in a wild mice robertsonian population*. 19th International Chromosome Conference, September, 2-6, 2013, Bolonia, Italy. Oral communication.
 47. R. Reig-Viader, M. Vila-Cejudo, E. Giulotto, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Organization of telomeres in the mammalian germ line: the role of non-coding telomeric rna (TERRA) and telomerase*. 19th International Chromosome Conference, September, 2-6, 2013, Bolonia, Italy. Poster
 48. R. Reig-Viader, M. Vila-Cejudo, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Telomere length is maintained during mammalian spermatogenesis*. XIII Jornada de Biología de la Reproducción, June, 18, 2013, Barcelona, Spain. Oral communication.
 49. M. Vila-Cejudo, R. Reig-Viader, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Flow sorting optimization for the isolation of mouse spermatogenic cell populations*. XIII Jornada de Biología de la Reproducción, June, 18, 2013, Barcelona, Spain. Oral communication.
 50. **A. Ruiz-Herrera**, J. Segura, L. Capilla, M. Farré, F. Reis, M. Oliver-Bonet, H. Fernández-Bellon, T.J. Robinson, M. Garcia-Caldés. *On the evolution of recombination: insights into mechanisms that affect the pattern of crossover events and interference in eutherian mammals*. "Chromosome Dynamics" Gordon Research Conference, March, 26-31, 2013, Renaissance Tuscany Il Ciocco Resort in Lucca (Barga) Italy. Poster.
 51. Rita Reig Viader, Montserrat Garcia Caldés, **A. Ruiz-Herrera**. *RNA telomeric TERRA en cèl•lules germinals de mamífers*. II Jornadas científicas del Departament de Biología Cel.lular, Fisiología i Immunologia. Campus UAB, January, 30, 2013. Poster.
 52. L. Capilla, J. Segura, N. Medarde, J. Ventura, **A. Ruiz-Herrera**. *Recombination rate in a wild Robertsonian population of *Mus musculus domesticus**. III Jornadas científicas del Departament de Biología Cel.lular, Fisiología i Immunologia. Campus UAB, January, 30, 2013. Poster.
 53. R. Reig-Viader, M. A. Brieño-Enríquez, N. Toran, Ll. Cabero, E. Giulotto, M. Garcia-Caldés, **A. Ruiz-Herrera**. *An assessment of telomeric repeat-containing RNA (TERRA) and telomerase in human fetal oocytes*. Global questions in advanced Biology Conference - I International

