



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



« *CURRICULUM VITAE* »

(Abbreviated)

Name: Dr Oscar VICENTE MEANA

Position: Professor of Biochemistry and Molecular Biology
Department of Biotechnology
Polytechnic University of Valencia (Spain)

(Updated: January, 2020)

I. GENERAL INFORMATION

1. PERSONAL DATA

Family names: Vicente Meana **First name:** Oscar

ID (D.N.I.): 51 325 766 - R

Status: Married, two children

Place of birth: Madrid (Spain)

Date of birth: January 9, 1956

Private address: Avda. del Mar 4, pta. 4, 46132 Almàspera, Valencia (Spain).

2. PRESENT POSITION AND AFFILIATION

- Professor of Biochemistry and Molecular Biology (*Catedrático de Universidad*), Department of Biotechnology, Polytechnic University of Valencia

- Research group leader at the Institute for the Preservation and Improvement of Valencian Agrodiversity (COMAV), Polytechnic University of Valencia

Postal Address:

COMAV
CPI, Edificio 8E
Universidad Politècnica de Valencia
Camino de Vera s/n
46022 Valencia (Spain)

Phone: +34 96 387 78 78

Mobile: +34 670 61 99 15

Fax: +34 96 387 94 22

E-mail: ovicente@upvnet.upv.es

3. SCIENTIFIC FIELDS (UNESCO codes): Plant Molecular Biology (241502); Genetic Engineering (240902); Plant development (241715); Plant Ecology (241713); Plant Physiology (241719)

RESEARCH FIELDS OF HIGHEST INTEREST:

- **General:** plant biochemistry and molecular biology / plant stress physiology / plant biotechnology
- **Specific:** plant responses to abiotic stress and stress tolerance mechanisms / biotechnology of plant reproduction

II. ACADEMIC BACKGROUND

- **Graduate** (*Licenciado*, five-year university studies) in Chemical Sciences (Specialisation: Biochemistry). Universidad Complutense, Madrid. July 1978.
- **Ph.D.** in Sciences (Section Chemistry). Universidad Autónoma, Madrid. October 1983.

III. PREVIOUS TRAINING AND PROFESSIONAL POSITIONS

- 1978 - 1983** Pre- and post-graduate student (Graduate and Ph.D. Theses) at "Centro de Biología Molecular Severo Ochoa", Univ. Autónoma de Madrid (UAM).
- 1978** "Profesor Ayudante", UAM. Dept. of Virology and Molecular Genetics.
- 1979 - 1981** Fellowship (pre-doctoral) "Research in Biomedical Sciences" from Caja de Ahorros y Monte de Piedad de Madrid.
- 1982 - 1985** Fellowship for "Training of Research Personnel", from the Ministry of Education and Science, Spain.
- 1985 - 1987** Post-doctoral fellowship (Plan of Molecular Biology and its Applications, Juan March Foundation, Madrid), at the Friedrich Miescher-Institut (FMI), Basel (Switzerland).
- 1987 - 1988** Post-doc contract from FMI
- 1988 - 1990** Post-doctoral fellowship from the Spanish Ministry of Education and Science at the Institute of Microbiology and Genetics, University of Vienna (Austria).
- 1990 - 1991** *Wissenschaftlichermitarbeiter* (scientific collaborator) hired by the Institute of Microbiology and Genetics. Research group leader.
- 1991 - 1996** *Wissenschaftlichermitarbeiter* (1/2 position) and *Vertragsassistent* (Assistant Professor) hired by the University of Vienna (1/2 position). Research group leader at the Institute of Microbiology and Genetics.
- 1996 - 1999** "Return" contract for scientists abroad, from the Spanish Ministry of Education and Science. Institute for Plant Molecular and Cell Biology (IBMCP), Polytechnic University of Valencia (UPV).
- 1999 - 2003** 'Profesor Titular de Escuela Universitaria' at UPV / group leader at IBMCP
- 2003 - 2010** 'Profesor Titular de Universidad' (Associate Professor) at UPV / group leader at IBMCP
- 2010 - 2019** 'Catedrático de Universidad' (Full Professor) at UPV / group leader at IBMCP.

