

## **UPDATED CV**

**DEGREE:** PhD in Biochemistry and Molecular Biology

**CURRENT POSITION:** Junior group leader, Biochemistry Center (BZH) / Interdisciplinary Center for Neuroscience (IZN), Univ. Heidelberg.

### **ACADEMIC ACHIEVEMENTS AND EDUCATION**

- 10/11 – now Junior Group Leader, Biochemistry Center, Univ. Heidelberg, Germany  
10/04 – 05/11 Postdoctoral researcher, *Group of Prof. Carmeliet*, Vesalius Research Center, VIB-KULeuven, Belgium  
07/04 PhD award in Biochemistry (First class honours), *Group of Prof. López-Rivas*, Univ. Granada, Spain  
11/99 – 07/04 PhD studies, *Group of Prof. López-Rivas*, CSIC-Univ. Granada, Spain  
09/94 – 10/99 Bachelor in Biochemistry (First class honours), University of Granada, Spain

### **SHORT-TERM SCIENTIFIC RESEARCH STAYS**

- 01/11 – 04/11 Visiting scientist, *Group Prof. Tessier-Lavigne*. Genentech, San Francisco, USA  
05/07 Visiting scientist, *Group Prof. Vivien*. INSERM U919UMR, Caen, France  
01/07 – 02/07 Visiting scientist, *Group Prof. Chedotal*. CNRS UMR 7102, Univ. Paris, France  
05/02 – 08/02 Visiting PhD student, *Group Prof. Cohen*. MRC-University of Leicester, England  
09/03 – 12/03 Visiting PhD student, *Group Prof. Cohen*. MRC-University of Leicester, England  
10/00 – 12/00 Visiting PhD student, *Group Prof. Redondo*. CMBSO, Madrid, Spain  
01/00 – 05/00 Visiting PhD student, *Group Prof. Redondo*. CMBSO, Madrid, Spain  
07/99 – 09/99 Visiting student, *Group Prof. Lizardi*. Dept. of Pathology, Yale University, USA

### **RESEARCH FELLOWSHIPS RECEIVED**

- 2011 FEBS fellowship for EMBO Laboratory Management Course  
2008 – 2011 Postdoctoral fellowship from Research Foundation Flanders (FWO)  
2007 EMBO short-term fellowship  
2004 – 2008 FEBS Postdoc fellowship  
2004 Postdoc fellowship from the Spanish Education & Science Council (MEC)  
2000 – 2004 PhD Fellowship from the Spanish Health Research Fund (FIS)  
1999 Research fellowship from the Spanish Council of Scientific Research (CSIC)  
1998 Research fellowship from the Univ. Granada, Spain

### **SCIENTIFIC HONOURS AND GRANTS RECEIVED**

- 2012 – 2017 EU: ERC-StG (ref: ERC-StG-2012-311367)  
2012 – 2016 EU: FP7-PEOPLE-2011-Marie Curie Career integration grant (ref: 304054)  
2010 – 2011 FWO Research grant (ref: FWO-KANN-50088)  
2009 FEBS Distinguished Young Investigator award

- 2007 Travel award - 27<sup>th</sup> Biennial ISN-ANS meeting (Cancún, México)
- 2007 Leica Award (best presentation) in the 4th INA Meeting (Institute of Neuroscience, Alicante, Spain)

#### **LIST OF PUBLICATIONS**

(\* indicates that **authors contributed equally to the work**).

