CV Juan Valcárcel

Date and place of birth: January 6, 1962 in Lugo (Galicia, Spain).

EDUCATION

- 1979-1984: Undergraduate studies in Biology and Chemistry,
  Colegio Universitario de Lugo, Universidad de Santiago de Compostela (Spain)
- 1984-1986: Specialization in Biochemistry and Molecular Biology (Licenciado / BSc)
  Universidad Autónoma de Madrid (Spain)
-1986-1990: PhD in Molecular Biology, Centro de Biología Molecular Severo Ochoa
  Universidad Autónoma de Madrid. Thesis advisor: Dr. Juan Ortín
  Thesis title: "Regulation of influenza virus pre-mRNA processing"

RESEARCH AND PROFESSIONAL EXPERIENCE

- 1991-1995: Postdoctoral fellow, Program in Molecular Medicine, University of Massachusetts Medical Center, Worcester, MA, USA. Advisor: Prof. Michael R. Green.
-1996-2002: Group Leader, Gene Expression Programme, European Molecular Biology Laboratory (EMBL), Heidelberg, Germany.
- Since 2002: Senior Scientist, Centre de Regulació Genòmica (CRG), Barcelona, Spain.
- Since 2002: Research Professor, Institució Catalana de Recerca i Estudis Avançats (ICREA).
- 2006-2012: Co-coordinator, CRG International PhD Program.
- 2006-2010: Deputy Coordinator, European Alternative Splicing Network of Excellence (EURASNET), funded by the European Union.
- 2010-2014: Coordinator, Consolider Project RNAREG, funded by the Spanish Ministry of Science and Innovation.
- 2012 - 2020: Coordinator (Chair) Gene Regulation, Stem Cells and Cancer Program, CRG.
- 2017 - 2020: Deputy Director, CRG.
- 2022 - 2025: Coordinator European Innovation Council Transition Open TAONas-LUAD project.
- 2023 - 2029: Coordinator European Research Council Synergy UNLEASH project.
- 2024 - : Member of the Steering Committee of the Department of Medicine and Life Sciences, Universitat Pompeu Fabra.

FELLOWSHIPS AND AWARDS

- 1985-1986 Research fellowship from Ministerio de Educación y Ciencia, Spain
- 1987-1990 Predoctoral fellowship from Fondo de Investigaciones Sanitarias, Spain
- 1991-1994 Postdoctoral fellowships from European Molecular Biology Organization (EMBO) and Ministerio de Educación y Ciencia, Spain.
- 2004: elected EMBO member.
- 2007 – 2019: Fundación Botín Investigator
- 2016: elected President of the RNA Society for the period 2017-2018; Past-President 2019-20
- 2021: RNA Society Outstanding Service Award
- 2025: Carmen and Severo Ochoa Foundation Research Award

EDITORIAL BOARDS

Since 2005, member of the Editorial Board of the journal RNA.
2006-2011, associate editor PLoS ONE.
Since 2010, associate editor BMC Molecular Biology.
Since 2010, member of FACULTY 1000.
Since 2011, member of the Editorial Board of the journal Molecular and Cellular Biology
Since 2014, member of the Editorial Board of the journal Molecular Cell
2015 - 2021, member of the Board of Reviewing Editors of the journal eLife

SCIENTIFIC ADVISORY BOARDS

2009 - 2018 Institut de Génétique et Dévelopement de Rennes.
Since 2012, BioISI (Biosystems and Integrative Sciences Institute) Lisbon.

2015-2023 CABIMER (Andalusian Center for Molecular Biology and Regenerative Medicine) Seville
2015: H3 Biomedicine, Inc. Boston, MA (USA)
2015 -2018: member of the Wellcome Trust Science Funding Interviewing Panel
Since 2017: counselor, Fundación Gadea por la Ciencia
2019: member of the Wellcome Trust PhD Programmes Evaluation Committee
Since 2019: Stoke Therapeutics, Bedford MA (USA)
Since 2019: Remix Therapeutics, Cambridge MA (USA).
Since 2021: Molecular Biology Institute of Barcelona (IBMB - CSIC)
2022 - 2030: International Institute of Molecular and Cell Biology (IIMCB), Warsaw, Poland
2022: IntronX, New Haven, CT (USA).
Since 2024: Centro de Biología Molecular Severo Ochoa, Madrid, Spain.
Since 2025: Instituto de Biomedicina de Valencia (CSIC), Spain.
Since 2025: Instituto de Parasitología y Medicina López Neyra (IPBNL – CSIC), Granada, Spain

FOUNDATION BOARD

Since 2026: member of the Board of the Carmen and Severo Ochoa Foundation

PUBLICATIONS

As PhD student (Juan Ortín's lab Centro de Biología Molecular Severo Ochoa 1986-1990)

1. Valcárcel, J. and Ortín, J: Phenotypic hiding: the carryover of mutations in RNA viruses as shown by detection of *mar* mutants in influenza virus.
Journal of Virology, 63: 4107-4109 (1989).

2. Martínez, C., de la Luna, S., Peláez, F., López de Turiso, J.A., Valcárcel, J., de Haro, C. and Ortín, J: Permanent cell lines that show temperature-dependent expression of adenovirus virus-associated RNA.
Journal of Virology, 63: 5445-5450 (1989).

3. Valcárcel, J., Portela, A. and Ortín, J: Regulated M1 mRNA splicing during influenza virus infection.
Journal of General Virology 72: 1301-1308 (1991).

4. Beloso, A., Martínez, C., Valcárcel, J.,Fernández-Santarén, J. and Ortín, J: Degradation of mRNA during influenza virus infection: its possible role in protein synthesis shutoff.
Journal of General Virology 73, 575-581 (1992).

5. Suárez, P., Valcárcel, J. and Ortín, J: Heterogeneity of the mutation rates of influenza A viruses: isolation of mutator mutants.
Journal of Virology 66: 2491-2494 (1992).

6. Nieto, A., de la Luna, S., Bárcena, J., Portela, A., Valcárcel, J., Melero, J.A. and Ortín, J: Nuclear transport of influenza virus polymerase PA protein.
Virus Research 24: 65-75 (1992).

7. Valcárcel, J., Fortes, P. and Ortín, J: Splicing of influenza virus matrix protein mRNA expressed from a simian virus 40 recombinant
Journal of General Virology 74: 1317-1326 (1993).

As postdoc (Michael R. Green's lab, University of Massachusetts 1991-1995)

8. Valcárcel, J., Singh, R., Zamore, P.D. and Green, M.R: The protein Sex-lethal antagonizes the splicing factor U2AF to regulate alternative splicing of *transformer* pre-mRNA.
Nature 362, 171-175 (1993).

9. Cubitt, B, Oldstone, C., Valcárcel, J. and de la Torre, J.C: RNA splicing contributes to the generation of mature mRNAs of Borna disease virus, a non-segmented negative strand RNA virus.
Virus Research 34, 69-79 (1994).

10. Valcárcel, J, Singh, R. and Green M.R: Mechanisms of regulated pre-mRNA splicing
In "RNA Processing". (1995) Angus I. Lamond, Ed. pp. 97-102. R.G. Landes Publishers, Austin, TX.

11. Singh, R., Valcárcel, J. and Green, M.R. Distinct binding specificities and functions of higher eukaryotic polypyrimidine tract-binding proteins.
Science 268, 1173-1176 (1995).

12. Gaur, R.K., Valcárcel, J. and Green, M.R: Sequential recognition of the pre-mRNA branch point by U2AF^{65} and a novel spliceosome associated 28-kDa protein.
RNA 1: 407-417 (1995).

13. Valcárcel, J., Gaur, R.K., Singh, R. and Green, M.R: Interaction of U2AF^{65} RS region with pre-mRNA branch point and promotion of base pairing with U2 snRNA.
Science, 273: 1706-1709 (1996).

14. Valcárcel, J. and Green, M.R: SR proteins: pleiotropic functions in pre-mRNA splicing.
Trends in Biochemical Sciences 21: 296-301 (1996).

15. Gama-Carvalho, M., Krauss, R.D., Chiang, L., Valcárcel, J., Green, M.R. and Carmo-Fonseca, M: Targeting of U2AF^{65} to sites of active splicing in the nucleus.
Journal of Cell Biology, 137: 975-987 (1997).

16. Valcárcel, J, Martínez, C. and Green, M.R.: Functional analysis of splicing factors and regulators.
In "mRNA Formation and Function" (1997) Joel D. Richter, Ed. pp. 31-53. Academic Press, San Diego, CA.

17. Fleckner, J., Zhang, M., Valcárcel, J. and Green, M.R: U2AF^{65} recruits a novel human DEAD box protein required for the U2 snRNP-branchpoint interaction.
Genes & Development, 11: 1864-1872 (1997).

As Group Leader (European Molecular Biology Laboratory 1996-2002)

18. Valcárcel, J. and Gebauer, F: The dawn of PTB.
Current Biology, 7: R705-R708 (1997).

19. Granadino, B., Penalva, L.O.F., Green, M.R., Valcárcel, J., and Sánchez, L: Distinct mechanisms of splicing regulation *in vivo* by the *Drosophila* protein Sex-lethal.

Proc. Natl. Acad. Sci. U.S.A., 94: 7343-7348 (1997).

20. Gebauer, F., Merendino, L., Hentze, M.W. and Valcárcel, J: Novel functions for "nuclear factors" in the cytoplasm: the Sex-lethal paradigm.
Seminars in Cell and Developmental Biology, 8: 561-566 (1997).

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RNA, 4: 142-150 (1998).

22. Lallena, M-J., Martínez, C., Valcárcel, J. and Correas, I: Functional association of protein 4.1 with components of the splicing machinery.
Journal of Cell Science, 111: 1963-1971 (1998).

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Journal of Biological Chemistry, 273: 34603-34610 (1998).

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Molecular and Cellular Biology, 19: 8263-8271 (1999).

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Nature 402: 838-841 (1999).
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26. Penalva, L.O.F. and Valcárcel, J: An optimized procedure to mutagenize long (>10 kb) plasmids by PCR.
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exon definition and catalysis is important for *Sex-lethal* autoregulation.
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Journal of Biological Chemistry, 276: 13104-13112 (2001).

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Apoptosis, 6: 463-468 (2001).

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EMBO Journal, 20: 5748-5758 (2001).

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Nucleic Acids Research, 30: E51-1 (2002).
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Cell, 109: 285-296 (2002).
Reviewed in Graveley, B.R. **Cell**, 109: 409-412 (2002).

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42. Förch, P., Puig, O., Martínez, C., Séraphin, B. and Valcárcel, J: The splicing regulator TIA-1 interacts with U1-C to promote U1 snRNP recruitment to 5' splice sites.
EMBO Journal, 21: 6882-6892 (2002).

43. Förch, P. and Valcárcel J: Splicing regulation in Drosophila sex determination.
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Biochemical Journal, 372: 235-240 (2003).

45. Ortega, A., Niksic, M., Bachi, A., Wilm, M., Sánchez, L., Hastie, N., and Valcárcel, J: Biochemical function of Female-Lethal(2)D / Wilms' Tumor Suppressor-1 Associated proteins in alternative pre-mRNA splicing.
Journal of Biological Chemistry, 278: 3040-3047 (2003).

As Group Leader (Center for Genomic Regulation) and ICREA Research Professor 2002-present

46. Bilbao, D. and Valcárcel, J: Getting to the heart of a splicing enhancer.
Nature Structural Biology.10:6-7 (2003).

47. Banerjee, H., Rahn, A., Gawande, B., Guth, S., Valcárcel, J., and Singh, R: The conserved RNA Recognition Motif 3 of U2 snRNA Auxiliary Factor (U2AF^{65}) is essential *in vivo* but dispensable for activity *in vitro*
RNA, 10:240-253 (2004).

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Journal of Biological Chemistry, 279:27039-49 (2004).

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Nature Genetics, 36:916-7 (2004).

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Journal of Biological Chemistry, 280: 4779-84 (2005).

51. Roesler, J., Izquierdo, J.M., Ryser, M., Rössen-Wolff, A., Gahr, M., Valcárcel, J., Lenardo, M.J., Zheng, L: Haploinsufficiency, rather than the effect of an excessive production of soluble CD95 (CD95ΔTM) is the basis for ALPS Ia in a family with duplicated 3' splice site AG in Fas intron 5 on one allele.
Blood, 106: 1652-9 (2005).

52. Singh, R. and Valcárcel, J: Building specificity with non-specific RNA binding proteins.
Nature Structural and Molecular Biology, 12: 645-653 (2005).

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Molecular Cell, 19: 475-484 (2005).
Reviewed by Spellman, R. and Smith, C.W. Novel modes of splicing repression by PTB. Trends Biochem Sci. 31: 73-76 (2006).

54. Mendes-Soares, L.M. and Valcárcel, J: The expanding transcriptome: the genome as the "Book of Sand".
EMBO Journal, 25: 923-931 (2006).