IV. TEACHING ACTIVITIES

1. PRE- AND POST-GRADUATE TEACHING

- **1978.** "Profesor Ayudante", UAM. Department of Virology and Molecular Genetics. Collaboration in the organisation and teaching of a practical course on *Biochemical Methods*.

- **1979 - 1984.** As a pre-doctoral fellow in the Department of Virology and Molecular Genetics (UAM), I collaborated as an instructor in practical courses on *Biochemical Methods* and *Molecular Genetics* (2-3 weeks per academic year).

- **1991 - 1996.** Assistant Professor (*Vertragsassistent*), University of Vienna. Institute of Microbiology and Genetics. Responsible for several theoretical and practical courses on Experimental Genetics: *Proseminar zur Experimentellen Genetik II*. (theoretical course on Molecular Genetics), *Experimentelle Genetik II* (theoretical/practical course on Molecular Genetics), *Experimentelle Genetik III* (theoretical/practical course on Plant Genetics), *Experimentelle Genetik IV* (practical course on Plant Genetics). Supervision of Diploma and PhD Theses.

- **from 1999.** Professor of Biochemistry and Molecular Biology. Department of Biotechnology. School of Agricultural Engineering and Environment (ETSIAMN). Polytechnic University of Valencia. Responsible of theoretical and practical courses on the molecular biology / biotechnology fields ("Recombinant DNA Technology", "Food Biochemistry", "Molecular Biology", "Plant Biochemistry and Molecular Biology", "Biotechnology and Society", "Plant Reproductive Biotechnology", "Genetic Engineering", among others) to undergraduate students of Biotechnology, Biomedical Engineering, Agronomic Engineering, Food Science and Technology, as well as to post-graduate students. Supervision of the experimental work of visiting scientists, exchange students (Erasmus, Erasmus+ and other international mobility programmes), Graduate Degree and Master Theses Projects, and PhD Theses.

2. SUPERVISION OF Ph. D. THESES

1. **Anna Alwen** (1991). Detection and characterisation of an endogenous β -glucuronidase activity in plants. Faculty of Sciences. University of Vienna.

2. **Norbert Eller** (1993). Konstruktion von cDNA Bibliotheken sowie die Isolierung und Charakterisierung eines cdc2 homologen Gens aus *Nicotiana tabacum*. Faculty of Sciences. University of Vienna.

3. **Ines Swoboda** (1995). Isolation and characterisation of a birch gene family encoding pollen allergens and pathogenesis-related proteins. Faculty of Sciences. University of Vienna. *Austrian Society of Biotechnology's Award to the best Ph D Thesis in 1995*.

4. **Miguel Angel Naranjo** (2001). Caracterización de una lipasa atípica de *Arabidopsis thaliana* implicada en la tolerancia a sal. Higher Technical School of Agronomic Engineering (ETSIA). Polytechnic University of Valencia.

5. José Javier Forment Millet (2002). Aislamiento de genes de *Arabidopsis thaliana* implicados en la tolerancia a sal de las células eucarióticas: relación entre procesamiento del pre-mRNA y halotolerancia. ETSIA. Polytechnic University of Valencia.

6. Lucrecia Bourgon Baquedano (2006). Análisis de la expresión del factor de *splicing* SRL1 de *Arabidopsis thaliana* implicado en mecanismos de tolerancia a estrés salino. ETSIA. Polytechnic University of Valencia.

7. Bartolomé Amorós Seller (2008). RCY 1: Proteína nuclear relacionada con el estrés salino. ETSIA. Polytechnic University of Valencia.

8. José Félix Moruno Manchón (2013). Regulación de la degradación intracelular de proteínas por glucosa. Polytechnic University of Valencia (Academic Tutor)

9. Mohamad Al Hassan (2016). Comparative Analyses of Plant Responses to Drought and Salt Stress in Related Taxa: A Useful Approach to Study Stress Tolerance Mechanisms. Polytechnic University of Valencia.

10. Sara González Orenga (*in progress*). Mecanismos de tolerancia a estrés salino e hídrico en plantas endémicas, raras o amenazadas. Polytechnic University of Valencia.