- Congress of the Catalan Biology Society, Barcelona (Spain). July 2012. **Abstract selected as an oral communication.**
54. M. Farré, L. Capilla and **A. Ruiz-Herrera**. *Genomic shuffling affects recombination rates during mammalian diversification*. Global questions in advanced Biology Conference - I International Congress of the Catalan Biology Society, Barcelona (Spain). July 2012. **Abstract selected as an oral communication.**
 55. J. Segura, L. Capilla, F. Reis, H. Fernández-Bellon, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Dynamics of mammalian meiosis in distantly mammalian species*. Global questions in advanced Biology Conference - I International Congress of the Catalan Biology Society, Barcelona (Spain). July 2012. Poster.
 56. A. Ullastres, M. Farré, **A. Ruiz-Herrera**. *Whole genome comparison between human and macaque genomes: defining homologous syntenic blocks and evolutionary breakpoint regions*. Global questions in advanced Biology Conference - I International Congress of the Catalan Biology Society, Barcelona (Spain). July, 9, 2012. Poster.
 57. M. Farré and **A. Ruiz-Herrera**. *Testing the "suppressed recombination" model of chromosomal evolution during human-chimpanzee speciation*. Annual Meeting of the Society of Molecular Biology and Evolution (SMBE2012), Dublin (Ireland). June, 23-26, 2012, Poster.
 58. T.J. Robinson, M. Farré, **A. Ruiz-Herrera**. *Chromosomal evolution and signatures of phylogenetic diversification*. 20th International Colloquium on Animal Cytogenetics and Gene Mapping (Spain). April, 24-29, 2012. **Invited talk.**
 59. M. Farré and **A. Ruiz-Herrera**. *Genomic shuffling and recombination rates during human and chimpanzee diversification*. 20th International Colloquium on Animal Cytogenetics and Gene Mapping (Spain). April, 24-29, 2012. **Abstract selected as an oral communication.**
 60. L. Capilla, J. Segura, N. Medarde, J. Ventura and **A. Ruiz-Herrera**. *An assessment of the recombination rate in a wild Robertsonian population of *Mus musculus domesticus**. 20th International Colloquium on Animal Cytogenetics and Gene Mapping (Spain). April, 24-29, 2012. **Abstract selected as an oral communication.**
 61. J. Segura, L. Capilla, F. Reis, H. Fernández-Bellon, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Comparison of meiotic recombination rates across the mammalian tree*. 20th International Colloquium on Animal Cytogenetics and Gene Mapping (Spain). April, 24-29, 2012. Poster
 62. F. Garcia, F. Cortés, H. Fernández-Bellon, **A. Ruiz-Herrera**. *The CRYO-ZOO: A cell line repository from the Barcelona ZOO collection*. II Jornadas científicas del Instituto de Biomedicina y Biotecnología (IBB-UAB). Campus UAB, April 2012. Poster.
 63. L. Capilla, J. Segura, N. Medarde, J. Ventura, **A. Ruiz-Herrera**. *An assessment of the recombination rate in a wild Robertsonian population of *Mus musculus domesticus**. II Jornadas científicas del Instituto de Biomedicina y Biotecnología (IBB-UAB). Campus UAB, April 2012. Poster.
 64. L. Capilla, M. Farré, J. Segura, M. Ponsà, **A. Ruiz-Herrera**. *On the localization of evolutionary regions in the interphase nuclei: a preliminary approach*. 18th International Chromosome Conference. Manchester (UK). 29th August – 3rd September 2011. Poster
 65. **A. Ruiz-Herrera**, M. Farré, T.J. Robinson. *Mammalian chromosomal evolution: genomic insights from distantly related lineages*. 18th International Chromosome Conference. Manchester (UK). 29th August – 3rd September 2011. Poster
 66. M. Farré, M. Bosch, F. López-Giráldez, M. Ponsà, **A. Ruiz-Herrera**. *Implications of tandem repeats in the distribution of mammalian evolutionary breakpoints*. 18th International Chromosome Conference. Manchester (UK). 29th August – 3rd September 2011. **Abstract selected as an oral communication**
 67. **A. Ruiz-Herrera** and M. Farré. *Chromosomal evolution and comparative genomics in mammals*. VIth European Congress of Mammology. Paris (France). July, 19-23, 2011. Oral presentation. **Invited speaker**
 68. R. Reig-Viader, M.A. Brieño-Enríquez, N. Toran, Ll. Cabero, E. Giulotto, M. Garcia-Caldés, **A. Ruiz-Herrera**. *Description of telomeric RNA TERRA in human oocytes*. Annual Meeting of the European Society of Human Reproduction and embryology. Stockholm (Sweden). July, 3-6, 2011, Poster

