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Dr. Francisco Javier Martin-Romero

Last Name: **Martin-Romero**
First Name: **Francisco Javier**

Current position: **Associate Professor of Biochemistry and Molecular Biology**
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Education: B.S. Biology, 1993. University of Extremadura
M.S. Biochemistry, 1993. University of Extremadura
Ph.D. Biochemistry, 1998. University of Extremadura

Professional Experience:

- 1999-2001 Postdoctoral Fellow. National Cancer Institute (NCI/NIH). Bethesda, MD, USA. (Laboratory of Dr. Dolph L. Hatfield)
- 1999-2004 Lecturer, School of Sciences, University of Extremadura, Spain
- 2004-2010 Senior Lecturer, School of Sciences, University of Extremadura, Spain
- 2008-2009 Visiting Researcher, MRC-Protein Phosphorylation Unit, University of Dundee, UK (Laboratory of Dr. Dario R. Alessi)
Fellowship sponsored by the Jose Castillejo Postdoctoral Fellowship for Young Researchers Program of the Spanish Ministry of Science.
- 2008-present Advisory Board Member of "Gonzalez-Carrera Foundation for the Study of Human IVF"
- 2010-present Associate Professor, School of Sciences, University of Extremadura, Spain

Awards and Honours:

- 1993 Excellence in Biology National Award, sponsored by the Spanish Ministry of Science and Education.
- 1993 Outstanding Student Award, sponsored by Caja de Extremadura.
- 1993 Outstanding Student Award, sponsored by Banco Exterior de España.
- 1998 Doctorate Extraordinary Prize to the best Ph.D. Student, sponsored by the University of Extremadura.
- 2003 International Brain Organization Travel Grant
- 2005 Outstanding Young Investigator Award, sponsored by the University of Extremadura.

Teaching Experience:

Biochemistry, Lecturer
Biomembranes and Bioenergetics, Lecturer
Molecular Mechanisms of Signal Transduction, Lecturer
Reactive Oxygen/Nitrogen Species and Cellular Stress, Co-Organizer and Lecturer
Redox Modulation of Calcium Homeostasis, Co-Organizer and Lecturer
Cell Signaling during Oogenesis and Fertilization, Organizer, Lecturer
Crosstalk of Calcium and Phosphorylation Signaling during Cell Cycle, Organizer, Lecturer

Invited Lectures:

- *Oxidative stress and calcium homeostasis in neurons*. Universidad do Algarve. Faro (Portugal). 2002.
- *Selenoproteins in aging and gene expression in Drosophila*. XIV Meeting of the Portuguese Society of Biochemistry. Vilamoura (Portugal). 2004.
- *Regulation of store-operated calcium entry by phosphorylation of STIM1 in mammalian oocytes*. University of Dundee (Dundee, Reino Unido). 2008.
- *Modulation of calcium signaling by dynamic phosphorylation of the endoplasmic reticulum protein STIM1*. National Cancer Institute (NCI/NIH). Bethesda, MD. 2010.

Grant Review:

Spanish Agency for Evaluation and Prospective Assessment (ANEP), *ad hoc* reviewer 2009, 2010.

Societies

- Member of the Spanish Society for Biochemistry and Molecular Biology (SEBBM).
- Member of the Spanish Fertility Society (SEF).
- Member of the American Society for Cell Biology (ASCB).

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2. **Martín-Romero FJ**, García-Martín E, Gutiérrez-Merino C. Involvement of free radicals in signalling of low-potassium induced apoptosis in cultured cerebellar granule cells. *Int. J. Dev. Biol. Suppl.* 1:197S-198S. 1996.
3. **Martín-Romero FJ**, García-Martín E, Gutiérrez-Merino C. Inactivation of ecto-ATPase activity of rat brain synaptosomes. *Biochim. Biophys. Acta-Biomembranes* 1283:51-59. 1996.
4. Gladyshev VN, **Martín-Romero FJ**, Xu X-M, Kumaraswamy E, Carlson BA, Hatfield DL, Lee BJ. Molecular Biology of selenium and its role in cancer, AIDS and other human diseases. *Recent Res. Dev. Biochem.* 1:145-167. 1999.
5. Kumaraswamy E, Xu X-M, **Martín-Romero FJ**, Carlson BA, Hatfield DL. Roles of UGA in mammalian protein synthesis: selenocysteine, suppression and reading gaps. *Curr. Topics Biochem. Res.* 1:113-123. 1999.
6. **Martín-Romero FJ**, Santiago-Josefat B, Correa-Bordes J, Gutiérrez-Merino C, Fernández-Salguero P. Potassium-induced apoptosis in rat cerebellar granule cells involves cell cycle blockade at the G1/S transition. *J. Mol. Neurosci.* 15:155-165. 2000.