11. Sugenith Arteaga Castillo (*in progress*). Cultivos para el cambio climático: selección y caracterización de variedades de judía (*Phaseolus vulgaris* L.) tolerantes a sequía y salinidad. Polytechnic University of Valencia.

- (also supervision of over 30 Master, 'Diploma' and 'Graduate Degree' Theses)

V. RESEARCH ACTIVITIES AND PUBLICATIONS

1. SUMMARY

- Participation in 30 research projects or contracts, in seven of them as 'scientific supervisor', in eight as Project leader/Principal investigator.

- Author or co-author of ~ 190 scientific publications, 118 of them included in Clarivate Analytics' 'ISI Web of Science' (Core Collection, databases: SCI-expanded + CPCI-S): 88 research papers, 8 reviews, 4 proceedings papers, 16 meeting abstracts, 1 letter, 1 note. Total number of citations: 2890; citations/article: ~ 25; citations/year: ~ 74; 'h-index' = 30.

- Co-inventor in four patent applications

- Co-author in ~ 175 communications to national or international scientific Congresses.

- Author identifiers: Researcher ID (Web of Science): A-3858-2009
 Author ID (Scopus): 55945779600
 ORCID: 0000-0001-5076-3784

2. RESEARCH PROJECTS / CONTRACTS

A) 1978 - 1988. Pre- and post-doctoral work

1. Mechanisms of regulation of protein synthesis in eukaryotic cells. eIF-2 and eIF-2 kinases in eukaryotes. 1978 - 1984. Centre of Molecular Biology, UAM-CSIC, Madrid (Spain) [including Graduate (*Licenciatura*) and PhD Theses].
2. Preparation of monoclonal antibodies against foot-and-mouth disease virus, 04/1985 - 09/1985. Centre of Molecular Biology, UAM - CSIC, Madrid (Spain).
3. Purification and characterisation of RNA 3'-terminal phosphate cyclase, from HeLa cells, 10/1985 - 08/1988. Post-doctoral fellowship/contract. Friedrich Miescher-Institut, Basel (Switzerland). Funded by CIBA - GEIGY AG.

B) 1989 - 1996. *Institute of Microbiology and Genetics, University of Vienna (Austria)*

4. "Gentransfer in Pflanzen" (Gene transfer in plants), 01/1989 - 12/1992. Funded by "biotechnologische Forschungsgesellschaft m.b.H. (BtF)" and by "Forschungsförderungsfonds für die gewerbliche Wirtschaft (FFF)". *Type of participation*: project co-worker.
5. "Proteinkinasen in Pollen" (Protein kinases in pollen), 10/1989 - 09/1990. Funded by "Hochschuljubiläumsstiftung der Stadt Wien". *Type of participation*: scientific supervisor of the project.
6. "Gene der Pollen- und Embryonalentwicklung von Pflanzen" (Genes of pollen and embryo development in plants), 02/1990 - 09/1992. Project P7529-BIO, from "Fonds zur Förderung der wissenschaftlichen Forschung (FWF)". *Type of participation*: scientific supervisor of the project.
7. Gene expression during embryogenesis in vitro: comparison between somatic and pollen embryogenesis, 07/1990 - 06/1992. Collaboration with Prof. Denes Dudits' group, Biological Research Center, Hungarian Academy of Sciences, Szeged (Hungary). Funded by Bundesministerium für Wissenschaft und Forschung, BMWF, (Federal Ministry of Science and Research). *Type of participation*: scientific supervisor of the project, on the Austrian side.
8. "Generationswechsel höherer Pflanzen" (Alternation of generations in higher plants), 06/1991 - 05/1996. Project S6003-BIO from FWF. *Type of participation*: co-applicant (with Prof. Heberle-Bors) and scientific supervisor of the project.
9. "MAP kinasen und Pollenembryogenese" (MAP kinases and pollen embryogenesis), 10/1993 - 06/1996. Project P09676-MOB from FWF. *Type of participation*: applicant and project leader.
10. Pollen cellular and molecular biology, 03/1991 - 12/1994. Collaboration with Dr María del Carmen Risueño (Centro de Investigaciones Biológicas, C.S.I.C., Madrid) and Dr María Isabel Rodríguez-García (Estación Experimental del Zaidín, C.S.I.C., Granada). Funds for the exchange of scientific personnel, Spanish-Austrian Mixed Commission for Scientific and Technical Co-operation, Spanish Ministry of Foreign Affairs and Austrian Federal Ministry of Science and Research. *Type of participation*: scientific supervisor of the project, on the Austrian side.
11. Molecular and cellular basis of the process of androgenic induction in *Nicotiana tabacum* and *Capsicum annuum* (*Solanaceae*), 01/1995 - 12/1995. Collaboration with Dr María del Carmen Risueño (Centro de Investigaciones Biológicas, C.S.I.C., Madrid), within the "Integrated Actions Programme". *Type of participation*: scientific supervisor of the project, on the Austrian side.
12. "Antheren und Pollenkultur" (Anther and pollen cultures), 01/1993 - 12/1995. Project P9174-BIO, funded by FFF and FWF. *Type of participation*: project co-worker.