69. L. Capilla, M. Farré, J. Segura, M. Ponsà, **A. Ruiz-Herrera**. *Nuclear distribution of sequences involved in evolutionary breakpoints*. III Congreso de la Sociedad Española de Biología Evolutiva (SESBE2011), Madrid (Spain). November 2011, Poster.
70. M. Farré, M. Bosch, F. López-Giráldez, M. Ponsà, **A. Ruiz-Herrera**. *Implications of tandem repeats in shaping the genomic architecture of great apes*. III Congreso de la Sociedad Española de Biología Evolutiva (SESBE2011), Madrid (Spain). November 2011, Oral communication.
71. Rita Reig Viader, Montserrat Garcia Caldés, **A. Ruiz-Herrera**. *Descripció de l'RNA telomeric TERRA en cèl·lules germinals de mamífers*. III Jornadas del Programa de Doctorado de Biología Celular. Sagàs (Spain). June 2011, Oral communication.
72. L. Capilla, J. Segura, J. Ventura, **A. Ruiz-Herrera**. *Efectes de les fusions robertsonianes sobre la recombinació meiótica en Mus musculus domesticus*. III Jornadas del Programa de Doctorado de Biología Celular. Sagàs (Spain). June 2011, Oral communication.
73. M. Farré, Ponsà, **A. Ruiz-Herrera**. *Selecció en contra de fusions Robertsonianes en ratolí*. III Jornadas del Programa de Doctorado de Biología Celular. Sagàs (Spain). June 2011, Oral communication.
74. **A. Ruiz-Herrera**, M. Farré, L. Capilla, T.J. Robinson. *Dynamics of mammalian chromosome evolution reconstructions of ancestral genomes*. International symposium "Frontiers in biodiversity: a phylogenetic perspective" (PHY2010), Barcelona (Spain). October, 1-2, 2010, Poster
75. **A. Ruiz-Herrera**, R. Garcia-Cruz, M.A. Brieño, S. Pacheco, E. Steinberg, M. Mudry, M. Garcia-Caldés. *Pairing and recombination in primates: lessons from evolution*. 19th International Colloquium on Animal Cytogenetics and Gene Mapping (Poland). June, 6-9, 2010, Oral presentation
76. N. Camats, F. García, **A. Ruiz-Herrera**, M. Garcia-Caldés. *Chromosomal instability in the rat: a trans-generational study*. 19th International Colloquium on Animal Cytogenetics and Gene Mapping (Poland). June, 6-9, 2010, Poster
77. S. Pacheco, **A. Ruiz-Herrera**, R. Garcia-Cruz, M.A. Brieño, E. Steinberg, M. Mudry, M. Garcia-Caldés. *Aproximació evolutiva a l'estudi de la recombinació meiótica en primats: descripció dels mapes de recombinació*. X Jornadas de Biología Evolutiva. Barcelona (Spain). July 2010, Oral communication.
78. **A. Ruiz-Herrera**, Smirnova A, Khouriauli L, Nergadze SG, Mondello C, Giulotto E. *Estudio de la amplificación génica en líneas celulares humanas*. II Jornadas del Programa de Doctorado de Biología Celular. Sagàs (Spain). June 2009, Oral communication.
79. M. Farré, Bosch M, Ponsà, **A. Ruiz-Herrera**. *Distribución de los puntos de rotura evolutivos en el genoma de los mamíferos*. II Jornadas del Programa de Doctorado de Biología Celular. Sagàs (España). June 2009, Oral communication.
80. **A. Ruiz-Herrera**, Smirnova A, Khouriauli L, Nergadze SG, Mondello C, Giulotto E. *Estudio de la amplificación génica en líneas celulares humanas defectivas en los mecanismos de reparación del ADN*. XVIII Reunión científica de la sociedad española de mutagénesis ambiental. Barcelona (Spain). June 2009. Oral communication.
81. M. Farré, Bosch M, Ponsà, **A. Ruiz-Herrera**. *Distribución de los puntos de rotura evolutivos en el genoma humano*. IX Jornadas de Biología Evolutiva. Barcelona (Spain). June 2009. Oral communication.
82. **A. Ruiz-Herrera**. *Reconstrucciones filogenéticas de los mamíferos a través de sus cariotipos*. IX Jornadas de Biología Evolutiva. Barcelona (Spain). June 2009. Oral communication (invited contribution).
83. **A. Ruiz-Herrera**. *The genomic puzzle of mammalian evolutionary breakpoints: can we track any trend?* 19th Evolutionary Biology Meeting at Marseilles (France). September 2009, Oral presentation. **Invited speaker**
84. M. Farré, M. Bosch, F. López-Giraldez, Ponsà, **A. Ruiz-Herrera**. *Distribution of evolutionary breakpoint regions in the human genome and their association with tandem repeats*. 19th Evolutionary Biology Meeting at Marseilles (France). September 2009, Poster with fast presentation