#### **PAPERS AS FIRST AUTHOR**

1. Snuderl\*, Batista\*, Kirkpatrick\*, **Ruiz de Almodovar\***, et al. Placental growth factor/neuropilin 1 signaling is a therapeutic target in pediatric medulloblastoma **Cell**, 2013, Feb 28;152(5):1065-76.
2. Meissirel\*, **Ruiz de Almodovar\***, Knevels\*, et al. VEGF modulates NMDA receptor activity via a Src-family-kinase-dependent cross-talk. **Proc Natl Acad Sci USA**, 2011, Aug 16(33): 13782-7.
3. **Ruiz de Almodovar\***, Fabre\*, et al. VEGF mediates commissural axon chemoattraction through its receptor Flk1. **Neuron**, 2011, June 9 (70):966-78.
4. Storkebaum\*, **Ruiz de Almodovar\***, et al. Impaired autonomic regulation of resistance arteries in mice with low vascular endothelial growth factor or upon vascular endothelial growth factor trap delivery. **Circulation**, 2010, Jul 20;122(3):273-81.
5. **Ruiz de Almodovar\***, Coulon\*, et al. Matrix-binding VEGF isoforms guide granule cell migration in the cerebellum via VEGF receptor Flk1. **J. Neurosci**, 2010, Nov 10; 30(45): 15052-66.
6. **Ruiz de Almodovar**, et al. Tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) decoy receptor TRAIL-R3 is up-regulated by p53 in breast tumor cells through a mechanism involving an intronic p53-binding site, **J Biol Chem**, 2004, 279, 4093-101.
7. **Ruiz de Almodovar**, et al. Transcription initiation sites and promoter structure of the human TRAIL-R3 gene, **FEBS Lett**, 2001, 531, 304-8.
8. **Ruiz de Almodovar**, et al. The differential sensitivity of Bcl-2-overexpressing human breast tumor cells to TRAIL or doxorubicin-induced apoptosis is dependent on Bcl-2 protein levels, **Oncogene**, 2001, 20, 7128-33.

#### **OTHER PUBLICATIONS AS CO-AUTHOR**

9. Bono\*, De Smet\*, Herbert, De Bock, Georgiadou, Fons, Tjwa, Alcouffe, Ny, Bianciotto, Jonckx, Murakami, Lanahan, Michielsen, Sibrac, Dol-Gleizes, Mazzone, Zacchigna, Herault, Fischer, Rigon, **Ruiz de Almodovar**, et al. Inhibition of tumor angiogenesis and growth by a small-molecule multi-FGF receptor blocker with allosteric properties. **Cancer Cell**, 2013, Apr 15;23(4):477-88
10. Lelli, Gervais, Colin, Chéret, **Ruiz de Almodovar**, Carmeliet, Krause, Boillée & Mallat. The NADPH oxidase Nox2 regulates VEGFR1/CSF-1R-mediated microglial chemotaxis and promotes early postnatal infiltration of phagocytes in the subventricular zone of the mouse cerebral cortex. **Glia**. 2013, Sep;61(9):1542-55.
11. Pierreux, Cordi, Hick, **Ruiz de Almodovar** et al. An epithelial-endothelial crosstalk regulates differentiation in developing pancreas. **Dev Biol**. 2010, Nov 1; 347(1): 216-27.
12. Geudens\*, Herpers\*, Hermans\*, Segura, **Ruiz de Almodovar**, et al. Role of Dll4/Notch in the formation and wiring of the lymphatic network in zebrafish. **Arterioscler Thromb Vasc Biol**. 2010, Sep 30(9):1605-702.
13. Mazzone\*, Dettori\*, Leite de Oliveira\*, Loges, Schmidt, Jonckx, Tian, Lanahan, Pollard, **Ruiz de Almodovar**, et al. **Cell**, 2009, Mar 6, 136(5):839-51.
14. Chittenden, Claes, Lanahan, Autiero, Palac, Tkachenko, Elfenbein, **Ruiz de Almodovar**, et al. Selective regulation of arterial branching morphogenesis by synectin. **Dev Cell**, 2006, Jun;10(6):783-95.

15. Ruiz-Ruiz, **Ruiz de Almodovar**, et al. The up-regulation of human caspase-8 by interferon-gamma in breast tumor cells requires the induction and action of the transcription factor interferon regulatory factor-1, *J Biol Chem*, 2004, 279, 19712-20.
16. Munoz-pinedo, Ruiz-Ruiz, **Ruiz de Almodovar**, et al. Inhibition of glucose metabolism sensitizes tumor cells to death receptor-triggered apoptosis through enhancement of death-inducing signaling complex formation and apical procaspase-8 processing, *J Biol Chem*, 2003, 278, 12759-68.