55. Mendes-Soares, L.M., Zanier, K., Mackereth, C., Sattler, M. and Valcárcel, J: Intron removal requires proofreading of U2AF / 3' splice site recognition by DEK.
Science, 312: 1961-1965 (2006).
Science Online seminar: http://www.sciencemag.org/multimedia/video/seminars/
Reviewed by Kress and Guthrie: Accurate RNA siting and splicing gets help from a DEK-hand. Science 312: 1886-1887 (2006). Spotlight ACS Chemical Biology 1: 329 (2006).

56. Izquierdo, J.M. and Valcárcel, J: A simple principle to explain the evolution of pre-mRNA splicing.
Genes & Development, 20: 1679-1684 (2006).

57. Guigó, R. and Valcárcel, J: Unweaving the meanings of messenger RNA sequences.
Molecular Cell, 23: 150-151 (2006).

58. Izquierdo, J.M. and Valcárcel, J: Fas-activated serine/threonine kinase (FAST) synergizes with TIA-1 / TIAR proteins to regulate Fas alternative splicing.
Journal of Biological Chemistry, 282: 1539-1543 (2007).

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Nature Structural and Molecular Biology, 14: 620-629 (2007).

60. Vilardell, J. and Valcárcel, J: Powering a two-stroke RNA engine.
Nature Structural and Molecular Biology, 14: 574-576 (2007).

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Journal of Biological Chemistry, 282: 19410-19417 (2007).

62. Ben-Dov, C., Hartmann, B., Lundgren, J. and Valcárcel, J: Genome-wide analysis of alternative pre-mRNA splicing.
Journal of Biological Chemistry, 283: 1229- 1233 (2008).

63. Martins-Araujo, M. and Valcárcel, J: A guide to one of the genome's best kept secrets.
Molecular Cell, 31: 782-784 (2008).

64. Bonnal, S., Martínez, C., Förch, P., Bachi, A., Wilm, M. and Valcárcel , J: RBM5 / Luca-15 / H37 regulates Fas alternative splice site pairing after exon definition.
Molecular Cell, 32: 81-95 (2008).
Reviewed by Kotlajich and Klemens, "Death by splicing: tumor suppressor RBM5 freezes splice site pairing" Molecular Cell, 32: 162-164 (2008).

65. Bonnal, S. and Valcárcel, J: Spliceosome meets telomerase.
Nature, 456: 879-880 (2008).

66. Martins-Araujo, M., Bonnal, S., Hastings, M.L., Krainer, A.R. and Valcárcel, J: Differential 3' splice site recognition of SMN1 and SMN2 transcripts by U2AF and U2 snRNP.
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67. Hartmann, B., Castelo, R., Blanchette, M., Boue, S., Rio, D.C. and Valcárcel, J: Global analysis of alternative splicing regulation by insulin and wingless signalling in *Drosophila* cells.
Genome Biology, 10:R11 (2009).

68. Hartmann, B. and Valcárcel, J. Decrypting the genome's alternative messages.
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69. Tilgner, H., Nikolau, C., Althammer, S., Sammeth, M., Beato, M., Valcárcel, J. and Guigó, R: Nucleosome positioning as a determinant of exon recognition.
Nature Structural & Molecular Biology, 16: 996-1001 (2009).

70. Corrionero, A. and Valcárcel, J: RNA Processing: redrawing the map of charted territory.
Molecular Cell, 36: 918-919 (2009).

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Nature, 465: 45-46 (2010).

72. Tavanez, J. and Valcárcel, J: A mastermind for EMT.
EMBO Journal, 29: 3217-3218 (2010).

73. Alló, M., Schor, I.E., Muñoz, M.J., de la Mata, M., Agirre, E., Valcárcel, J., Eyras, E. and Kornblihtt, A.R: Chromatin and alternative splicing.
Cold Spring Harb. Symp. Quant. Biol., 75: 103-111 (2010).

74. Corrionero, A., Raker, V., Izquierdo, J.M. and Valcárcel, J: Strict 3' splice site sequence requirements for U2 snRNP recruitment after U2AF binding underlie a genetic defect leading to autoimmune disease.
RNA, 17: 401-411 (2011).

75. Hartmann, B., Castelo, R., Miñana, B., Peden, E., Blanchette, M., Rio, D.C., Singh, R. and Valcárcel, J: Distinct programs establish widespread sex-specific alternative splicing in Drosophila melanogaster.
RNA, 17: 453-468 (2011).

76. Corrionero, A., Miñana, B. and Valcárcel, J: Reduced fidelity of branch point recognition and alternative splicing induced by the anti-tumor drug Spliceostatin A.
Genes & Development, 25: 445-459 (2011).

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Nature, 475: 408-411 (2011).

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Molecular Cell, 43: 353-368 (2011).

79. Tavanez, J.P., Madl, T., Kooshapur H, Sattler, M. and Valcárcel, J: hnRNP A1 proofreads 3' splice site recognition by U2AF.
Molecular Cell, 45: 314-329 (2012).

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Science, 338: 1547-1548 (2012).

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Molecular Cell, 51: 279-280 (2013).

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Molecular Cell, 52: 720-733 (2013).

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Cell Reports, 7: 1211-1226 (2014).

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Science, 345: 624-625 (2014).

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EMBO Journal, 33: 2601-2603 (2014).

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107. Papasaikas, P. and Valcárcel, J: The Spliceosome: the ultimate RNA chaperone and sculptor.
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* Co-corresponding authors

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Nature Microbiology, 1: 16100 (2016)

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* Co-corresponding authors

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* Co-corresponding authors

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* Co-corresponding authors
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* Co-corresponding authors
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* Co-corresponding authors
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Manuscripts in preparation:

150. Arecco, N. and Valcárcel, J. Regulation of pre-mRNA splicing by small molecules. Commissioned by Michael Sattler and Gian-Gaetano Tartaglia, editors of Issue of *Current Opinion in Structural Biology* on Protein-Nucleic Acid Interactions.

151. Herrero-Vicente, J., Rogalska, M.E., Anglada-Girotto, M. and Valcárcel, J. Splicing vulnerabilities of MYC activation in immortalized cells.

152. Mays, S., Bonnal, S., Pavlyokov, M., Battistini, F., MacRae, A., Orozco, M., Pena, V. and Valcárcel, J. Structural and functional basis for selective transcriptomic effects of antitumor SF3B1 inhibitors.

153. Guerra-Moreno, A., Hoffmann, T., Segovia, C., Martínez-Lumbreras, S., Granata, G., Maldonado, A., Marqués, M., Dyrskjot, L., Sattler, M., Real, F.X. and Valcárcel, J. Bladder cancer-associated mutations in RBM10 reduce association with U2 snRNP and impact on miRNA production via ALAS1 alternative splicing.

MEETINGS.

Meetings organized:

- **Juan March Foundation Workshop on "From transcript to protein: mRNA processing, transport and translation"**. Madrid, March 1996. Co-organized with Drs. Iain W. Mattaj and Juan Ortín

- **Juan March Foundation / EMBO Workshop on "Regulation of messenger RNA processing"**. Madrid, Oct.2-4, 2000. Co-organized with Drs.Walter Keller and Juan Ortín.

- 8th Annual Meeting of the RNA Society. Vienna, July 2003. Co-organized with Drs. Renée Schröder, Andrea Barta, Lynne Maquat and Scott Strobel.

- "Coupling between transcription and RNA Processing". Universidad Internacional de Andalucía, Baeza, Nov 2004. Co-organized with Prof. Miguel Beato.

- "Inaugural meeting of the European Alternative Splicing network of Excellence". Sitges, Spain, April 2006.

- EMBO conference "Pre-mRNA processing and disease". Co-organized with Franco Pagani, Francisco Baralle and Reinhard Lührmann. Cortina d'Ampezzo, Italy, January 2007.

- **"Genomic regulation: executing the code".** CRG Annual Symposium, November 2007. Co-organized with Miguel Beato and Ramin Shiekhattar.

- **EMBO conference "RNA and the etiology of disease".** Co-organized with Claudia Bagni, Joel Richter and Francisco Baralle. Rome, May 2008.

- **13th Annual meeting of the RNA Society**. Co-organized with Reinhard Lührmann, Elena Conti, Volker Erdmann, Witold Filipowicz, Elena Conti and Joan Steitz. Berlin, July 2008.

- **EURASNET Workshop "High-throughput technologies for the analysis of alternative splicing".** Co-organized with Christopher W.J. Smith and Federico Pallardó. Valencia, February 2009.

- **EURASNET Workshop "Mouse models for alternative splicing studies".** Co-organized with Glauco Tocchini-Valentini. Assissi, April 2009.

- International EURASNET meeting on Alternative Splicing. Main organizer. Granada, March 2011.

- IMPCC & RNAREG Joint Symposium RNA Biology in Cancer and other Diseases. Co-organized with Mayka Sánchez. Barcelona, May 2012.

- **CRG Xth Anniversary International Symposium.** Co-organizer with CRG Program Coordinators. October 2012.

- **Cell Symposia Functional RNAs.** Co-organized with Cell Press editors Boyana Konforti and Miao Chih Tsai. Sitges, December 2012.

- **CRG International Symposium "Gene Regulation, Stem Cells and Cancer".** Co-organized with the faculty of the Gene Regulation, Stem Cells and Cancer program, CRG. November 2014.

- **post-EURASNET meetings** (Trieste, November 2012, November 2013 and April 2015), co-organized with various EURASNET colleagues, including Emanuele Buratti and Francisco Baralle.

- IMPCC & RNAREG Joint Symposium RNA Biology in Cancer and other Diseases. Co-organized with Mayka Sánchez. Barcelona, November 2015.

- **Hallmarks of Cancer: Focus on RNA.** Satellite meeting of the RNA Society Meeting 2017. Co-organized with Stephan Vagner, Martin Dutertre, Petr Svoboda, David Stanek and Sandra Wolin. Prague, May 2017.

- **From snurps to cryoEM structures of the spliceosome. A Symposium in honor of Prof. Reinhard Lührmann.** Berlin, September 2024.

- Unlocking RNA's potential in Medicine Symposium. Co-organized with Maria Carmo-Fonseca, Michal Lotem and Rotem Karni. Porto, 25-26 September 2024.

- **The complex life of RNA.** Co-organized with Elena Conti, Karla Neugebauer, Torben H. Jensen and Olivier Duss. EMBL, Heidelberg, October 2026.

Participation in conferences as invited speaker:

1. Juan March Foundation Workshop "From transcript to protein: mRNA processing, transport and translation". Madrid, March 1996.
2. European Research Conference on "Molecular Biology of RNA".Castelvecchio Pascoli, Italy. September 1999.
3. Fundación Juan March Workshop on Regulation of messenger RNA processing. Madrid, October 2000.
4. Euresco conference “Molecular Biology of RNA”. Granada, September 2001.
5. Transcriptome 2002 Conference. Seattle, March 2002.
6. 3th Human Frontier Science Program Awardees' Annual Meeting. Cambridge, July 2003.
7. "Alternative Splicing- Biology & Data". Industry Programme Workshop, European Bioinformatics Institute (EMBL-EBI), Hinxton. July 2003.
8. Gene Expression and RNA processing meeting of the ICGEB & Universidad de Buenos Aires. Iguazú Falls, Argentina. Nov. 30-Dec 3, 2003.
9. Meeting of the Swiss RNA Society. Bern, Switzerland. October 15, 2004.
10. Coupling between transcription and RNA processing. Universidad Internacional de Andalucía, Baeza, November 2004.
11. CNRS Conference Jacques Monod “Regulation of pre-mRNA splicing”. Aussois, France. April 2005.
12. ESF Workshop “The pathology of pre-mRNA splicing: diagnostic and mechanistic aspects”. Trieste, Italy. April 2005.
13. Frontiers of Molecular Biology, 2005 EMBO members meeting. Warsaw, Poland. October 2005.
14. Mini-symposium “Biomolecular Recognition” organized by the Royal Swedish Academy of Sciences. Stockholm, September 22, 2006.
15. RNA in disease and therapy Workshop, Universidad Internacional de Andalucía, October 2006.
16. 2020 Vision: variation and function in the genome, Genome Canada International Conference, Quebec City, October 2006
17. EMBO-ICGEB Workshop: Pre-mRNA processing and disease. Cortina d’Ampezzo, January 2007.
18. ISBM Satellite Meeting, Vienna, Austria, July 2007.
19. ELSO meeting, Dresden, September 2007
20. Hans-Fischer Symposium für Bioorganische Chemie “RNA Moleküle des Lebens”. Munich, November 2007.
21. EMBO meeting: RNA and Etiology of Disease. Rome, May 2008.
22. Gordon Research Conference “The biology of post-transcriptional gene regulation”. Colby College, MN, June 2008.
23. EURASNET Workshop on Alternative Splicing in Neurodegenerative Diseases and Cancer. Tel-Aviv, February 2010.
24. 21st Meeting of the European Association for Cancer Research. Oslo, June 2010.
25. Gordon Research Conference “The biology of post-transcriptional gene regulation”. Newport, RI, July 2010.
26. 3th Bordeaux RNA Club Annual Workshop. June 2011.
27. Gene expression and RNA processing symposium. Iguazú Falls, Argentina. September 2011.
28.- New Frontiers in Haematological Malignancies International Symposium. Pamplona. November 2011.
29.- Perpectives in Translational Medicine. Barcelona, September 2012.
30.- Cell Symposium "Functional RNAs". Sitges, Spain. December 2012.