85. M. Farré, M. Bosch, F. López-Giráldez, M. Ponsà, **A. Ruiz-Herrera**. *Distribution of tandem repeats in the human genome and its evolutionary implications*. Annual Meeting of the Society of Molecular Biology and Evolution (SMBE2008), Barcelona (Spain). June 2008, Poster
86. T.J. Robinson and **A. Ruiz-Herrera**. *Phylogenomics, ancestral karyotypes and the effects of lineage sorting in constructing chromosomal phylogenies: contributions from chromosome painting and genome sequences assemblies*. 18th International Colloquium on Animal Cytogenetics and Gene Mapping (Romania). June 2008. Oral communication
87. **A. Ruiz-Herrera** and T.J. Robinson. *Mammalian chromosomal evolution: a tale of fragility*. 16th International Chromosome Conference. Amsterdam (Netherlands). 24th-29th August 2007. Oral communication. **Invited speaker**
88. T.J. Robinson and **A. Ruiz-Herrera**. *Chromosomal evolutionary breakpoints in Afrotheria and phylogenetic inference from genomic assemblies*. 16th International Chromosome Conference. Amsterdam (Netherlands). 24th-29th August 2007. Oral communication
89. T. J. Robinson, P.D. Waters, **A. Ruiz-Herrera**, G. Dobigny, M. Garcia-Caldes. *Sex chromosomes of basal placental mammals*. 16th International Chromosome Conference. Amsterdam (Netherlands). 24th-29th August 2007. Poster
90. **A. Ruiz-Herrera** and T.J. Robinson. *Afrotherian fragile sites, evolutionary breakpoints and phylogenetic inference from genomic assemblies*. 33rd Meeting of the Zoological Society of Southern Africa (ZSSA). 8th-11th July 2007, North-West University, Potchefstroom (South Africa). Oral communication.
91. P.D. Waters, **A. Ruiz-Herrera**, G. Dobigny, M. Garcia, T. J. Robinson. *Sex chromosomes of basal placental mammals*. 28th Lorne Genome Conference, Erskine Mantra Resort, Lorne (Australia). 11-15th February 2007. Oral communication.
92. **A. Ruiz-Herrera**, J. Castresana, T.J. Robinson. *Mammalian chromosomal evolution is driven by "fragile" regions*. Second Congress of the International Cytogenetic and Genome Society (ICGS). June 2006. University of Canterbury, Kent (UK). Oral communication. **Award for the best young researcher oral communication of the congress**.
93. **A. Ruiz-Herrera** and T.J. Robinson. *Chromosome instability in the Aardvark genome*. 32nd Meeting of the Zoological Society of Southern Africa (ZSSA). July 2005, Rhodes University, Grahamstown (South Africa). Poster.
94. **A. Ruiz-Herrera**, J. Castresana, F. García, M. Ponsà, M. Garcia. *Unstable chromosomal bands in the human karyotype and its relationship with tandem repeat sequences*. Fifth European Cytogenetics Conference. Madrid (Spain). June 2005. Poster.
95. N. Camats, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Garcia. *Distribution of intrachromosomal telomeric sequences (ITS) on *Rattus norvegicus* chromosomes*. 15th International Chromosome Conference. London (UK). September 2004. Poster.
96. **A. Ruiz-Herrera**, F. García, M. Aguilera, M. Garcia, M. Ponsà. *New results in Platyrrhini chromosome evolution based on comparative chromosome painting: the case of *Aotus**. 15th International Chromosome Conference. London (UK). September 2004. Poster.
97. **A. Ruiz-Herrera**, F. García, E. Giulotto, C. Attolini, J. Egozcue, M. Ponsà, M. Garcia. *Intrachromosomal telomeric-like repeats on *Cebus apella* (Primates) chromosomes*. XX Congress of the International Primatological Society. Torino (Italy). August 2004. Oral communication.
98. **A. Ruiz-Herrera**, F. García, L. Mora, J. Egozcue, M. Ponsà, M. Garcia. *Biografía de los cromosomas humanos: El puzzle evolutivo*. IV Jornada de Biología Evolutiva. Societat Catalana de Biologia. Barcelona (Spain), July 2004. Oral communication.
99. **A. Ruiz-Herrera**, F. García, M. Ponsà, M. Garcia. *Estudio de la expresión de los lugares frágiles en *Mandrillus sphinx* (F. Cercopithecidae, Primates)*. III Seminario de Citogenética – Sección de la Sociedad Española de Genética. Bubión (Granada). Junio 2004. Oral communication.
100. **A. Ruiz-Herrera**, F. García, M. Aguilera, M. Garcia, M. Ponsà. *Polimorfismos de la heterocromatina en *Cebus nigrivittatus* (Primates)*. V Congreso de la Asociación Primatológica Española. Valencia (Spain), September 2003. Poster.
101. **A. Ruiz-Herrera**, F. García, L. Froenicke, R. Stanyon, M. Ponsà, J. Egozcue, M. Garcia. *Implicaciones de los lugares frágiles en la evolución cromosómica de los Primates*. III Jornada