#### REVIEW AND COMMENTARY ARTICLES

17. Santos, **Ruiz de Almodovar**, Bulteau & Gomes. Neurodegeneration, neurogenesis and oxidative stress. *Oxid Med Cell Longev.*, 2013;2013:730581. Epub 2013 Nov 24
18. Carmeliet & **Ruiz de Almodovar**. VEGF ligands and receptors: implications in neurodevelopment and neurodegeneration. *Cell. Mol. Life Sci.*, 2013, May;70(10):1763-78.
19. **Ruiz de Almodovar**, Lambrechts, Mazzone & Carmeliet. Role and therapeutic potential of VEGF in the nervous system. *Physiol Rev*, 2009, Apr; 89(2): 607-48.
20. Segura, De Smet, Hohensinner, **Ruiz de Almodovar** & Carmeliet. The neurovascular link in health and disease: an update. *Trends Mol Med.*, 2009, Oct; 15(10):439-51.
21. Zacchigna\*, **Ruiz de Almodovar\*** & Carmeliet. Similarities between angiogenesis and neural development: what small animal models can tell us. *Curr Top Dev Biol*, 2008, 80:1-55.
22. Mazzone, **Ruiz de Almodovar** & Carmeliet. Buiding in resistance to cell death. *Nat Genet.*, 2007, Nov; 39(11):1308-1309.
23. Schenider, Ny, **Ruiz de Almodovar** & Carmeliet. A new mouse model to study acquired lymphedema. *PLoS Med.*, 2006, Jul; 3(7):e264.
24. **Ruiz de Almodovar**, Luttun & Carmeliet. An SDF-1 trap for myeloid cells stimulates angiogenesis. *Cell*, 2006, Jan 13;124(1):18-21.
25. **Ruiz de Almodovar**, Lopez-Rivas & Ruiz-Ruiz. Interferon-gamma and TRAIL in human breast tumor cells, *Vitam Horm*, 2004, 67:291-318.
26. **Ruiz de Almodovar**, Lopez-Rivas, Redondo & Rodriguez. Transcriptional regulation of the TRAIL-R3 gene, *Vitam Horm*, 2004, 67:51-63.
27. Munoz-Pinedo\*, **Ruiz de Almodovar\*** & Ruiz-Ruiz\*. Death on the beach: a rosy forecast for the 21st century, *Cell Death Differ*, 2002, Sep;9(9):1026-9.

#### BOOK CHAPTERS

26. Luck & **Ruiz de Almodovar**. Axon guidance factors in developmental and pathological angiogenesis. Book titled "Vascular signaling in health and disease". *Springer*, In press.
27. **Ruiz de Almodovar\***, Zacchigna\*, Autiero & Carmeliet. Guidance of Vascular and Neuronal Network Formation. Book titled "Tumor angiogenesis: Mechanisms and Cancer therapy". *Springer*, 2008, 47-65.
27. **Ruiz de Almodovar\***, Zacchigna\* & Carmeliet. Angiogenesis in the central nervous system. Book titled: Angiogenesis: an integrative approach from science to medicine. *Springer*, 2008, 489-504.
28. **Ruiz de Almodovar\***, Ny\* & Carmeliet. General concepts of angiogenesis and vasculogenesis. Book titled "Retinal vascular disease". *Springer*, 2007, 38-65.
29. Zacchigna, **Ruiz de Almodovar**, Lafuste & Carmeliet. Vascular and Neural development, intersecting parallelisms and crossroads. Book titled: Therapeutic Neovascularization-Quo Vadis? *Springer*, 2007, 159-191.
30. Haigh, **Ruiz de Almodovar**, Schneider & Carmeliet. Non-angiogenic functions of VEGF. Book titled "Angiogenesis: From Basic Science to Clinical Aspects". *CRC Taylor & Francis*, 2006,133-155.