31.- Fundación Pablo Ugarte Symposium on Ewing Sarcoma. Madrid. March 2013.
32.- Genomics days symposium. University of Lausanne, Switzerland. February 2013.
33.- FEBS meeting. St. Petersburg, Russia. July 2013.
34.- 50th anniversary, Spanish Biochemical and Molecular Biology Society. Madrid. Sept 2013.
35.- II Post-EURASNET Meeting. Trieste. November 2013.
36.- RNA metabolism, cancer, development and diseases. Nice. December 2013.
37.- Chemical Biology of RNA Splicing. Fujisawa. March 2014. Organized by Takeda Inc.
38.- Keynote speaker at the Ist joint meeting of the Israeli iCORES, Jerusalem. January 2015.
39.- Hallmarks of cancer: focus on RNA. Institute Curie, Paris. March 2015.
40.- III Post-EURASNET Meeting. Trieste. April 2015.
41.- FEBS meeting. Berlin. July 2015.
42.- RNP and Disease. Marrakech. October 2015
43.- RNA Day at Glaxo-Smith-Klyne. Collegeville, USA. November 2015.
44.- Inaugural talk of the Academic Year, University of Trento, February 2016.
45.- Spliceosome kinetics, catalysis and regulation. Tsinghua Univ., China. April 2016.
46.- Cancer Research Technologies Splicing Workshop. Cancer Research UK. London, May 2016.
47.- Keynote speaker, Israeli Society for Biochemistry and Molecular Biology, Yosi Sperling Memorial Symposium, Weizmann Institute, Israel. September 2016.
48.- Severo Ochoa Lecture at the Meeting of the Chilean Biochemistry and Molecular Biology Society. Puerto Varas, Chile, September 2016.
49.- Beyond Cancer Genomes. BDebate Conference on Epigenetics&Cancer. Barcelona. October 2016.
50.- Keystone Symposium “mRNA processing and human disease”. Taos, New Mexico. March 2017.
51.- Keynote Speaker, RNA Society Meeting, Prague, June 2017.
52.- Special Lecture, Naito Conference, Sapporo, June 2017.
53.- FEBS meeting. Jerusalem. September 2017.
54.- Keynote speaker. Meeting of the RNA society of Sweden. Örenäs, Sweden. September 2017.
55.- Invited panelist. Cold Spring Harbor Laboratory Meeting "40 years of pre-mRNA splicing". Cold Spring Harbor, NY. October 2017.
56.- Session Chair, FEBS meeting. Krakow. July 2019.
57.- Keynote speaker. Singapore's RNA Biology Symposium. Singapore, October 2019.
58.- Tsinghua-Science Symposium on Novel Proteins and Structures, Beijing November 2919.
59.- EMBO/EMBL Symposium "The complex life of RNA", Virtual Conference, October 2020.
60.- Dioscuri Center- IIMCB Inauguration, Warsaw, Poland, September 2021.
60.- “RNA: Beyond its Genetic Code” organized by IMB Mainz and University of Cologne, March 2022.
61.- EMBO Workshop “RNA: Structure meets function”, Akersberga, Sweden, June 2022.
62.- Forbeck forum Therapeutic targeting of mRNA splicing in cancer, Asilomar, CA, September 2023.
63.- Cold Spring Harbor Asia Conference on RNA Biology, Suzhou, China, September 2024.
64.- RNA Horizons 2024 Therapeutics Symposium “Unlocking the RNA’s Potential in Medicine”. Alfandega Congress Centre, Porto, Portugal, September 27-27, 2024.
65.- Bridging RNA Biology and Therapy Symposium: exploring the frontiers of advanced medicine. CIMA, Pamplona, Spain, October 9-11, 2024.
66.- The complex life of RNA, Heidelberg, Germany, October 2024.
67.- 11th Forum on Translational Immunology and Immunotherapy of Cancer (FIT Cancer 11), Madrid, March 13-15 2025.
68.- Helmholtz Drug Discovery Conference 2025, Berlin, April 28-30, 2025.
69.- International Conference on Interconnections and Cross-regulation of Gene Expression Processes, Göttingen, September 17-19, 2025.
70.- 2025 Cell Research Symposium on RNA: Mechanisms and Therapeutics, Beijing,

September 25-27, 2025.
70.- Heinrich Wieland Prize Symposium in honor of Prof. Adrian Krainer, Munich, December 11, 2025.
71.- RNA Regulation in Aging Biology Symposium, National Institute of Aging (online talk), January 28, 2026.
72.- Gordon Research Conference on "Post-transcriptional Gene Regulation", Portland, Maine, July 2026.
73.- Keynote speaker, LARP Society Symposium, Regensburg, September 2026.

Acted as invited session chair at the following meetings:
-European Research Conference on "Molecular Biology of RNA". Castelvecchio Pascoli, Italy. September 1999.
-6th Annual Meeting of the RNA Society. Banff. May 2001.
-Eukaryotic RNA processing. Cold Spring Harbor. August 2003.
-Jacques Monod conference "Regulation of pre-mRNA splicing and human disease". Aussois. April 2005.
-11th Annual Meeting of the RNA Society. Seattle. June 2006.
-EMBO conference "Pre-mRNA processing and disease". Cortina. January 2007.
-ELSO meeting, Dresden. September 2007.
-1st International EURASNET Conference on Alternative Splicing. Krakow. May 2008.
-Gordon Conference "The Biology of Post-transcriptional Gene Regulation" Waterville, June-July 2008.
-Eukaryotic RNA processing. Cold Spring Harbor. August 2009.
-50th Anniversary, Spanish Biochemical and Molecular Biology Society. Madrid. September 2013.
- Beyond Cancer Genomes. BDebate Conference on Epigenetics&Cancer. Barcelona. October 2016.
- Keystone Symposium "mRNA processing and human disease". Taos, New Mexico. March 2017.
- Naito Conference. Sapporo, June 2017.
- Cold Spring Harbor Eukaryotic RNA Processing Meeting. August 2017.
- FEBS meeting. Jerusalem. September 2017. Chair of two sessions on 'RNA Processing and Regulation'.
- FEBS meeting. Krakow. July 2019.
- RNA Society Meeting. Vancouver, May 2020.
- EMBO Workshop "RNA: Structure meets function", Akersberga, Sweden, June 2022.
- Forbeck forum Therapeutic targeting of mRNA splicing in cancer, Asilomar, CA, September 2023.
- CSHL Asia Conference on RNA Biology, Suzhou, China, September 2024.

Abstracts:
1.- "Cloning and expression of influenza virus segment 7".
J. Valcárcel, A. Portela, C. Martínez and J. Ortín. Poster presentation.
Negative Strand Virus Meeting 1988. Dinard (France). September 1988.
2.- "Regulation of influenza segment 7 splicing".
J. Valcárcel, C. Martínez, A. Portela and J. Ortín.
VIIIth. International Congress of Virology. Berlin. August 1990. Poster presentation.
3.-"Activities of polypyrimidine tract-binding proteins: implications for alternative splicing"
J. Valcárcel, M. Zhang, P.D.Zamore and M.R. Green
Cold Spring Harbor Meeting on RNA Processing. Cold Spring Harbor. May 1991.Poster presentation.
4.-"Mechanism of *tra* alternative splicing regulation by Sex-lethal in vitro"

J. Valcárcel, P.D.Zamore and M.R.Green
RNA Processing Meeting. Keystone, Colorado. May 1992. Platform presentation.

5.-"Structural and functional analysis of the U2AF^{65} arginine-serine-rich domain"
J. Valcárcel and M. R. Green
Cold Spring Harbor Meeting on RNA Processing. Cold Spring Harbor. May, 1993. Platform presentation.

6.-"Higher eukaryotic polypyrimidine-tract binding proteins recognize the pyrimidine-tract in distinct fashions"
R. Singh, J. Valcárcel and M.R. Green
Cold Spring Harbor Meeting on RNA Processing. Cold Spring Harbor. May 1993. Poster presentation.

7.-"3' splice site activation in mammalian pre-mRNA splicing"
J. Valcárcel, R. Singh, S. Wu and M.R.Green
EMBO Workshop on Structure and Function of Eukaryotic RNPs. Arolla (Switzerland). August 1993. Platform presentation.

8.-"U2AF^{65} arginine-serine-rich domain has an annealing activity that facilitates base-pairing between U2 snRNA and the pre-mRNA branch-point region"
J.Valcárcel and M.R. Green.
RNA Processing Meeting of the RNA Society. Madison. May 1994. Platform presentation.

9.-"Mechanisms of 3' splice site activation by exon enhancers"
J. Valcárcel and M.R. Green
Cold Spring Harbor Meeting on RNA Processing. Cold Spring Harbor. May 1995. Poster presentation.

10.-"Mechanisms of 3' splice site definition and regulation"
J. Valcárcel, R.K. Gaur and M.R. Green
Platform presentation.

11.-"Mechanisms of splicing regulation by the protein Sex-lethal"
L. Merendino, L.O.F. Penalva, C. Martínez, B. Granadino, M.R. Green, L. Sánchez and J. Valcárcel
2nd Annual Meeting of the RNA Society. Banff (Canada). May 1997. Platform presentation.

12.-"Mechanism of regulation of *Drosophila msl-2* pre-mRNA expression by the protein Sex-lethal"
L. Merendino, F. Gebauer, C. Martínez, M. Hentze and J. Valcárcel
Cold Spring Harbor Meeting on RNA Processing. Cold Spring Harbor. August 1997. Platform presentation.

13.-"Distinct mechanisms of splicing regulation by the Drosophila protein Sex-lethal"
L.O.F.Penalva, B. Granadino, M.R.Green, L.Sánchez and J. Valcárcel
Cold Spring Harbor Meeting on RNA Processing. Cold Spring Harbor. August 1997. Poster presentation.

14.-"Mechanism of splicing inhition of msl-2 pre-mRNA by Sex-lethal"
L. Merendino, P. Förch, C. Martinez, D. Bilbao and J. Valcárcel
4th Annual Meeting of the RNA Society. Edinburgh, Scotland. June 1999. Platform presentation.

15.-"U1 snRNP recruitment assisted by the U2 auxiliary factor U2AF^{65}"
P. Foerch, L. Merendino, C. Martinez and J. Valcárcel
4th Annual Meeting of the RNA Society. Edinburgh, Scotland. June 1999. Poster presentation.

16.-"Autoregulation of sex-lethal pre-mRNA splicing:analysis of cis-acting signals and the co-factor Fl(2)d"
L.O.F. Penalva, A. Ortega,M.-J. Lallena, M-F. Ruiz, L. Vicente, B. Granadino, L. Sánchez and J. Valcárcel

European Research Conference on "Molecular Biology of RNA".Castelvecchio Pascoli, Italy. September 1999. Poster presentation.

17.-"U2AF^{35} and SF1 have functions in spliceosome assembly distinct from facilitating U2AF^{65} binding"
S. Guth, C. Martínez and J. Valcárcel
Cold Spring Harbor Meeting on Eukaryotic RNA Processing. Cold Spring Harbor. August 1999. Platform presentation.

18.-"Autoregulation of *Sex-lethal* pre-mRNA splicing: cis-acting sequences and the cofactor FL(2)D".
L.O.F.Penalva, M-F. Ruiz, A. Ortega, M-J. Lallena, L.Vicente, B. Granadino, L. Sánchez and J. Valcárcel
Cold Spring Harbor Meeting on Eukaryotic RNA Processing. Cold Spring Harbor. August 1999. Platform presentation.

19.-"Identification and characterization of the gene female-lethal(2)d (fl(2)d)".
L.O.F. Penalva, A. Ortega, M.F. Ruiz, L. Vicente, B. Granadino, L. Sánchez and J. Valcárcel
16th European Drosophila Research Conference. Zurich. September 1999. Poster presentation.

20.-"A novel vertebrate U2AF35-like protein"
T.R. Pacheco, L. Mendes-Soares, V.Benes, W. Ansorge, F. Stewart, M. Gama-Carvalho, J. Valcárcel and M. Carmo-Fonseca
5th Annual Meeting of the RNA Society. Madison, May 2000. Platform presentation.

21.-" Requirement of U2AF35 and SF1.mBBP in mammalian spliceosome assembly"
S. Guth, T.O.Tange and J. Valcárcel
5th Annual Meeting of the RNA Society. Madison, May 2000. Platform presentation.

22.-"The apoptosis-inducing protein TIA-1 facilitates U1 snRNP binding to 5' splice sites followed by U-rich-tracts"
P. Förch, O. Puig, N. Kedersha, B. Séraphin, P. Anderson and J. Valcárcel
5th Annual Meeting of the RNA Society. Madison, May 2000. Platform presentation.

23.-"Swicth in 3' splice site recognition involving U2AF35 and SPF45 is important for Sex-lethal autoregulation"
M.J.Lallena, K.Chalmers, A.I.Lamond and J.Valcárcel
6th Annual Meeting of the RNA Society. Banff. May 2001. Platform presentation.