- de Biologia Evolutiva. Societat Catalana de Biologia. Barcelona (Spain), July 2003. Oral communication.
102. **A. Ruiz-Herrera**, F. García, M. Aguilera, M. García, M. Ponsà. *Polimorfismos de la heterocromatina en Cebus nigrivittatus procedentes de Venezuela*. I Congreso "Osvaldo A. Reig" de Vertebradología Básica y Evolutiva e Historia y Filosofía de la Ciencia. Buenos Aires, Argentina, 2003. Oral communication.
 103. M. Ponsà, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Aguilera, M. Garcia. *Heterochromatin polymorphisms and fragile site analysis in Cebus nigrivittatus (F. Cebidae, Primates) from Venezuela*. Four European Cytogenetics Conference. Bologna (Italy). September 2003. Poster.
 104. **A. Ruiz-Herrera**, F. García, L. Fröenicke, M. Ponsà, J. Egozcue, M. Garcia, R. Stanyon. *Molecular cytogenetics conservation of human aphidicolin-induced fragile sites in Papionini (Primates) species*. Four European Cytogenetics Conference. Bologna (Italy). September 2003. **Oral presentation selected from the scientific committee**
 105. F. García, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Ponsà. *Chromosome homologies among Cebus apella (CAP), Ateles belzebuth hybridus (ABH) and Homo sapiens (HSA)*. Third European Cytogenetics Conference. Paris (France). July 2001. Poster.
 106. M. García, **A. Ruiz-Herrera**, F. García, J. Egozcue, M. Ponsà. *A comparative study of fragile sites on Homo sapiens and Macaca fascicularis (Primates) chromosomes*. Third European Cytogenetics Conference. Paris (France). July 2001. Poster.
 107. **A. Ruiz-Herrera**, F. García, C. Azzalin, E. Giulotto, J. Egozcue, M. Ponsà, M. García. *Intrachromosomal telomere repeats (ITS) on M. fascicularis (Primates) chromosomes*. Third European Cytogenetics Conference. Paris (France). July 2001. Poster.
 108. L. Mora, **A. Ruiz-Herrera**, M. Ponsà, M. García. *Localització de cromosomes en el nucli interfàsic en diferents línies cel·lulars de primats*. Jornades de Genètica i Biodiversitat. Bellaterra (Spain). December 2001. Oral communication.
 109. **A. Ruiz-Herrera**, F. García, M. Ponsà, M. García. *Seqüències telomèriques intersticials (ITS) en els cromosomes de Macaca fascicularis (Primates). Implicacions evolutives*. Jornades de Genètica i Biodiversitat. Bellaterra (Spain). December 2001. Oral communication.
 110. F. García, **A. Ruiz-Herrera**, M. Ponsà, M. García. *Aplicació de la tècnica de ZOO-FISH i bandes G seqüencials en l'estudi de l'evolució cromosòmica del gènere Cebus (Primates)*. Jornades de Genètica i Biodiversitat. Bellaterra (Spain). December 2001. Oral.
 111. **A. Ruiz-Herrera**, F. García, M. Ponsà, M. García. *Homologías cromosómicas de Cebus nigrivittatus y Cebus apella reveladas mediante la técnica de ZOO-FISH*. IV Congreso de la Asociación Primatológica Española. Madrid. September 2001. Poster.
 112. **A. Ruiz-Herrera**, F. García, M. Ponsà, J. Egozcue, M. García. *Estudio comparativo de los lugares frágiles (c-LF) de Macaca fascicularis y Homo sapiens*. III Congreso de la Asociación Primatológica Española. Barcelona. September 1999. Oral.