7. Carlson BA, **Martín-Romero FJ**, Kumaraswamy E, Moustafa ME, Zhi H, Hatfield DL. Mammalian selenocysteine tRNA, in *Selenium: its molecular biology and role in human health*. Kluwer Academic Publishers, pp. 23-32. Boston, Dordrecht, London. 2001.
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9. *Gutiérrez-Martín Y, ***Martín-Romero FJ**, Henao F, Gutiérrez-Merino C. Synaptosomal plasma membrane Ca²⁺-pump activity inhibition by repetitive micromolar ONOO⁻ pulses. *Free Radic. Biol. Med.* 32:46-55. 2002.
(*) These authors contributed equally to this work.
10. **Martín-Romero FJ**, Gutiérrez-Martín Y, Henao F, Gutiérrez-Merino C. The NADH oxidase activity of the plasma membrane of synaptosomes is a major source of superoxide anion and is inhibited by peroxynitrite. *J. Neurochem.* 82:604-614. 2002.
11. **Martín-Romero FJ**, García-Martín E, Gutiérrez-Merino C. Inhibition of oxidative stress produced by plasma membrane NADH oxidase delays low potassium-induced apoptosis of cerebellar granule cells. *J. Neurochem.* 82:705-715. 2002.
12. Kwon SY, Badenhorst P, **Martín-Romero FJ**, Carlson BA, Paterson BM, Gladyshev VN, Lee BJ, Hatfield DL. The *Drosophila* selenoprotein BthD is required for survival and has a role in salivary gland development. *Mol. Cell. Biol.* 23:8495-8504. 2003.
13. **Martín-Romero FJ**, Gutiérrez-Martín Y, Henao F, Gutiérrez-Merino C. Fluorescence measurements of steady state peroxynitrite production upon SIN-1 decomposition: NADH versus dihydrodichlorofluorescein and dihydrorhodamine 123. *J. Fluorescence* 14(1):17-23. 2004.
14. *Samhan-Arias AK, ***Martín-Romero FJ**, Gutiérrez-Merino C. Kaempferol blocks oxidative stress in cerebellar granule cells and reveals a key role for reactive oxygen species production at the plasma membrane in the commitment to apoptosis. *Free Radic. Biol. Med.* 37(1):48-61. 2004.
15. Gutiérrez-Martín Y, **Martín-Romero FJ**, Iñesta-Vaquera FA, Gutiérrez-Merino C, Henao F. Modulation of sarcoplasmic reticulum Ca²⁺-ATPase by chronic and acute exposure to peroxynitrite. *Eur. J. Biochem.* 271(13):2647-2657. 2004.
16. **Martín-Romero FJ**, Samhan-Arias AK, García-Bereguiaín MA, Gutiérrez-Merino C. Molecular biology of mammalian AFR reductases. *Recent Res. Dev. Mol. Biol.* 2:29-52. 2004.
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20. Samhan-Arias AK, García-Bereguiaín MA, **Martín-Romero FJ**, Gutiérrez-Merino C. Regionalization of plasma membrane-bound flavoproteins of cerebellar granule neurons in culture by fluorescence energy transfer imaging. *J. Fluorescence* 16(3):393-401. 2006.

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29. Gómez-Fernández C, Pozo-Guisado E, Gañán-Parra M, Perianes MJ, Álvarez IS, **Martín-Romero FJ***. Relocalization of STIM1 in mouse oocytes at fertilization: early involvement of store-operated calcium entry. *Reproduction* 138:211-221. 2009.
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