# *Curriculum vitae*
# *Dr. José R Botella*

***Personal data***

Date of birth: May 30, 1959
Birthplace: Málaga, Spain.
Nationality: Australian.

***Education***

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| Sep. 1987 | Ph.D. degree in Biochemistry, University of Málaga, Spain. |
| Sep. 1983 | Hons. Quantum Chemistry, Universidad Autonoma de Madrid, Spain. |
| June 1982 | BSc. Chemistry, Universidad Autónoma de Madrid, Spain. |

***Professional work experience***

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| Jan. 1994-Present | Associate Professor, Department of Botany, University of Queensland. Director, Plant Genetic Engineering Laboratory. |
| Jan. 1992-Dec. 1993 | Research associate. Department of Chemical Engineering. Pennsylvania State University. NASA funded project. |
| Dec. 1990-Dec. 1992 | Research associate. Laboratory of Plant Molecular Biology, Department of Horticulture. Pennsylvania State University. |
| Nov. 1989-Nov. 1990 | Molecular Biology Team leader , Therapeutic Enzymes Ltd. |
| Sep. 1988-Sep. 1989 | Postdoctoral research associate. Plant Research Laboratory. Michigan State University. |

***Professional societies***

* American Society of Plant Biologists (ASPB).
* International Society of Plant Molecular Biology (ISPMB).
* Australian Society of Plant Physiology (ASPP).
* International Society for Horticultural Research (ISHR)

***Selected publications***

Trusov, Y., Rookes, J.E., Chakravorty, D., Armour, D., Schenk, P.M., and Botella, J.R. (2006). Heterotrimeric G proteins facilitate Arabidopsis resistance to necrotrophic pathogens and are involved in jasmonate signaling. Plant Physiology 140, 210-220.

Botella, J.R. (2005). Balancing teaching and research in higher education. Studies in Learning, Evaluation, Innovation and Development 2, 3-4.

Cazzonelli, C.I., McCallum, E.J., Lee, R., and Botella, J.R. (2005). Characterization of a strong, constitutive mung bean (Vigna radiata L.) promoter with a complex mode of regulation in planta. Transgenic Research 14, 941-967.

Hidalgo, M.S.P., Tecson-Mendoza, E.M., Laurena, A.C., and Botella, J.R. (2005). Hybrid 'Sinta' papaya exhibits unique ACC synthase 1 cDNA isoforms. Journal of Biochemistry and Molecular Biology 38, 320-327.

Moyle, R., Crowe, M., Ripi, J., Fairbairn, D.J., and Botella, J.R. (2005). PineappleDB: An online pineapple bioinformatics resource. BMC Plant Biology 5.

Moyle, R., Fairbairn, D.J., Ripi, J., Crowe, M., and Botella, J.R. (2005). Developing pineapple fruit has a small transcriptome dominated by metallothionein. Journal of Experimental Botany 56, 101-112.

Petsch, K.A., Mylne, J., and Botella, J.R. (2005). Cosuppression of eukaryotic release factor 1-1 in Arabidopsis affects cell elongation and radial cell division. Plant Physiology 139, 115-126.

Purnell, M.P., Skopelitis, D.S., Roubelakis-Angelakis, K.A., and Botella, J.R. (2005). Modulation of higher-plant NAD(H)-dependent glutamate dehydrogenase activity in transgenic tobacco via alteration of beta subunit levels. Planta 222, 167-180.

Smith M. K., Ko, H. L., Sanewski, G. M. and Botella J. R. 2005. *Ananas comosus* Pineapple. In "Biotechnology of Fruit and Nut Crops". (R.E. Litz Ed.). 'Biotechnology in Agriculture Series No 29. CABI publishing. Cambridge, USA. pp157-172.

Kim, J.H. and Botella, J.R. 2004. Etr1-1 gene expression alters regeneration patterns in transgenic lettuce stimulating root formation. Plant Cell Tissue and Organ Culture 78: 69-73.

Gonzalez N. and Botella J.R. 2003. Characterisation of three ACC synthase gene family members during post-harvest-induced senescence in Broccoli (*Brassica oleracea* L. Var. italica). Journal of Plant Biology 46:223-230.

Botella J.R. 2003. Biotechnology and reduced spoilage in harvested plant foods. In "Food Preservation Techniques". ( P. Zeuthen and L. Bogh-Sorensen Ed.) Woodhead publishing, Cambridge, UK. pp 243-262.

Firoozabady, E., Heckert, M., Trusov, Y., Botella, J.R. and Gutterson, N. 2003. Transformation and regeneration of transgenic pineapple plants. Molecular Breeding: In press.

Kim, J.H. and Botella, J.R. 2002. Callus induction and plant regeneration from broccoli (Brassica oleracea var. italica) for transformation. Journal of Plant Biology 45: 177-181.

Botella J.R., Leeton P., Cruz-Hernandez A., Cavallaro A. and Labrie P. (2002). Bigger, firmer, riper: Biotechnological control of ripening in fruits. Acta Hort 575: 589-594.

Magdalita P.M., Laurena A.C., Yabut-Perez B.M., Tecson-Mendoza E.M., Villegas V.N. and Botella J.R. (2001). Progress in the development of transgenic papaya: Transformation of solo papaya using ACC synthase antisense construct. Acta Horticulturae. 575: 171-176.