15. STAGES IN FOREIGN AND NATIONAL CENTRES

- **Dipartimento de Genetica e Microbiologia, Università di Pavia (Italy)**. Host: Prof. E. Giulotto. Period: 2014 and 2016. Research collaboration.
- **Evolutionary Genomics Group, University of Stellenbosch (South Africa)**. Host: Prof. T.J. Robinson. Period: 2010. Research collaboration.
- **Dipartimento de Genetica e Microbiologia, Università di Pavia (Italy)**. Advisor: Prof. E. Giulotto. Period: from June 2007 to November 2008, March 2009 and February 2010. Postdoctoral research activity: The study of the relative contribution of homologous recombination and non-homologous end-joining to spontaneous and radiation-induced gene amplification funded by an Intra-European Fellowship from the FP6 EURATOM program (UE).
- **Evolutionary Genomics Group, University of Stellenbosch (South Africa)**. Advisor: Prof. T.J. Robinson. Period: from January 2005 to May 2007. Postdoctoral research activity:

Investigation of the role of chromosomal rearrangements in speciation and macroevolution. Analysis of evolutionary breakpoints in basal mammals.

- **IBMB (Institut de Biologia Molecular de Barcelona, CSIC). Barcelona (Spain).** Advisor: Dr. J. Castresana. Period: from October to December 2004. Research collaboration: Computational analysis of DNA sequences.
- **IRTAGen (Institut de Recerca Tècnica Agroalimentaria). Barcelona (Spain).** Advisor: Dr. J. Ballester. Period: June 2004. Postdoctoral research activity: Evolutionary studies of microsatellite loci. Human microsatellites applicable for analysis of genetic variation in *Miopithecus talapoin*.
- **Evolutionary Biology Group (BIOEVO). University Simón Bolívar, Caracas (Venezuela).** Advisor: Prof. M. Aguilera. Period: March 2002. PhD research activities: Cell cultures and cytogenetic techniques. Fragile sites induction.
- **National Cancer Institute. National Institute of Health, Frederick, MD (USA).** Advisor: Dr. R. Stanyon. Period: from May 2001 to July 2001. PhD research activities - Topic covered: Flow sorting and Fluorescence *In Situ* Hybridization with whole chromosome probes and BACs/YACs. Fragile sites induction.
- **Dipartimento de Genetica e Microbiologia, Università di Pavia (Italy).** Advisor: Prof. E. Giulotto. Period: from March 2000 to April 2000, and from May 2002 to June 2002. PhD research activities: Studies on interstitial telomeric sequences by Fluorescence In Situ Hybridization (FISH).

16. TEACHING EXPERIENCE

I have been involved in teaching activities since 1998 and have accumulated more than 3,000 hours of teaching in both pre-graduated and post-graduated courses in different disciplines, such as Biology, Biochemistry, Biotechnology, Genetics, Cell Biology, Histology, Primatology and Genome Evolution.