24.-"Binding of hnRNP A1 to a novel intron silencer inhibits splicing of the HIV-1 tat/rev intron at a post U2AF binding step"
J.Kjems, C.K.Damgaard, S.Guth, J.Valcárcel and T.O.Tange.
6th Annual Meeting of the RNA Society. Banff. May 2001. Platform presentation

25.-"Characterisation of SPF45 as a novel human pre-mRNA splicing factor"
K.Chalmers, P.Ajuhl, M.J.Lallena, Y.W.Lam, J.Valcárcel and A.I.Lamond
6th Annual Meeting of the RNA Society. Banff. May 2001. Poster presentation.

26.-"Switch in 3' splice site recognition involving U2AF and SPF45 is important for Sex-lethal autoregulation"
M.J.Lallena, K.J.Chalmers, A.I.Lamond and J.Valcárcel
Cold Spring Harbor meeting on "Eukaryotic mRNA processing". Cold Spring Harbor, August 2001. Platform presentation.

27.-"Evidence for multiple spliceosome assembly pathways in HIV-1 Tat/Rev splicing controlled by positive and negative factors"
J.Kjems, C.K.Damgaard, S. Guth, J.Valcárcel and T.O.Tange
Cold Spring Harbor meeting on "Eukaryotic mRNA processing". Cold Spring Harbor, August 2001. Platform presentation.

28.-"Molecular characterization of the *Drosophila fl(2)d* gene, a cofactor of alternative pre-mRNA splicing regulation by Sex-lethal"

A.Ortega, A. Bachi, L.O.F.Penalva, L.Sánchez, M.Wilm and J.Valcárcel
Cold Spring Harbor meeting on "Eukaryotic mRNA processing". Cold Spring Harbor, August 2001. Poster presentation.
29.-"Mechanism of U1 snRNP recruitment by the apoptosis-promoting factor TIA-1"
P.Förch, O.Puig, C.Martínez, N.Kedersha, P.Anderson, B.Séraphin and J.Valcárcel
Cold Spring Harbor meeting on "Eukaryotic mRNA processing". Cold Spring Harbor, August 2001. Platform presentation.
30.- "Regulation of Fas alternative splicing and TIA-1 function" J.M.Izquierdo, P. Förch, A. Rösen-Wolff, J. Roesler and J. Valcárcel. 7th Annual Meeting of the RNA Society. Madison. May 2002. Platform presentation.
31.- "Modulation of U2AF35/3' splice site recognition: interaction betrween U2AF35 and the splice junction component DEK" L.M.Soares, K, Zanier, M. Sattler and J. Valcárcel. 8th Annual Meeting of the RNA Society. Vienna. July 2003. Platform presentation.
32.- "Regulation of FasR alternative splicing by Caspase-mediated cleavage of TIA1 and by antagonism between TIA1 and PTB" J.M. Izquierdo, A. Rössen-Wolff, J. Roesler and J. Valcárcel. 8th Annual Meeting of the RNA Society. Vienna. July 2003. Poster.
33.- "Depletion of U2AF35 in mammalian cells blocks normal cell cycle progression" T.R.Pacheco, J. Valcárcel, and M. Carmo-Fonseca. 8th Annual Meeting of the RNA Society. Vienna. July 2003. Poster.
34.- "Modulation of U2AF35/3' splice site recognition: interaction betrween U2AF35 and the splice junction component DEK" L.M.Soares, K, Zanier, M. Sattler and J. Valcárcel. Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2003. Platform presentation.
35.- "Regulation of FasR alternative splicing by Caspase-mediated cleavage of TIA1 and by antagonism between TIA1 and PTB" J.M. Izquierdo, A. Rössen-Wolff, J. Roesler and J. Valcárcel. Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2003. Platform presentation.
.**36.-** "Modulation of 3' splice site recognition by DEK: role of DEK phosphorylation".L. Mendes Soares, S. Estermann and J. Valcárcel. 9th Annual Meeting of the RNA Society. Madison. June 2004. Poster
37.- "The tumor suppressor protein RBM5 modulates U2AF activity and alternative splicing". D. Bilbao, C. Martínez and J. Valcárcel. 9th Annual Meeting of the RNA Society. Madison. June 2004. Platform presentation.
38.- "Distinct mechanisms of Fas alternative splicing regulation by PTB and RBD5"
S. Bonnal, J. M. Izquierdo, D. Bilbao, N. Majos, C. Martínez and J. Valcárcel" 10th Annual Meeting of the RNA Society. Banff, Canada. May 2005. Platform presentation.
39.- "A tethering approach to explore splicing regulation by PTB bound to an exonic silencer" N. Majos, F. Robinson, A. Rideau2, C. Martínez1, C.W.J. Smith and J. Valcárcel. 10th Annual Meeting of the RNA Society. Banff, Canada. May 2005. Poster presentation.
40.- "Regulation of Fas alternative splicing and autoimmune lymphoproliferative syndrome" V. Raker, J.M. Izquierdo, A. Corrionero, A. Rössen-Wolff, J. Roesler and J. Valcárcel. Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2005.
41.- "Regulation of alternative splicing of the MIA gene" M. Araujo, D. Bilbao and J. Valcárcel. Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2005. Poster.
42.- "Diverse mechanisms of exon silencing in Fas and Pax6 pre-mRNAs" S. Bonnal, N. Majos and J. Valcárcel . Annual Meeting of the RNA Society, Seattle, June 2006. Platform presentation.
43.- "Proof-reading of U2AF / 3' splice site recognition by DEK is required for pre-mRNA splicing but not for spliceosome assembly". L.M. Mendes Soares and J. Valcárcel . Annual Meeting of the RNA Society, Seattle, June 2006. Platform presentation.

44.- "Silencing of exon definition by simple amino acids sequence motifs". N. Majòs, A. Ridau, C.W.J. Smith and J. Valcárcel. First EURASNET International Meeting on Alternative Pre-mRNA Splicing". Krakow, May 2008. Platform presentation.
45.- "Control of alternative splicing by regulatory networks in Drosophila". B. Hartmann, R. Castelo, S. Boue, M. Blanchette, E. Peden, R. Singh, D. Rio and J. Valcárcel. First EURASNET International Meeting on Alternative Pre-mRNA Splicing". Krakow, May 2008. Platform presentation.
46.- "Distinct mechanisms of exon silencing by PTB and the tumor suppressor RBM5". S. Bonnal, C. Martinez, P. Förch, A. Bacchi, M. Wilm and J. Valcárcel. Gordon Research Conference "The biology of post-transcriptional gene regulation". Colby College, MN, June 2008. Poster.
47.- "Molecular mechanisms for an alternative splicing defect in Autoimmune Lymphoproliferative Syndrome". Corrionero, A., 14th Annual Meeting of the RNA Society. Madison, WI, May 2009. Poster.
48.- "Structure-function analysis of OCRE, a novel protein fold involved in alternative splicing regulation". Bonnal, S., and Valcárcel, J. 14th Annual Meeting of the RNA Society. Madison, WI, May 2009. Platform presentation..
49.- "hnRNP A1 confers specificity for 3' splice site recognition by U2AF". J. Tavanez, and J. Valcárcel. ISBM/ECCB Meeting. Stockholm, June 2009. Platform presentation.
50.- "A Single Nucleotide Polymorphism, Risk Factor in Coronary Disease, Regulates Alternative Splicing of the olr1 Gene" JR Tejedor and J. Valcárcel. Cold Spring Harbor Meeting on Eukaryotic RNA processing, August 2009. Poster.
51.- Alternative splicing response to DNA damage. M.P. Paronetto, B. Miñana, C. Ben-Dov and J. Valcárcel. Cold Spring Harbor Meeting on Eukaryotic RNA processing, August 2009. Platform presentation.
52.- Nucleosome positioning as a determinant of exon recognition.Tilgner, H., Nikolau, C., Althammer, S., Sammeth, M., Beato, M., Valcárcel, J. and Guigó, R. Cold Spring Harbor Meeting on Eukaryotic RNA processing, August 2009. Platform presentation.
53.- Exploring the role of nucleosome positioning in alternative splicing. Iannone, C., Tejedor, J.R., Tilgner, H., Miñana, B. and Valcárcel, J. AS-SIG@ISMB Meeting, Boston, July 2010. Poster presentation.
54.- In vivo identification of RNA targets of the Ewing Sarcoma Protein EWS by HITS-CLIP. Paronetto, M.P., Bernardis, I., Bechara, E., Eyras, E. and Valcárcel, J. Gordon Research Conference, Newport, Rhode Island, July 2010. Poster presentation.
55.- Deciphering genetic networks of splicing regulation in vivo. Barberán-Soler, S., Lehner, B. and Valcárcel, J. The EMBO Meeting, Barcelona, September 2010. Poster presentation.
56.- hnRNP A1 confers specificity for 3' splice site recognition by U2AF. Tavanez, J. and Valcárcel, J. EURASNET IFM "Splicing regulation: from molecules to organisms", Berlin, September 2010. Poster presentation.
57.- hnRNP A1 proofreads 3' splice site recognition by U2AF. Tavanez, J. and Valcárcel, J. Second International Conference on Alternative Splicing, Granada March 2011. Platform presentation.
58.- A new function for CPEB1: nuclear processing of pre-mRNAs. Bava FA, Eliscovich C, Ferreira PG, Ben-Dov C, Guigó R, Valcárcel, J and Méndez R. Second International Conference on Alternative Splicing, Granada March 2011. Platform presentation.
59.- Chromatin epigenetics and alternative splicing. Schor IE, Alló M, Fiszbein A, Bertucci P, Buggiano V, Gómez Acuña L, Lières D, Agirre E, Lamond A, Eyras E, Valcárcel J and Kornblihtt AR. Second International Conference on Alternative Splicing, Granada March 2011. Platform presentation.
60.- Deciphering genetic networks of splicing regulation in vivo. Barberán-Soler S, Lehner B and Valcárcel, J. Second International Conference on Alternative Splicing, Granada March 2011.

Poster presentation.
61.- CLIP-Seq of RBM5, 6 and 10 reveals cooperative/competitive roles in alternative splicing regulation of cell proloferation and apoptosis related genes. Bechara EG, Bernardis I, Eyras E and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
62.- Structure-function analysis of OCRE, a novel protein fold involved in alternative splicing regulation. Bonnal S, Miñana B, Mourao A, Sattler M and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
63.- Reduced fidelity of branch point recognition and alternative splicing induced by the anti-tumor drug Spliceostatin A. Corrionero A, Miñana B and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
64.- Exploring the role of nucleosome positioning in alternative splicing. Iannone C, Gaveglia L, Castellano G, Miñana B, Beato M and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation. Cold Spring Harbor Laboratory Eukaryotic RNA Processing meeting, August 2011. Poster presentation.
65.- A computational framework for integrated analysis of high-throughput chromatin and splicing data. Papasaikas P and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
66.- The Ewing Sarcoma protein (EWS) regulates DNA damage-induced alternative splicing. Paronetto MP, Miñana B, Bernardis I, Eyras E and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
67.- A single nucleotide polymorphism in the orl1 gene that is a risk factor in coronary disease regulates alternative splicing. Tajedor JR and Valcárcel J. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation. Cold Spring Harbor Laboratory Eukaryotic RNA Processing meeting, August 2011. Poster presentation.
68.- High-throughput genetic screen for regulators of Fas alternative splicing. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
69.- Bioinformatic analysis of ENCODE data suggests a weak but widespread influence of chromatin organization on alternative splicing. Tilgner H, Iannone C, Curado J, González, D, Djebali D, Merkel A, Valcárcel J and Guigó R. Second International Conference on Alternative Splicing, Granada March 2011. Poster presentation.
70.- CLIP-Seq of RBM5, 6 and 10 reveals cooperative/competitive roles in alternative splicing regulation of cell proloferation and apoptosis related genes. Bechara EG, Bernardis I, Eyras E and Valcárcel J. 16th Annual Meeting of the RNA Society, Kyoto, June 2011. Platform presentation. Cold Spring Harbor Laboratory Eukaryotic RNA Processing meeting, August 2011. Poster presentation.
71.- Multi-domain conformational selection underlies pre-mRNA splicing regulation by U2AF. Mackereth C, Madl T, Bonnal S, Simon B, Zanier K, Gasch A, Rybin V, Valcárcel J and Sattler M. Cold Spring Harbor Laboratory Eukaryotic RNA Processing meeting, August 2011. Platform presentation.
72.- Domains requirement for the function of RBM5, RBM6 and RBM10 in alternative splicing regulation. Bonnal S, Mourao A, Sattler M and Valcárcel J. Cold Spring Harbor Laboratory Eukaryotic RNA Processing meeting, August 2011. Platform presentation.
73.- Tejedor R . 1st post-EURASNET symposium, March 2012. Trieste. Platform presentation.
74.- Barberán S. 1st EURASNET symposium, March 2012. Trieste. Platform presentation.
75.- Vigevani L. 1st EURASNET symposium, March 2012. Trieste. Poster presentation.
76.- Iannone C. 1st EURASNET symposium, March 2012. Trieste. Poster presentation.
77.- Paronetto. 1st EURASNET symposium, March 2012. Trieste. Poster presentation.
78.- Tejedor R. RNA Biology in Cancer and other Diseases. May 2012, Barcelona. Poster.
79.- Bechara E. RNA Biology in Cancer and other Diseases. May 2012, Barcelona. Poster.