Mason, M. and Botella, J.R. (2001). Isolation of a Novel G-Protein γ-Subunit from Arabidopsis thaliana and its Interaction with Gβ. Biochimica et Biophysica Acta. 1520: 147-153.

Botella J. (2001). Genes selected for their role in modifying post-harvest life. In "Fruit and Vegetable Biotechnology". Woodhead publishing, Cambridge, UK.

Humphrey, T.V. and Botella, J.R. (2001). Re-evaluation of the cytokinin receptor role of the *Arabidopsis* gene GCR1. Journal of Plant Physiology 158: 645-653.

Mason, M. and Botella, J.R. (2000). Completing the heterotrimer: Isolation and characterization of an Arabidopsis thaliana G-protein gamma subunit cDNA. Proceedings of the National Academy of Sciences USA. 97: 14784-14788.

Cruz-Hernandez, A., Town, L., Cavallaro, A. and Botella, J.R. (2000). Transient and stable transformation in mango by particle bombardment. Acta Horticulturae 509: 237-242.

Botella J.R., Cavallaro A. and Cazzonelli C.I. (2000). Towards the production of transgenic pineapple to control flowering and ripening. Acta Horticulturae 529: 115-122.

Etheridge, N., Trusov, Y. and Botella, J.R. (1999). Characterization of ATDRG1, a member of a new class of GTP-binding proteins in plants. Plant Molecular Biology 39:1113-1126.

Cazzonelli, C., Cavallaro, T. and Botella, J.R. (1999). Searching for the role of ethylene in non-climacteric fruits. In Biology and Biotechnology of the Plant Hormone Ethylene. (Kanellis, Chang, Klee, Bleecker, Pech and Grierson Eds.). Kluwer Academic Publishers. pp 29-30.

Mylne J., Mason M. and Botella J.R. (1998) Rapid isolation of high-quality RNA from symbiotic dinoflagellates. Phycologia 37:307-309.

Mylne J. and Botella J.R. (1998). Binary vectors for sense and antisense expression of Arabidopsis ESTs. Plant Molecular Biology Reporter 16:156-162.

Cazzonelli C., Cavallaro A. and Botella J.R. (1998). Cloning and characterisation of ripening-nduced ethylene biosynthetic genes from non-climacteric pineapple (*Ananas comosus*) fruits. Australian Journal of Plant Physiology 25:513-518.

Mason M. and Botella J.R. (1997). Cloning and differential expression of two ACC synthase genes during papaya (Carica papaya L.) fruit ripening. Australian Journal of Plant Physiology 24:239-244.

Purnell M., Stewart G. and Botella J.R. (1997). Cloning and characterisation of a glutamate dehydrogenase cDNA from tomato (Lycopersicon esculentum L.). Gene 186:249-254.

Botella, J.R., Arteca J.M., Somodevilla, M.J. and Arteca R.N. (1996). Calcium-dependent protein kinase gene expression in response to physical and chemical stimuli in mungbean (vigna radiata). Plant Molecular Biology 30:1129-1137.

Botella, J.R., Frangos, J. and Arteca R.N. (1995) A mechanical strain-induced ACC synthase gene. Proceedings of the National Academy of Sciences USA. 92:1595-1598.

***International Patents***

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| 2003 | Founding member of Origo Biotech. A spin-off company commercialising two of my patents. The company has an agreement to invest 3.5 million dollars in R&D. |
| 2002 | The patent entitled "A Method for Facilitating Pathogen Resistance" PR8802 (US #60/341404) covers a novel method to control nematode infestation. Licensed to Golden Circle. Resulted in an ARC linkage grant. |
| 2000 | Founding member Coridon Ltd. Spin-off company commercialising two patents of which I am an inventor in one of them. The company is now finalising a structured finance agreement for the value of 4 million dollars to be invested in research. |
| 2000 | The patent entitled "Nucleic Acid Molecule And Uses Therefore" PR7188 covers a novel translational enhancer sequence. |
| 2000 | The patent entitled "Method for modifying a plant phenotype" (PCT/AU00/02011) covers the use of a novel gene that produces a plant phenotype with an unusually high number of branches, flowers and seeds. Licensed to Origo Biotechnology. Resulted in the Start up Biotech company Origo Biotech. |
| 2000 | The patent entitled "Method for modifying a plant phenotype-2" (PCT/AU00/02012) covers the use of a novel gene that can alter the phenotype of a plant to produce flowers grouped in one location instead of distributed throughout a branch. |
| 1998 | Patent entitled "Polynucleotide and method" (PCT/AU98/00530), covers a novel method of directing specific expression of genes to different plant tissues. Licensed to Coridon Ltd. |
| 1998 | The patent entitled "A novel plant promoter and uses therefor" (PP5572/98) protects the intellectual property and uses of the PGEL-1 promoter, which directs gene expression in a constitutive way and with 3-4 higher levels of expression than the CaMV 35s promoter. Licensed to several overseas and Australian Companies on non-exclusive agreements. |
| 1996 | Australian patent PN/5559, international patent PCT/AU96/00591 entitled "Novel ACC synthase genes". Licensed to Golden Circle and Origo Biotech. |
| 1995 | Australian patent PN/9582 entitled "Novel ACC synthase genes from pineapple", Licensed to Golden Circle. |