Pre-graduate courses:

- **Cell Biology** – practical lessons to 3rd year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. Course 2002/2003.
- **Cell Biology** – lectures and practical lessons to 3rd year students. Biochemistry degree. *Universitat Autònoma de Barcelona*, Spain. Courses 2002/2003, 2003/2004 and 2004/2005.
- **Cell Biology** – practical lessons to 1st year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. December 1998 and courses 2001/2002, 2002/2003, 2003/2004 and 2004/2005.
- **Cell Culture Techniques** – practical lessons to 3rd year students. Biochemistry degree. *Universitat Autònoma de Barcelona*, Spain. Courses 2002/2003 and 2003/2004.
- **Cytogenetics**– practical lessons to 3rd year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. Course 2001/2002.
- **Reproduction Biology** – practical lessons to 1st year students. Biotechnology degree. *Universitat Autònoma de Barcelona*, Spain. December 1998.
- **Developmental Biology** – practical lessons to 4th year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. Courses 2008/2009 and 2009/2010
- **Cytology and Histology** – lectures and practical lessons to 2nd year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. Since 2010.
- **Cytology and Histology** – lectures and practical lessons to 1st year students. Genetics degree. *Universitat Autònoma de Barcelona*, Spain. Since 2009.
- **Cytology and Histology** – lectures and practical lessons to 1st year students. Microbiology degree. *Universitat Autònoma de Barcelona*, Spain. Since 2009.
- **Primatology** – lectures and practical lessons to 4th year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. Since 2012.

- **Evolution** – lectures and practical lessons to 4th year students. Biology degree. *Universitat Autònoma de Barcelona*, Spain. Since 2012.

Post-graduate courses:

- Visiting Professor at the **Laurea Magistralis (Master Degree) in Molecular Biology and Genetics**. University of Pavia (Pavia, Italy). February 2016.
- Visiting Professor at the **Laurea Magistralis (Master Degree) in Molecular Biology and Genetics**. University of Pavia (Pavia, Italy). February 2014.
- Visiting Professor at the **Vienna Graduate School of Population Genetics** (Vienna, Austria). July 2013.
- Coordinator and teacher of the postgraduate course “**Comparative Genomics**” in the PhD Programme in Cell Biology, *Universitat Autònoma de Barcelona*, Barcelona (Spain). Since 2013.
- Teacher of the postgraduate course “**Principles of Human Evolution**” in the PhD Programme in Human Biology, *Universitat Autònoma de Barcelona* and *Universitat de Barcelona*, Barcelona (Spain). Since 2009.
- Postgraduate Programme “**La Universitat a l’Abast**”, *Universitat Autònoma de Barcelona*, Barcelona (Spain). 2010.
- Coordinator and teacher of the postgraduate course “**Cytogenetics and Evolution**” in the MSc Programme in Cytogenetics and Biology of Reproduction, *Universitat Autònoma de Barcelona*, Barcelona (Spain). 2009-currently.
- Course “**Guidelines for the researcher career**” in the PhD Programme in Cell Biology, *Universitat Autònoma de Barcelona*, Barcelona (Spain). 2007.
- Coordinator and teacher of the postgraduate course “**Cytogenetics and Evolution**” in the PhD Programme in Cell Biology, *Universitat Autònoma de Barcelona*, Barcelona (Spain). 2000, 2002 and 2007.

17. REFEREES ACTIVITIES

- Members of Editorial Boards: *Heredity* (since 2012), *Cytogenetics and Genome Research* (since 2016), *Genes* (since 2018).
- Research journals referee: *Heredity*, *Genome Research*, *Genome Biology*, *Nucleic Acid Research*, *Molecular Biology and Evolution*, *Evolution*, *Genetics*, *BMC Evolutionary Biology*, *Cell Death & Disease*, *Molecular Human Reproduction*, *Biological Journal of Linnean Society*, *Cytogenetics and Genome Research*, *Chromosoma*, *Chromosome Research*, *Molecular Cytogenetics*, *Genetica*, *Organisms Diversity and Evolution*, *Caryologia*, *International Journal of Medical Sciences*, *The Scientific World Journal*
- Research proposal external reviewer: National Science Foundation (NSF, USA), National Research Foundation (NRF, South Africa), National Research Foundation (ANEP, Spain), Czech Science Foundation (GACR, Czech Republic), Ministerio de Educación, Ciencia y Tecnología (ANPCyT, Argentina), Research Grants Council (RGC, Hong Kong).