80.- Iannone C. RNA Biology in Cancer and other Diseases. May 2012, Barcelona. Poster.
81.- Vigevani L.RNA Biology in Cancer and other Diseases. May 2012, Barcelona. Poster.
82.- Papasaikas P.RNA Biology in Cancer and other Diseases. May 2012, Barcelona. Poster.
83.- Papasaikas P and Valcárcel J. Multiple links between splicing rgeulation and chormatin revealed by an integrated analysis of high-throughput chormatin and splicing perturbation data. RECOMB 2012 (Annual International Conference on Research in Computational Biology). April 2012, Barcelona.
84.- Tejedor R, Papasaikas P and Valcárcel J. Reconstruction of a splicing regulatory circuit involved in cell proliferation and apoptosis. RECOMB 2012 (Annual International Conference on Research in Computational Biology). April 2012, Barcelona. Poster presentation.
85.- Bechara E, Bernardi I, Eyras E and Valcárcel J. CLiP-Seq of RBM5, 6 and 10 indicates cooperative / competitive roles in alternative splicing regulation of cell proliferation and apoptosis related genes. Gordon Research Conference "The Biology of Post-transcriptional Gene Regulation". Newport, July 2012. Poster presentation.
86.- Barberán-Soler S, Iannone C, Ceron J, Fontrodona L, Lamm A, Fire A, Lehner Band Valcárcel J. cTOR alternative splicing is regulated by the antisense transcription of a sperm gene. Gordon Research Conference "The Biology of Post-transcriptional Gene Regulation". Newport, July 2012. Poster presentation.
87.- Valcárcel, J. Control of cell proliferation by alternative pre-mRNA splicing. Perspectives in Translational Medicine. Barcelona, September 2012. Platform presentation.
88.- Bechara E, Bernardi I, Eyras E and Valcárcel J. RBM5, 6 and 10 regulate alternative splicing regulation of cell proliferation and apoptosis related genes. Cell Symposium on Functional RNAs. Sitges, December 2012. Poster presentation.
89.- Valcarcel, J. Identification of alternative splicing regulatory networks. Cell Symposium on Functional RNAs. Sitges, December 2012. Platform presentation.
90.- Papasaikas P, Tejedor J and Valcárcel, J: Comprehensive mapping of the splicing regulatory circuitry involved in cell proliferation and apoptosis. RNA Society Meeting. Davos, June 2013. Poster presentation.
91.- Bechara E, Sebestyén E, Bernardis I, Eyras E and Valcárcel J. RBM5, RBM6 and RBM10 differentially regulate NUMB alternative splicing to control cancer cell proliferation. Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2013. Poster presentation.
92.- Tejedor J, Papasaikas P, Vigevani L and Valcárcel J. Genome-wide RNAi screen and splicing regulatory network analysis link iron homeostasis and alternative splicing regulation. Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2013. Platform presentation.
93.- Barberán-Soler S, Fontrodona L, Lamm A, Iannone C, Cerón J, Lehner B and Valcárcel J. Co-option of the piRNA pathway for germline-specific alternative splicing of *C. elegans* TOR Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2013. Platform presentation.
94.- Horiuchi K, Papasaikas P, Pintado B, Gutiérrez-Adán A, Valcárcel J. TRANSCRIPTOME ANALYSIS OF SPERMATOGENESIS-DEFICIENT Zrsr1 MUTANT MICE REVEALS EXTENSIVE IMPACT ON U12 INTRONS.
Cold Spring Harbor Meeting on Eukaryotic RNA Processing. August 2015. Poster presentation.
95.-Luisa Vigevani, Panagiotis Papasaikas, Sohpie Bonnal, Juan Valcárcel. Molecular basis for the differential sensitivity of 3' splice sites to anti-tumor drugs targeting U2 snRNP.
Cold Spring Harbor Meeting on Eukaryotic RNA Processing. CSHL, August 2015. Platform presentation.
96.- Hernández J, Bechara E, Schlesinger D and Valcárcel J. Mechanisms of numb alternative splicing regulation in lung cancer cells by RBM10 and SF1/BBP.
Cold Spring Harbor Meeting on Eukaryotic RNA Processing. Cold Spring Harbor, August 2015. Platform presentation.
97.- Luisa Vigevani, Panagiotis Papasaikas, Juan Valcárcel. Molecular basis for the differential

sensitivity of 3' splice sites to anti-tumor drugs targeting U2 snRNP. Hallmarks of cancer: Focus on RNA. Paris, October 2015. Short talk.

98.- Hernández J, Bechara E, Schlesinger D and Valcárcel J. Mechanisms of numb alternative splicing regulation in lung cancer cells by RBM10 and SF1/BBP.
Hallmarks of cancer: Focus on RNA. Paris, October 2015. Platform presentation.

99.- Luisa Vigevani, Panagiotis Papasaikas, Juan Valcárcel. Molecular basis for the differential sensitivity of 3' splice sites to anti-tumor drugs targeting U2 snRNP.
RNA Biology in Cancer and Disease. Barcelona, November, 2015. Short talk and poster presentation.

100.- Hernández J, Bechara E, Schlesinger D and Valcárcel J. Mechanisms of numb alternative splicing regulation in lung cancer cells by RBM10 and SF1/BBP.
RNA Biology in Cancer and Disease. November, 2015. Platform presentation.

101.- Daguenet E, Pervuchine D, Guigó R, Valcárcel R. Searching for lncRNAs as potential regulators of Alternative Splicing. RNA Biology in Cancer and other diseases, Barcelona. November 2015. Poster presentation.

102.- Martín-Rodríguez E, Tejedor JR, Papasaikas P, Valcárcel J. Alternative splicing regulation by the SPF45-SR140-CHERP complex.
Barcelona meeting on RNA Biology in Cancer and other Diseases. November 2015. Poster presentation.

103.- Martín-Rodríguez E, Tejedor JR, Papasaikas P, Valcárcel J. Alternative splicing regulation by the SPF45-SR140-CHERP complex. RNP and Disease Meeting. Marrakech, October 2015. Poster presentation.

104.- Papasaikas P, Rao A, Huggins P, Valcarcel J and Lopez AJ. Reconstruction of Composite Regulator-Target Splicing Networks from High-Throughput Transcriptome Data.
RECOMB Comparative Genomics. October 2015. Platform presentation.

105.- Bonnal S, Mourão A, Soni K, Warner L, Bordonné R, Valcárcel J, Sattler. Structural basis for the recognition of spliceosomal SmN/B/B' proteins by the RBM5 OCRE domain in splicing regulation. SifrARN, Toulouse (France), March 2016. Poster presentation.

106.- Miñana B, Julien P, Baeza P, Papsaikas P, Tejedor JR, Lehner B and Valcárcel J. Saturation mutagenesis of alternatively spliced exons reveals dense regulatory content, generalized de-convolution of splicing enhancers and silencers and extensive epistasis. Annual Meeting of the RNA Society. Kyoto, Japan. June 2016. Platform presentation.

107.- Horiuchi K, Papasaikas P, Fabre M, Pintado B, Gutierrez-Adan A and Valcárcel J.. Splicing factor Zrsr1 mutant-induced aberrant U12-type intron splicing impairs spermatogenesis and triggers muscle and erythrocyte disorders. Annual Meeting of the RNA Society. Kyoto, Japan. June 2016. Poster presentation.

108.- Vivori C, Papasaikas P, Di Stefano B, Stadhouders R, Graf T and Valcárcel J. How alternative splicing changes during reprogramming - The case of C/EBPα poising B cells. 4th Post-EURASNET meeting. Poznan, Poland. September 2016. Platform presentation.

109.- Martín Rodríguez E and Valcárcel J. Alternative splicing regulation by SPF45, SR140 and CHERP could control cell proliferation and cell cycle progression. The complex life of mRNA. EMBO-WMBL Symposia. Heidelberg, Germany. October 2016. Poster presentation.

110.- Dujardin, G and Valcárcel J. Potential roles of R-loops in alternative splicing regulation. Annual Meeting of the RNA Society. Prague, May 2017. Platform presentation.

111.- Claudia Vivori, Panagiotis Papasaikas, Bruno Di Stefano, Ralph Stadhouders, Thomas Graf, Juan Valcárcel. Contribution of alternative splicing to deterministic cell reprogramming: the case of C/EBPα poising B cells. Eukaryotic mRNA Processing Meeting. Cold Spring Harbor Laboratory, NY. August 2018. Poster presentation

112.- Elena Martín-Rodríguez, Juan Valcárcel. A complex of the splicing factors SPF45/SR140/CHERP regulates alternative splicing and G2/M cell cycle progression.

Eukaryotic mRNA Processing Meeting. Cold Spring Harbor Laboratory, NY. August 2018. Platform presentation

113.- Mancini E, Rogalska M, Valcárcel J. Reconstruction of splicing regulatory network. Integrating Systems Biology. From Networks to Mechanisms to Models. EMBO Workshop. Heidelberg, Germany. April 2018. Poster presentation.

114.- Rogalska M, Mancini E, Valcárcel J. Self-regulatory network of the core spliceosome. Annual Meeting of the RNA Society. Berkeley, May 2018. Poster presentation.

115.- Juan-Mateu J, Bajew S, Rubio-Moscardo F, Valverde MA, Irimia M, Valcárcel J. SRRM3 regulates a functional program of microexons in endocrine pancreas. 24th Annual Meeting of the RNA Society, Krakow, Poland, June 2019. Poster.

116.- Rogalska M, Mancini E., Hernandez X, Schaefer M, Serrano L and Valcárcel J. Self-regulatory network of the spliceosome. 24th Annual Meeting of the RNA Society, Krakow, Poland, June 2019. Platform presentation.

117.- Vivori C, Papasaikas P, Di Stefano B, Stadhouders R, Graf T and Valcárcel J. Contribution of alternative splicing to deterministic cell reprogramming: the case of C/EBPα poising B cells. 24th Annual Meeting of the RNA Society, Krakow, Poland, June 2019. Platform presentation.

118.- Rogalska M, Mancini E., Hernandez X, Schaefer M, Serrano L and Valcárcel J. Self-regulatory network of the spliceosome. 24th Annual Meeting of the RNA Society, Krakow, Poland, June 2019. Platform presentation.

119.- Mancini E, Rogalska M and Valcárcel J. Reconstruction of splicing regulatory network. WGC Advanced Course: Systems Biology: From Large Datasets to Biological Insight
Hinxton, UK. July 2019. Platform presentation.

120.- Rogalska, M. E., Mancini,E., Hernandez-Alias, X., Schaefer,M., Serrano,L ., Valcárcel, J. "Self-regulatory network of the core spliceosome". EMBL Partnership Conference "Perspectives in Translational Medicine" in Barcelona Spain, September 2019.

121- Rogalska M, Mancini E., Hernandez X, Schaefer M, Serrano L and Valcárcel J. "EMBL Partnership Conference "Perspectives in Translational Medicine". Barcelona, Spain, September 2019. Poster.

122.- Mancini E, Rogalska M and Valcárcel J. Reconstruction of splicing regulatory network.
10th Argentinian Congress of Bioinformatics and Computational Biology (10CAB2C). Mendoza, Argentina. November 2019.

123.- Hoffmann T, Maldonado AM, Baltzis A, Notredame C, Real FX, Valcárcel J. Functional impact of frequent cancer mutations in the splicing regulatory protein RBM10 and discovery of cancer relevant targets. Signalling and Gene Regulation in health and Disease Conference. Babraham Institute, November 2019. Platform presentation.

124.- Rogalska M, Mancini E., Hernandez X, Schaefer M, Serrano L and Valcárcel J. The multidimensional regulatory network of Alternative Splicing involves a layer of spliceosome cross-regulation. "25th RNA Society meeting" Vancouver, Canada (online meeting due to covid-19). May 2020. Poster.

125.- Mancini E, Rogalska M and Valcárcel J. Reconstruction of alternative splicing regulatory networks. 1st Latin American Congress of Women in Bioinformatics and Data Science. September 2020.

126.- Rogalska, M. E., Mancini,E., Hernandez-Alias, X., Schaefer,M., Serrano,L ., Valcárcel, J. The multidimensional regulatory network of Alternative Splicing involves a layer of spliceosome cross-regulation" SpliceCon 2021 A Steenbock Symposium April 2021.

127.- Hernandez, J., Guerrero, M, Ribo, A., Papon, L., Mancini, E., Bechara, E., Fernandez, P., Rovira, M., Serrano, M., Maraver, A., and Valcárcel, J. Therapeutic effects of antisense oligonucleotides targeting NUMB alternative splicing in preclinical models of lung adenocarcinoma. CSHL Meeting on Nucleic Acid Therapies, Cold Spring Harbor, New York, March 2021.

