



CURRICUM VITAE

Personal Data

Forename: Roque

Name: Bru-Martinez

Birthdate: February 22, 1964

Degree: Biology, University of Murcia. Spain, 1986.

PhD: Biochemistry and Molecular Biology. University of Murcia. Spain, 1990.

Postdocs: Institute for Polymers – ETH Zurich, Switzerland 1991-1992. Dpt. Biochemistry and Molecular Biology. University of Murcia, 1993-1997

Present position: Professor of Biochemistry and Molecular Biology. Head of Plant Proteomics and Functional Genomics Group. Department of Agrochemistry and Biochemistry. University of Alicante. Since 1997. Coordinator of the Proteomics Facility-University of Alicante

Telephone: +34965903400 ext 3113.

Fax: +34965909955.

E-mail: roque.bru@ua.es

Research lines: Plant proteomics and functional genomics. Production of plant natural bioactive compounds by plant cell culture. Role of Polyphenol oxidases and fruit quality: proteomic approaches. Protein biomarkers of grapevine berry development and quality. Biosynthesis and accumulation pathways for resveratrol and derivatives in model grapevine cell cultures.

Recent publications:

Articles

- Martínez-Esteso, M.J.; Sellés-Marchart, S.; Lijavetzky, D.; Pedreño, M.A.; Bru-Martínez, R. (2011) A DIGE-based quantitative proteomic analysis of grape berry flesh development and ripening reveals key events in sugar and organic acid metabolism *Journal of Experimental Botany* aceptado-en prensa
- Martínez-Esteso, M.J.; Sellés-Marchart, S.; Vera-Urbina, J.C.; Pedreño, M.A.; Bru-Martínez, R. (2011) DIGE analysis of proteome changes accompanying resveratrol production by grapevine (*Vitis vinifera* cv. Gamay) cell cultures in response to cyclodextrin and methyl jasmonate elicitors *Journal of Proteomics* doi:10.1016/j.jprot.2011.02.035
- Fernández-García, N.; Hernández, M.; Casado-Vela, J.; Bru, R.; Elortza, F.; Hedden, P.; Olmos, E. (2011) Changes to the proteome and metabolome of xylem sap in *Brassica oleracea* in response to salt stress *Plant Cell and Environment* doi: 10.1111/j.1365-3040.2011.02285.x
- Casado-Vela, J.; Cebrian, A.; Gómez, T.; Sánchez, E.; Sellés, S.; Yubero, N.; Menchen, L.; Vilaseca, M.; Diema, C.; Bru, R.; Lacal, J.C. (2011) Lights and shadows of proteomics

technologies for the study of protein species including isoforms, splicing variants and post-translational modifications *Proteomics* 11, 590-603

- Martínez-Esteso, M.J.; Casado-Vela, J.; Sellés-Marchart, S.; Elortza, F.; Pedreño, M.A.; Bru-Martinez, R. (2011) iTRAQ-based profiling of grape berry exocarp proteins during ripening using a parallel mass spectrometric method *Molecular Biosystems (Online)* 7, 749-765
- Martínez-Esteso, M.J.; Vilella-Antón, M.T.; Sellés-Marchart, S.; Botta-Catalá, A.; Piñol-Dastis, R.; Bru-Martinez, R. (2010) A DIGE proteomic analysis of wheat flag leaf treated with Terra-Sorb(R) foliar, a free amino acid-based biostimulator *PROTEÓMICA* 5, 164-166
- Casado-Vela, J.; Martínez-Esteso, M.J.; Rodríguez, E.; Borrás, E.; Elortza, F.; Bru-Martinez, R. (2009) iTRAQ-based quantitative analysis of protein mixtures with large fold change and dynamic range *Proteomics* 10, 343-347
- Almagro, L.; Gómez-Ros, V.; Belchí-Navarro, S.; Bru, R.; Ros-Barceló, A. and Pedreño, M.A. (2009) Class III peroxidases in plant defence reactions *Journal of Experimental Botany* 60, 377-390
- Martínez-Esteso, M.J.; Sellés-Marchart, S.; Vera-Urbina, J.C.; Pedreño, M.A.; Bru-Martinez, R. (2009) Changes of defense proteins in the extracellular proteome of grapevine (*Vitis vinifera* cv Gamay) cell cultures in response to elicitors *73*, 331-341
- Lijavetzky, D.; Almagro, L.; Belchí-Navarro, S.; Martínez-Zapater, J.M.; Bru, R.; Pedreño, M.A. (2008) Synergistic effect of methyl jasmonate and cyclodextrin on stilbene biosynthesis pathway gene expression and resveratrol production in Monastrell grapevine cell cultures *1*, 132
- Sellés-Marchart, S.; Luque, I.; Casado-Vela, J.; Martínez-Esteso, M.J. and Bru-Martínez, R. (2008) Proteomics of multigenic families from species underrepresented in databases: the case of loquat (*Eriobotrya japonica* Lindl.) polyphenol oxidases *Journal of Proteome Research* 7, 4095-4106

Book chapters

- Almagro, L.; Sabater-Jara, A.B.; Belchí-Navarro, S.; Fernández-Pérez, F.; Bru, R.; Pedreño, M.A. (2011) Effect of UV light on secondary metabolite biosynthesis in plant cell cultures elicited with cyclodextrins and methyl jasmonate *Abiotic Stress/Book 3 / ISBN979-953-307-297-4 / Intech 2011 (en prensa)*
- Belchí-Navarro, S.; Tallón-Vila, C.I.; Almagro, L.; Bru, R.; Pedreño, M.A. (2009) Characterization of trans-resveratrol production from grapevine cell cultures *BioVeg 09 / ISBN:978-959-16-0979-3 / Centro de Bioplantas*

Membership: Spanish society of biochemistry and molecular biology (FASEB); Spanish society of proteomics (EuPA); PROTEORED (Spanish network of proteomics facilities)

Languages: Spanish (mother tongue), English