18. COMMITTEES

- Member of MSc in Cell Biology committee. *Universitat Autònoma de Barcelona* (Spain). 2011-present.
- Member of the customers panel of the *Servei de Cultius Cel·lulars, Producció d’Anticossos i Citometria (SCAC)*. Institut de Biotecnologia i Biomedicina. 2010-present.
- Member of PhD Programme in Cell Biology committee. *Universitat Autònoma de Barcelona* (Spain). 2009-present.
- Member of the scientific committee of *las IV Jornadas del Departamento de Biología Celular, Fisiología e Inmunología*. Barcelona, February 2010.
- Member of the scientific committee of *IX Jornades de Biologia Evolutiva*. Barcelona, July 2009.

- Member of the scientific committee of *Jornades de Genética i Biodiversitat*. Barcelona, December 2001.
- Member of the scientific committee of *III Congreso de la Asociación Primatológica Española*. Barcelona, September 1999.

External examiner for PhD/master defence (national and international)

MSc thesis

- Adriaan Engelbrecht. MSc thesis title: *Phylogeography and chromosomal variation in vlei rats, Otomys irroratus*. University of Stellenbosch (South Africa), July 2010.

PhD thesis

- Francesco Gozzo. PhD thesis title *Molecular organization of satellite-less centromeres in the genus Equus*. Università di Pavia (Italy), December 2017.
- Rebecca O'Connor. PhD thesis title: *Reproductive isolation, in individuals and during evolution, as a result of gross genomic rearrangement in pigs, birds and dinosaurs*. University of Kent (UK), October 2016.
- Riccardo Gamba. PhD thesis title *Epigenetics and transmission of mammalian centromeric domains*. IUSS Pavia (Italy), April 2016.
- Maite G. Barrón Aduriz. PhD thesis title: *Nucleotide variaion patterns and mapping of linked selection blocks along the Drosophila melanogaster genome*. Universitat Autònoma de Barcelona (Spain), July 2015.
- David Vicente. PhD thesis title: *Anàlisi, validació i estudi poblacional de les inversions cromosòmiques entre dos genomes humans*. Universitat Autònoma de Barcelona (Spain), September 2014.
- Hannah Bende. PhD thesis title: *Pathogenesis and Molecular Biology of a Transmissible Tumour in the Tasmanian Devil*. The Australian National University (Australia), April 2013.
- Nuria Medarde. PhD thesis title: *La zona de polimorfismo cromosómico "Barcelona" de Mus musculus domesticus Schwarz y Schwarz, 1943: dinámica espacio-temporal de su estructura y efecto de las fusiones robertsonianas sobre la espermatogénesis*. Universitat Autònoma de Barcelona (Spain), June 2013.
- Alexandra Francès. PhD thesis title: *Efecte genotòxic del fuel del petrolier Prestige: Estudi de seguiment sis anys després d l'exposició*. Universitat Autònoma de Barcelona (Spain), July 2013.
- Oriol Calvete. PhD thesis title: *Dinámica evolutiva de las reordenaciones cromosómicas y coincidencia de los puntos de rotura en Drosophila buzzatii*. Universitat Autònoma de Barcelona (Spain), May 2010.
- Naima Alaoui. PhD thesis title: *Caracterización citogenética y evolución cromosómica de los équidos*. Universitat Autònoma de Barcelona (Spain), May 2009.
- Laia Mora. PhD thesis title: *Chromosomal territories in Primates*. Universitat Autònoma de Barcelona (Spain), March 2007.