128.- Rogalska, M. E., Mancini,E., Hernandez-Alias, X., Schaefer,M., Serrano,L ., Valcárcel, J. The multidimensional regulatory network of Alternative Splicing involves a layer of spliceosome cross-regulation. 26th RNA Society meeting. June 2021
129.- Hernandez, J., Guerrero, M, Ribo, A., Papon, L., Mancini, E., Bechara, E., Fernandez, P., Rovira, M., Serrano, M., Maraver, A., and Valcárcel, J. Therapeutic effects of antisense oligonucleotides targeting NUMB alternative splicing in preclinical models of lung adenocarcinoma. 26th RNA Society meeting. June 2021.
130.- Irene Lopez-Oreja, Andrè Gohr, Heribert Playa-Albinyana, Ariadna Giró, Fabian Arenas, Mònica López-Guerra, Elias Campo, Juan Valcárcel, Sophie Bonnal and Dolors Colomer. Effects of SF3B1 K700E mutation in chronic lymphocytic leukemia and the opportunity for targeted therapy with SF3B1-binding splicing modulator H3B-8800. XIX International Conference on Chronic Lymphocytic Leukemia. Virtual broadcast, Germany, September 2021.
131.- Rogalska, M., Mancini, E., Valcárcel, J. Functional splicing network: systematic approach to understand splicing regulation. EMBO / EMBL Symposium The complex life of RNA. Heidelberg, October 2022. Oral.
132.- Herrero-Vicente, J. Rogalska, M.E., Anglada-Girotto, M., Serrano, L. and Valcárcel, J. Understanding splicing vulnerabilities of MYC activation in cancer cells. 28th Annual Meeting of the RNA Society, Singapore, June 2023. Poster.
133.- Hoffmann, T., Guerra, A., Maldonado, A.M., Segovia, C., Marqués, M., Dyrskjot, L., Real, F.X. and Valcárcel, J. RBM10-mediated alternative splicing controls bladder cancer cell proliferation and apoptosis. 28th Annual Meeting of the RNA Society, Singapore, June 2023. Oral.
134.- Guerra, A., Hoffmann, T., Rogalska, M., Maldonado, A.M., Segovia, C., Marqués, M., Dyrskjot, L., Real, F.X. and Valcárcel, J. RBM10-mediated alternative splicing controls bladder cancer cell proliferation and apoptosis. Cold Spring Harbor Laboratory meeting on Eukaryotic mRNA Processing, Cold Spring Harbor, August 2023. Oral.
135.- Baeza-Centurión, P., Miñana, B., Faure, A.J., Thompson, M., Bonnal, S., Lehner, B., Valcárcel, J. Deep indel mutagénesis reveals the regulatory and therapeutic architecture of alternative exons. 29th Annual Meeting of the RNA Society. Edinburgh, May 2024. Oral presentation.
136.- Guerrero, M., Ribó, A., Nacht, A.S. and Valcárcel, J. Antisense oligonucleotides, an innovative RNA therapeutic for lung adenocarcinomas. RNA Horizon 2024 Conference: Unlocking RNA's potential in Medicine, Porto, September 2024. Oral presentation.
137.- Valcárcel, J. on behalf of the TAONas-LUAD Consortium. Splice switching antisense oligonucleotides targeting NUMB display therapeutic effects in four mouse models of lung adenocarcinoma. ELRIG Therapeutic Oligonucleotides 2025 – Drugging the Undruggables. Gothenburg, May 2025. Poster presentation.
138.- Mays, S., Bonnal, S., Pavlyukov, M., Battistini, F., MacRae, A., Orozco, M., Pena, V. and Valcárcel, J. Structural and functional basis for selective transcriptome effects of different antitumor SF3B1 inhibitors. 30th Annual Meeting of the RNA Society. San Diego, May 2025. Oral presentation.

INVITED SEMINARS

- Before 2006: Uppsala University; University of Bern; Centro Nacional de Biotecnología (Madrid); University of Geneva; University of Zurich; St. Jude Children's Research Hospital (Memphis); Centro de Biología Molecular "Severo Ochoa"; RNA Molecular Biology Center, Case Western Reserve University, Cleveland; Museu de Ciencia de Barcelona (Public lecture "Why the genome does not tell the whole story"); University of Halle; Centro de Investigación y Desarrollo (Barcelona); Rockefeller University, New York (PhD students' invitation); MRC Human Genetics Unit, Edinburgh; University of Stockholm; Centro Nacional de Investigaciones

Oncológicas (CNIO, Madrid); Centro de Investigaciones sobre el Cáncer (CSIC, Salamanca).
- Institute of Molecular Medicine, Lisbon. February 2006.
- Genezentrum, Munich. April 2006.
- IMP, Vienna. May 2006.
- Fondazione Santa Lucia, IRCCS, Rome, April 2007.
- CNB, Madrid, November 2007 (PhD students' invitation).
- MPI, Dresden. December 2007.
- CABIMER, Sevilla. May 2008.
- Instituto de Microbiología, Salamanca. February 2009
- CNIO, Madrid. March 2009.
- University of Edinburgh, May 2010.
- FMI, Basel. September 2010.
- CBM, Madrid, March 2011.
- University of Rome "Tor Vergata", March 2011.
- ETH RNA Club, Zurich, November 2011.
- Hospital Clinic, Barcelona, November 2011.
- Gulbenkian Institute, Lisbon, July 2012.
- Institute of Functional Biology and Genomics. Salamanca, November 2012.
- Instituto Maimónides de Investigación Biomédica, Córdoba, March 2013.
- École Normale Superieure, Lyon, May 2013 (PhD students' invitation).
- University of Kyoto, Japan, March 2014.
- University of Tokyo, Japan, March 2014.
- IGMM, Montpellier, April 2014.
- IMB, Mainz, May 2014.
- Academic Year Opening Lecture, International PhD Program, University of Trento, February 2016.
- University of Cambridge, April 2016
- MRC Human Genetics Unit, University of Edinburgh, April 2016
- Center for Gene Expression and Regulation, University of Dundee, April 2016
- Cancer Research Center, Salamanca, May 201
- Cancer Rersearch UK Splicing Interest Group, London, May 2016
- Novartis, Basel, July 2016
- FMI, Basel, October 2016
- 20th Anniversary Special Seminar IDIBAPs, Barcelona December 2016
- Centro de Investigaciones Biológicas, Madrid January 2017
- University of Algarve, February 2017
- University of Bern, May 2017
- ETH, Zurich, May 2017
- IFOM, The FIRC Institute for Molecular Oncology, Milano, February 2018
- IMIM, Barcelona, March 2019
- IFOM, The FIRC Institute for Molecular Oncology, Milano, February 2020
- Brandeis University, Waltham, MA. November 2020. Invited by Nobel Laureate Prof. Michael Rosbash
- Distinguished speaker seminar, Dept of Genetics, UPenn. November 2020
- University of Odense, Denmark. March 2023.
- International Institute of Molecular Mechanisms and Machines, Polish Academy of Sciences, Warsaw. June 2023.
- UCLA, Department of Microbiology, Immunology and Molecular Genetics. September 2023.
- UCSC, Center for Molecular Biology of RNA. September 2023.
- Remix Therapeutics. February 2024.

- IBMB, Barcelona, December 2024.
- Helmholtz Zentrum, Munich, March 2025.
- Academia Sinica, Taiwan, September 2025.
- University of Massachusetts Medical School, Worcester, MA, June 2026.

MENTORING ACTIVITIES.

Supervised the following Ph.D. students:

1. Dr. Livia Merendino, defended her thesis at the University of Heidelberg in July 1999. After a postdoc at the University of Geneva supported by a Human Frontier Science Program fellowship and Associate Faculty position at the University of Grenoble, she is currently CNRS Researcher at the Institute of Plant Sciences Paris-Saclay (IPS2).

2. Dr. Sabine Guth, defended her thesis at the University of Tübingen in November 2000. Currently she is Research Director at the Novartis Institutes for Biomedical Research, Basel, Switzerland. Her work allowed the identification of first-in-class inhibitors of HECT E3 ligases, currently in Phase II clinical trials. Therapeutic potential of allosteric HECT E3 ligase inhibition - ScienceDirect

3. Dr. Patrik Förch, defended his thesis at the University of Heidelberg in May 2002, supported by a Gertrud Reemtsma Stiftung fellowship. After being Project Leader at UCB-Group, Belgium, he is currently Head of Biology at Sitryx (Oxford, UK).

4. Dr. Angela Relògio, defended her thesis at the University of Lisbon in March 2003, supported by a Praxis Program Fellowship from the Portuguese government. After a postdoc she became Group Leader at the Institute for Theoretical Biology, Charité Medical University, Berlin and is currently Full Professor at the Medical School Hamburg.

5. Dr. Luis Mendes Soares, defended his thesis at the University of Lisbon in Feb 2007. He was supported by a Praxis Program fellowship from the Portuguese government and after a postdoc with Prof. Steven Buratowsky at Harvard Medical School, Boston, USA, supported by an EMBO fellowship, after a Senior Bioinformatics Scientist position at Foghorn Therapeutics in Boston (USA) he is now Head of Computational Biology at Arrakis Therapeutics in Boston (USA).

6. Dr. Mafalda Araujo, defended her thesis at the University of Porto, July 2008. She was supported by a GABA Programm fellowship from the Portuguese government and after a postdoc at the IBMC, Porto, she is currenty Lab Manager at the University of Porto.

7. Dr. Anna Corrionero, defended her thesis at the Universitat Pompeu Fabra in December 2010. She was supported by a FPI fellowship from the Ministry of Science and Innovation, Spain. After a postdoctoral fellow with Nobel Laureate Prof. Robert Horvitz at the Massachusetts Institute of Technology, Cambridge, USA, supported by an EMBO fellowship, after holding a Senior Scientist position at Stoke Therapeutics (Bedford, MA, USA), she is currently Principal Scientist of Disease Biology at Korro Bio (Boston).

8. Dr. Nuria Majos Oró, defended her thesis at the University Pompeu Fabra in May 2012. She was supported by a FPU predoctoral fellowship from the Ministry of Education and Science, Spain. After working for Novartis (Spain) and as Associate Director of Cell Therapy (CAR-T), Kite Pharma, she is currently Director Global Launch Excellence, Gilead Science (London).

9. Dr. Camilla Iannone, supported by fellowship from la Caixa. Defended her thesis in May 2014. After a postdoc at King's College, London, supported by Marie Curie Fellowship, she works in Science funding and innovation / Mental Health department of the Wellcome Trust (London).

10. Dr. Juan Ramón Tejedor, supported by FIS fellowship from the Ministry of Health, Spain. Defended his thesis in June 2014. Currently Juan de la Cierva Fellow, Universidad de Oviedo and Coordinator of Orphanet (Rare Diseasses and Orphan Drugs Network).

11. Dr. Luisa Vigevani, supported by CRG internal fellowship. Defended her thesis in November 2016. After a position as Senior Field Applications Scientist, Illumina (Spain), she is currently Senior Field Applications Scientist, Oxford Nanopore Technologies.

12. Dr. Jordi Hernández, supported by la Caixa fellowship. Defended his thesis in November 2016. After working as Entrepreneur in Residence at CRG and Associate Consultant, Alira Health, he is now Principal of LatticePoint Consulting, Barcelona.

13. Dr. Elena Martín, supported by FPI fellowship. Defended her thesis in January 2018. "Control of G2/M cell cycle transition by a complex of the splicing factors

SPF45/SR140/CHERP". Currently Principal Scientist at Stoke Therapeutics (Bedford, MA, USA).

14. Dr. Claudia Vivori, supported by Severo Ochoa fellowship. Defended her thesis in February 2019. "Alternative splicing dynamics during somatic cell reprogramming". After a postdoc at the Francis Crick Institute (London) she is currently Bioinformatician at Oxford Nanopore Technologies, London.

15. Dr. Caterina Colí, supported by FPI fellowship. Defended her thesis in November 2019. "Exploring the role of differential expression of splicing factors and regulators in tissue-specific alternative splicing". Currently Bioinformatician at Oxford Nanopore Technologies, London.

16. Dr. Tobias Hoffmann, supported by ERC grant. Defended his thesis on April 8 2021, entitled "Functional impact of frequent cancer mutations in the splicing regulatory protein RBM10 and discovery of cancer relevant targets". Currently works at the federal Ministry of Education and Research, Germany in the department of Innovation & Science Policy / Biomedicine & RNA Biology / Science Diplomacy.

17. Dr. Irene López, supported by PhD4MD Fellowship. Defended her thesis on March 1, 2022 entitled "Characterization of SF3B1 mutation in chronic lymphocytic leukemia and the role of new splicing modulators". Currently combining research and diagnostics of hematological malignancies at Hospital Clinic/IDIBAPS.

18. Dr. Simon Bajew. Defended his Thesis on April 12, 2022, entitled "SRRM3 regulates a subprogram of highly sensitive microexons important for pancreatic endocrine function" at the University Pompeu Fabra. Currently Research Data Manager at VHIO, Barcelona.

19. Dr. Francisco Aya, supported by PhD4MD Fellowship. Defended his Thesis, entitled "Targeting BRAF mutant pre-mRNA alternative splicing in melanoma" on February 15, 2023. Currently combining clinical practice at Hospital Clinic, Barcelona, with research at CRG.

20. Dr. Jorge Herrero, supported by a FPI predoctoral fellowship. Defended his Thesis "Characterization of synthetic lethality between MYC activation and splicing inhibition in an immortalized cell line: roles of alternative splicing" on February 26, 2024 at UPF with the qualification of Excellent cum laude. Currently Staff Scientist at Integra Therapeutics, Barcelona.

21. Pablo Lanuza, 3th year PhD student, supported by FPI predoctoral fellowship.

22. Giulia Granata, 2nd year PhD student, supported by Marie Sklodowska Curie PhD Fellowship.

23. Taniya Agarwal, 1st year PhD student, supported by ERC Synergy UNLEASH.

24. Amelia Gannon, 1st year PhD student, supported by FPI predoctoral fellowship.

25. Pau García-Guix, 1st year PhD student, supported by ERC Synergy UNLEASH.

<u>Supervised the following Postdocs</u>:

1. Dr. Luiz O.F. Penalva, supported by an EMBO fellowship. Currently Full Professor at the Children's Cancer Research Institute, University of Texas in San Antonio, USA.

2. Dr. Angeles Ortega, supported by fellowship from Spanish Ministry of Education and by European Union "Marie Curie" postdoctoral fellowship. Currently Professor at Universidad Pablo Olavide (Sevilla), where she has been supported by EU funds and a Ramón y Cajal contract.

3. Dr. María José Lallena, supported by fellowship from Ramón Areces Foundation and by European Union "Marie Curie" postdoctoral fellowship. After holding a position as Group Leader at Therapeutic Target, Inc., Madrid, and Senior Scientist and Group Leader, Eli Lilly, Madrid, she is currently Director of Quantitative Biology at Eli Lilly (Spain). Her work led to the identification of first-in-class inhibitors of Cyclin D kinases for breast cancer, currently in clinical practice.

4. Dr. José María Izquierdo, supported by a European Union "Marie Curie" postdoctoral fellowship. Currently Associate Professor, Universidad Autónoma de Madrid and Staff Scientist (Científico Titular), Spanish Research Council (CSIC), at the CBMSO, Madrid.

5. Dr. Karla Neugebauer, visited the lab for one year supported by an Alexander von Humbodlt postdoctoral fellowship. After holding a Group Leader positions at the Max Planck Institute for Cell Biology in Dresden, she is currently Professor at Yale University, USA and Director of Yale Center for RNA Science and Medicine.

6. Dr. Brendan Bell, supported by a European Union "Marie Curie"

postdoctoral fellowship. Currently Associate Professor at the University of Sherbrooke, Canada.

7. Dr. Claudia Ben-Dov, supported by contracts from EU projects. Currently Founder & CEO, InnHealthium (Strategic-Regulatory Comliance & Scientific Consultant MedTech), Barcelona.
8. Dr.Veronica Raker, supported by a "Ramón y Cajal" contract from the Ministerio de Ciencia y Tecnología, Spain. Currently working as free-lance science editor.
9. Dr. Sophie Bonnal, supported by a European Union “Marie Curie” postdoctoral fellowship, currently Staff Scientist, CRG, Barcelona.
10. Dr. Britta Hartmann, supported by EMBO and DFG postdoctoral fellowships, after holding an independent position at the University of Freiburg, Germany, she is currently Responsible for Genetic Testing Lab at Kantonsspital Aarau AG, Switzerland.
11. Dr. Josefin Lundgren, supported by a fellowship from the Swedish Research Council, later postdoc at Karolinska Institute, Stockholm.
12. Dr. Joao Tavanez, supported by EMBO postdoctoral fellowship, currently Assistant professor, Universidade Nova of Lisboa and Researcher at the Global Health and Tropical Medicine Institute (Lisbon).
13. Dr. Maria Paola Paronetto, supported by EMBO and HFSPO postdoctoral fellowships. Currently Associate Professor at the University Foro Italico (Rome) and Group Leader at the Fondazione Santa Lucia (Rome), supported by a HFSPO reintegration grant.
14. Dr. Elias Bechara, supported by a Marie Curie fellowship from the EU-funded FP7Program, currently Researcher (Junior Group Leader) at Centre for Human Technologies, IIT, Genova, Italy.
15. Dr. Sergio Barberán-Soler, supported by EMBO postdoctoral fellowship. After a period at SomaGenics (California), he is currently CEO of RealSeq-Biosciences (California).
16. Dr. Panagiotis Papasaikas, supported by contract from ERC grant. Currently staff scientist at the Friedrich Miescher Institute, Basel, Switzerland.
17. Dr. Elisabeth Daguenet, supported by contract from MINECO grant. Currently Clinical Project Manager, Institut de Cancerologie Lucien-Neuwirt, France.
18. Dr. Gwendal Dujardin, supported by two successive Marie Curie postdoctoral fellowships. After postdoc in the lab of Prof. Nick Proudfoot at the University of Oxford, he is currently permanent job as INSERM Investigator at CRCN, Brest, France.
19. Dr. Keiko Horiuchi, supported by a postdoctoral fellowship from the University of Tokyo. After obtaining an Assistant Professor position at the Institute for Advanced Medical Sciences, Nippon Medical School, Kawasaki, she is now Assistant Professor at Yokohama City University, Yokohama, Japan.
20. Dr. Malgorzata Rogalska, partly supported by Marie Curie and Juan de la Cierva Fellowships. Currently working as venture capital analyst at Ysios Capital, Barcelona.
21. Dr. Estefania Mancini, currently working as Bioinformatics Scientist at the Josep Carreras Leukemia Research Institute and as free-lance bioinformatics data analyst in Barcelona.
22. Dr. Jonàs Juan, supported by Beatriu de Pinòs and Marie Curie postdoctoral fellowships. Currently Assistant Professor, Universitat Pompeu Fabra, Barcelona.
23. Dr. Suzanne Mays, supported by Intrepid postdoctoral program, currently she has a permanent job coordinating scientific projects at Emory University, USA.
24. Dr. Andrew McRae, supported by ERC grant. Currently BI & BD manager at Ona Therapeutics, Barcelona.
25. Dr. Ángel Guerra-Moreno, supported by laCaixa Health grant.
26. Dr. Niccolò Arecco, supported by ERC Synergy UNLEASH.
27. Dr. Lidia Romero, supported by H2020 Health CANCERNA.
28. Dr. Mónica Salinas, supported by ERC Synergy UNLEASH and subsequently recipient of Juan de la Cierva fellowship from the Ministry of Science, Innovation and Universities.
29. Dr. Lucía Coscujuela, supported by Plan Estatal grant.

- Participation in mentoring programs:

1. Junior faculty external mentoring program Gulbenkian Institute of Science, Portugal: mentor of Dr. Paula Duque.
2. Junior faculty external mentoring program, Institute of Human Genetics, Montpellier,

France: mentor of Dr. Reini Luco

3. CRG postdoc mentoring program: since 2015.
4. EMBL Alumni mentoring program: since 2021.
4. Founder and organizer of the Mentoring Program of the RNA Society 2017 – (currently run by Dr. Nancy Greenbaum). Mentor of one young scientist mentee per year.
5. Co-chair of CRG Junior Faculty Mentoring Program.

TEACHING ACTIVITIES.

- Lecturing and practicals during EMBL Ph.D. Courses, 1996-2002, Heidelberg.
- One-time lecturing in Ph.D. Courses from Universidad Autónoma de Madrid Medical School (Madrid), University of Basel and Biozentrum (Basel, Switzerland).
- Lecturing and organization of EMBO Courses on "RNA-Protein Interactions" (together with Bertrand Séraphin). EMBL, Heidelberg, 1998 and 2000.
- Lecturing to 3th year undergraduate studies, Masters and International PhD Course, Universidad Pompeu-Fabra. 2002 - present
- Inaugural Lecture, Academic year 2002-2003. Faculty of Biology. Universitat Pompeu-Fabra, January 2003.
- Inaugural Lecture. Academic Year 2003-2004. Societat Catalana de Biologia. Nov.2003.
- ICGEB Theoretical Course “RNA Structure and Function”. April 2005 & 2007. Trieste, Italy.
- From Dec. 2003: Associate Professor of Cell Biology. Universitat Pompeu-Fabra. Teaching Genome organization and Gene Expression in the Cell Biology Course, 3th year.
- 2008-2012: coordinator of the Universitat Pompeu Fabra masters/PhD course “Advanced seminars in Biomedical Research”.
- Organizer, with Dr. Veronica Raker, of EURASNET Practical Course “RNA-protein interactions in pre-mRNA splicing”, Barcelona, July 2009.
- Organizer, with Dr. Elias Bechara, of Practical Courses on CLiP and ribosome profiling technologies, 2014 and 2016.
- Lecturing on RNA Biology PhD Course, FMI / University of Basel, October 2010.
- Lecturing on Alternative splicing PhD course, University of Stockholm, November 2010.
- Lecturing on “Alternative Splicing : biology, mechanisms and impact on disease”. PhD course on RNA Biology, University of Vienna. January 2014
- Lecturing on "Alternative splicing and disease". PhD Course FMI, Basel. October 2016.
- Lecturing on the International Course "Post-transcriptional gene regulation. Mechanisms and networks". Institute Curie, Paris. March 2017.
- Lecturing on the PhD Course of the IFOM, The FIRC Institute for Molecular Oncology, Milano, February 2018 and February 2020.
- Lecturing on "Alternative splicing mechanisms and disease" at the Eladio Viñuela Molecular Biology Summer Schools Universidad Internacional Menéndez Pelayo, Santander, 2005, 2012, 2019.
- Since 2024: Member of the RNA Society Education Committee.

PEER REVIEW ACTIVITIES

In the past years acted as referee for the following **journals**: Accounts of Chemical Research, American Journal of Human Genetics, Biochimica et Biophysica Acta, Biomed Central Genomics, Biotechniques, Biotechnology Progress, Cancer Cell, Cell, Current Biology, eLife, EMBO Journal, EMBO Reports, European Journal of Human Genetics, Experimental Cell Research, FEBS Letters, Genes and Development, Human Molecular Genetics, Journal of Cell Biology, Journal of Cell Science, Journal of Experimental Medicine, Journal of Molecular Biology,

Journal of Molecular Evolution, Molecular Biology and Evolution, Molecular Biology of the Cell, Molecular Cell, Molecular and Cellular Biology, Nature, Nature Cell Biology, Nature Structural and Molecular Biology, Nature Reviews Molecular Cell Biology, Nucleic Acids Research, PLoS Biology, PLoS Genetics, PLoS Computational Biology, Proceedings of the National Academy of Sciences U.S.A., RNA, Science, Stem Cell Reports, The Plant Journal, Trends in Biochemical Sciences, Trends in Genetics.

Acted as referee of grant applications to the following **agencies**: Agencia Nacional de Evaluación y Prospectiva (Spain), Agencia Nacional de Promoción Científica y Tecnológica (Argentina), Italian Association for Cancer Research (AIRC), Association for International Cancer Research (AICR), Association Francaise contre les Myopathies**,** Austrian Science Fund (FWF), Danish National Research Foundation, Dutch Cancer Society, EMBO Young Investigator Award, European Science Foundation (ESF), Genome Canada, German-Israeli Foundation for Scientific Research & Development, Human Frontiers Science Program Organization (HFSPO), Ministry of Science and Technology (Spain), National Science Foundation (NSF, USA), Swedish Foundation for Strategic Research, Swedish Natural Science Research Council (NFR), US-Israeli Binational Research Foundation, Wellcome Trust (U.K.), EU FP6 Functional Genomics, invited to review EURYI awards and ESF awards, European Research Council, Singapore Ministry of Education.

Served in **grant evaluation panels** for the following agencies: Ministerio de Educación y Ciencia (2003, 2007), key evaluator EU FP6 Functional Genomics Panel (2006), Ministerio de Ciencia e Innovación (2009), Ministerio de Economía y Competitividad (2012, 2014), Wellcome Trust (2014, 2015-2018).

Average number of manuscripts and grant applications reviewed per year in the past four years: 50.

Thesis Committees: acted as external reviewer of PhD thesis from the University of Queensland (Australia), University of Stockholm, University of Uppsala (Sweden), University of Geneva (Switzerland), University of Lisbon (Portugal), Universidad Politécnica de Valencia, Universidad de Barcelona, University of Nova Gorica (Slovenia), Universitat Pompeu-Fabra, Universidad Autónoma de Madrid, Universidad de Sevilla, ICGEB-Free University (Trieste), Cambridge University (UK), University of Fribourg (Switzerland), ETH (Zurich).

Review of Faculty Appointments/Promotions for Baylor College of Medicine (USA), National Institutes of Health (USA), Beckman Research Institute (USA), University of Connecticut, University of Chicago, Medical Research Council (UK), Tel-Aviv University, Technion Institute (Israel), University of Pennsylvania (USA), Albert Einstein College of Medicine (USA), Institut Pasteur (France), Laboratory of Molecular Biology (Cambridge, UK), University of California in San Diego (USA), University of California in Santa Cruz, Royal Society (UK), Freie Universität (Berlin).

Member of the review panel of the EMBL-University of Heidelberg Molecular Medicine Partnership Unit (May 2012) and of the EMBL Barcelona Outstation Director selection panel. Member of Jury, Ramón y Cajal National Research Award (2020).

COMMUNITY SERVICE

1997-2002 member of the EMBL Graduate Committee

1999-2002 member of EMBL Science & Society Committee
2002-2004, member of PRBB Scientific Committee
Since 2003, member of CRG Executive Committee
2004, member of the RNA Society Nominations Committee
Since 2006, member of the CRG/UPF Proteomics Facility Committee
Since 2006, member of the PRBB Science & Society Committee
2006-2011 Deputy coordinator, European Alternative Splicing Network of Excellence
Since 2010, Coordinator RNAREG Consolider Consortium
Since 2006, Co-coordinator, with I. Vernos, of CRG International PhD Program, member of CRG Executive Committee
Since 2008, member of CRG Ultrasequencing Facility Committee
2007-2010, member of the EMBO Membership Committee
2008, chair of the RNA Society Nominations Committee
Since 2012, chair of the CRG Conflict Resolution Committee
Since 2015, CRG Technology Transfer Committee
Since 2015, CRG Gender Balance Committee
2017-2018, President of the RNA Society; Past-President 2019-20
Served in the thesis committees of more than 70 CRG and UPF students
2023, member of Committee for the Assessment of Scientific Evaluation, CRG
2024, co-coordinator of Junior Faculty Mentoring Program, CRG.
Since 2024: Member of the RNA Society Education Committee.

GRANT FUNDING

- Coordinator of a Human Frontiers Science Program Research Grant involving a network of five laboratories, including those of Prof. Michael R. Green (Univ. of Massachusetts), Prof. Donald C. Rio (Berkeley Univ.), Prof. Maria Carmo-Fonseca (Univ. of Lisbon) and Prof. Shigeyuki Yokoyama (Univ. of Tokyo). Period: 2000-2003. Amount for the laboratory: $ 180.000.
- Bundesministerium für Bildung und Forschung. Grant coordinated by Prof. Reinhard Lührmann. Period: 2002-2005. Amount for the laboratory: EUR 45.000,00 (one posdoctoral position in addition).
- EU Vth Framework Programme network. Grant coordinated by Dr. Stefan Stamm.

Period: 2002-2005. Amount for the laboratory: EUR 240.405,00 (+ one posdoctoral position).

- Ministerio de Ciencia y Tecnología. Period: 2003-2005. Amount for the laboratory: EUR 255.000,00 (one PhD position in addition).
- Muscular Dystrophy Association. Period 2004-2006. Amount to the laboratory: 150.000 US $.
- Grups Consolidats de la Generalitat de Catalunya 2002-2005. 20.229 EUR.
- Ministerio de Educación y Ciencia. Period 2005-2008. Amount to the laboratory: 280.000 EUR (one PhD position in addition).
- Grups consolidats de la Generalitat de Catalunya 2005-2008. 36.600 EUR
- Deputy coordinator of EU FP VI Network of Excellence "European Alternative Splicing Network (EURASNET)". 2006-2010 with a total budget of 10 million EUR, includes 43 groups and 27 Institutes in 13 countries. Amount for the laboratory: 408.758 EUR (for 5 years).
- Fundación Alicia Koplowicz. Period September 2007-October 2009. 100.000 EUR
- Association for International Cancer Research (AICR). Oct 2007-Sept 2010. 215.000 EUR
- Fundación Marcelino Botín. Oct 2007-Oct 2012. 953.000 EUR.
- Ministerio de Ciencia e Innovación. Jan 2009-Dec 2011. 500.940 EUR (and an additional PhD position).
- Agencia Gestió D'Aju ts Universitaris. 2009-2013. 43.680 EUR.
- Coordinator, Consolider Project RNAREG. 2010-2014. Total Budget 4.9 million EUR,

includes 12 spanish groups. Amount for the laboratory: 446.667 EUR (for 5 years).
- Collaborative Project ROCHE-CDTI. Molecular profiling of triple negative breast tumors. 2010-2013. Amount for the laboratory 135.000 EUR.
- Ministerio de Ciencia e Innovación. Jan 2012-Dec 2014. 581.000 EUR (and an additional PhD position).
- Fundación Botín. Oct 2012-Sept 2017. 625.000 EUR.
- Ministerio de Economía e Innovación. Jan 2015-Dec 2017. 592.900 EUR (and an additional PhD position).
- European Research Council Advanced Grant MASCP (670146). Mechanisms of altrentaive pre-mRNA splicing regulation in cancer and pluripotent cells. October 2015-March 2021. 2.159.574 EUR.
- European Research Council Proof of Concept Grant VALSL (790429). Sept 2017 – Feb 2019. 150.000 EUR
- Collaboration agreement with GlaxoSmithKline Spain: in kind support for the screening of small molecule modulators of alternative splicing relevant for cancer and cardiovascular disease.
- Spanish Ministerio de Economía e Innovación Grant (BFU 2017 89308-P). Jan 2018-Dec 2020. 453.750 EUR (direct costs and an additional PhD position).
- Worldwide Cancer Research Grant (19-0270): NUMB splicing modulation with AONs as a novel lung cancer treatment. May 2019 - January 2022. 201,864.48 Pounds.
- Spanish Ministerio de Ciencia e Innovación Grant (PID2020-114630GB-100): Molecular mechanisms of pre-mRNA splicing regulation and their relevance in cancer. September 2021-August 2024. 375.000 EUR (direct costs and an additional PhD position).
- La Caixa Banking Foundation Health Research Grant (HR21-01208) (joint project with F.X. Real, CNIO, Madrid): "RBM10, a novel splicing regulator and tumor suppressor: from mechanisms to therapies". October 2021 - September 2024, 816.239 EUR (445.139 EUR for the group).
- Ministerio de Ciencia e Innovación Proof of Concept Grant (PDC2021-121832-I00): Therapeutic effects of NUMB alternative splicing modulation in hepatocarcinomas. Dec 2021- November 2023. 125.000 EUR
- Coordinator of European Innovation Council Transition Open Grant (GAP-101058055): Therapeutic Antisense Oligonucleotides Targeting NUMB Alternative Splicing in Lung Adenocarcinoma (TAONas-LUAD). April 2022 – Dec 2025. 2.89 M EUR (1.8 M EUR for CRG)
- EU HORIZON-HLTH-2021-TOOL-06-02 Grant (CANCERNA Horizon-RIA 101057250): RNA processing for anti-cancer immunotherapy. Coordinated by M. Lotem and R. Karni. 2022 – 2025. 5.99M EUR (485.000 EUR for the group).
- HORIZON-MSCA-2021-DN-01 Doctoral Network Grant (101073094-RBP-ReguNet): Deconstructing and Rewiring RNA-RBP regulatory networks. Coordinated by Woodhoo Ashwin. 2022-2026. 2.6 M EUR (250 K EUR for the group).
- Asociación Española contra el Cancer Grant (ECC 009087) grant "Generation of optimised anti-tumor drugs targeting the spliceosome". Dec 2022- 2025. 300K EUR
- Coordinator of European Research Council Synergy Grant UNLEASH (GAP-101071936): Harnessing the splicing code for targeted control of gene expression. Together with the groups of Angus Lamond and David Gray (University of Dundee) and Michael Sattler (Helmholtz Center, Munich). June 2023-May 2029. 10.2 M EUR (2.5 M EUR for the group).
- Spanish Ministerio de Ciencia, Innovación y Universidades (MCIU/AEI) (PID2023-146691NB-I00) "Molecular mechanisms of alternative pre-mRNA splicing regulation – SpliceReg". September 2024-August 2027. 395.000 EUR direct cost and one PhD position in addition.

PATENTS

1. EPO Patent application "Method for the identification of gene regulation targets". Filed in Europe in December 2014 (EP 14196170.6) and extended internationally 1-year after (PCT/EP2015/078603) in order to protect a method combining laboratory and computational tools to build splicing networks, and identify novel gene regulation, biomedically-relevant splicing targets. Officially awarded by the European patent Office on Feb 12 2020: **WO2016/087625.**

2. Patent family WO2019180046 entitled 'Antisense Oligonucleotides and Uses Thereof' protecting composition of matter and methods of use/use comprising antisense nucleotide sequences that are complementary to a target region within exon 9 of a NUMB transcript as potential therapy for lung adenocarcinomas and other tumours. Filed March 19, 2019, PCT/EP2019/056889 . Entered into US National Phase (partially granted (US20220079969; methods) and composition of matter under examination (US18302580)) and European Regional Phase (EP19717230; awarded). Authors: Elias Bechara, Jordi Hernández, Pablo Fernández, Miguel Rovira, Manuel Serrano and Juan Valcárcel.

3. European Priority Application 24382126.0, entitled "SPLICE-MODULATING ANTISENSE OLIGONUCLEOTIDES." Method patent application to protect a method, that can be experimental or in silico, using high throughput deletion mutagenesis to target regions of genomes for the design of splice-modulating antisense oligonucleotides. Filed February12, 2024, entered PTC February 2025. Authors: Pablo Baeza-Centurión, Belén Miñana, Ben Lehner and Juan Valcárcel.

SCIENTIFIC DISSEMINATION ACTIVITIES

- Lecture "Follow a star" for High School students engaged in the program "Youth and science", Fundació Catalunya La Pedrera, Nov 2008
- Public lecture on "Do we understand our genomes", Ateneu de Barcelona, May 2010
- "Scientific café" debate "What is behind our genome?", La Pedrera, Barcelona, May 2010
- "Scientific café" debate "Decoding humanity", Casa Elizalde, Barcelona, June 2012
- Science outreach newspaper articles in La Vanguardia and El Progreso, interviews in El Progreso and La Voz de Galicia.
- Lectures to High School students on "What is left to understand in our genomes" and "The hidden messages of our genes" in the "Science Week" of 2012, 2013, 2015, 2016.
- Lecture at PRBB Open Day and "Live Research!" fair and guided visits to labs. 2014.
- Inauguration of the exhibit "Tree of Life. The complexity of life: from the cell to the living organism", El Maresme and Palau Robert, Barcelona . 2014.
- Public debate on "Transfer of knowledge" organized by Fundación Botín. Madrid, 2014.
- Chapter "Splicing pieces together" in the Book "The Value of Science", edited by Dr. Pedro García-Barreno, Fundación Botín.2015.
- Essay "Vocaciones científicas", Papeles de la Fundación Botín, 2017.
- Outreach Video "AskCRG", responding questions from the public about the genome, genomics and genetic disease. April 2022. https://www.youtube.com/watch?v=QkLUJcZqDrM
- Outreach video Asociación Española contra el cancer, on the identification of new anticancer molecules . https://www.youtube.com/watch?v=VqcEc2Ezsqg
- Roundtable on Knowledge Industry Program organized by AGAUR. September 2023.

- Numerous interviews on the occasion of the Science publication by Rogalska et al, October 2024, including https://www.3cat.cat/3cat/telenoticies-migdia-27122024/video/6317342/ https://www.genengnews.com/topics/omics/first-spliceosome-blueprint-reveals-complex-interplay-uncovers-drug-targets/ https://sciencemediacentre.es/cartografian-por-primera-vez-el-espliceosoma-humano-la-maquinaria-que-permite-multiplicar-la https://elpais.com/ciencia/2024-10-31/logrado-el-primer-mapa-del-espliceosoma-un-talon-de-aquiles-del-cancer.html https://www.elmundo.es/ciencia-y-salud/salud/2024/10/31/67236749e85ecef3418b459d.html https://www.larazon.es/ciencia/que-espliceosoma-hito-que-revolucionara-medicina-barcelona_202410316723c88fd8f8950001d6a2f6.html https://www.lemonde.fr/sciences/article/2024/11/05/plongee-au-c-ur-d-une-machinerie-cellulaire-meconnue-et-vitale-le-spliceosome-humain_6376693_1650684.html https://www.lavanguardia.com/vida/20241031/10069120/crean-primer-mapa-maquina-molecular-edita-mas-90-genes-humanos-agenciaslv20241031.html https://www.rtve.es/play/audios/a-golpe-de-bit/ https://www.theolivepress.es/spain-news/2024/11/10/researchers-in-barcelona-have-successfully-mapped-the-spliceosome-a-key-cause-of-cancer/ https://www.elpuntavui.cat/societat/article/14-salut/2476781-l-espliceosoma-huma-busca-lloc-en-la-medicina-del-futur.html https://www.lemonde.fr/sciences/article/2024/11/05/plongee-au-c-ur-d-une-machinerie-cellulaire-meconnue-et-vitale-le-spliceosome-humain_6376693_1650684.html

-Interviews in El Pais, El Progreso, La Voz de Galicia on the occasion of receiving the Carmen and Severo Ochoa Research Award, publication in El Progreso:
https://www.elprogreso.es/articulo/lugo/juan-valcarcel-biologo-molecular/202511080500001922615.html

https://www.lavozdegalicia.es/noticia/lavozdelasalud/enfermedades/2025/11/08/juan-valcarcel-investigador-biologia-molecular-dieta-puede-alterar-edicion-genes/00031762614863566987346.htm

https://elpais.com/ciencia/2025-11-27/juan-valcarcel-biologo-molecular-cada-uno-de-nosotros-somos-una-experiencia-unica-que-sentido-tiene-clonarnos.html#?prm=copy_link