13. Cell cycle regulation in pollen, *03/1993 - 02/1996*. Project OWP39 from BMWF, collaboration with Prof. Jaroslav Tupý, Institute of Experimental Botany, Czech Academy of Sciences, Prague (Czech Republic). *Type of participation*: scientific supervisor of the project, on the Austrian side.

14. Anther and pollen cultures for haploid production in forest species, *01/1995 - 03/1996*. Collaboration with Dr María Ángeles Bueno (Centro de Investigación Forestal, I.N.I.A., Madrid), within the "Integrated Actions Programme". *Type of participation*: applicant and project leader, on the Austrian side.

15. MAP kinases in tobacco pollen, *06/1996 - 05/1998*. Project P11481-GEN from FWF. *Type of participation*: applicant and project leader.

C) from 1996. *Institute of Plant Molecular and Cellular Biology (IBMCP), Institute for the Preservation and Improvement of Valencian Agrodiversity (COMAV), Polytechnic University of Valencia*

16. New strategies for improving salt tolerance in crop plants (SALTO), *(11/1996 - 10/1997)*. EU BIOTECH Project (AIR3 CT94-1508). *Type of participation*: project co-worker.

17. Aislamiento y expresión en plantas de genes que confieran tolerancia a sequía y salinidad: genes HAL y EHA (Isolation and expression in plants of genes conferring tolerance to drought and salt: HAL and EHA genes) *(11/1997 - 07/1999)*. CICYT, National Plan of Biotechnology, project BIO96-1196-C02-01. *Type of participation*: project co-worker.

18. Mejora de recursos genéticos en especies hortícolas de interés para la Comunidad Valenciana: Genes de estrés (Improvement of genetic resources in horticultural species of interest for the Valencian Community: Stress genes), *(08/2000 - 12/2003)*. Consellería de Agricultura, Pesca y Alimentación, Generalitat Valenciana (Regional Government of Valencia). *Type of participation*: member of the research team.

19. Regulación post-transcripcional de la respuesta a estrés en plantas: el *splicing* de los precursores del RNA mensajero como diana de la toxicidad iónica de la sal (Postranscriptional regulation of stress responses in plants: the splicing of messenger RNA precursors as a target of salt toxicity) *(12/2000 - 12/2003)* Project BMC2000-1130, Spanish Ministry of Science and Technology, National Plan of R+D. *Type of participation*: applicant and project leader.

20. Estudio de la biodiversidad de las poblaciones de *Rosmarinus* en la Comunidad Valenciana (Studies on the biodiversity of *Rosmarinus* populations in the Valencian Community) *(01/2001 - 12/2002)*. Project GV00-060-3, Consellería de Cultura, Educación y Ciencia, Generalitat Valenciana. *Type of participation*: member of the research team.

21. Proyecto Genoma Cítricos: Estrés Abiótico (Citrus Genome Project: Abiotic Stress) *(01/2001 - 12/2002)*. Consellería de Agricultura, Pesca y Alimentación, Generalitat Valenciana. *Type of participation*: member of the research team.

22. Estudio de la respuesta a estreses bióticos de cítricos mediante genómica funcional (Study of the response to biotic stress in citrus through functional genomics) *(12/2002 - 12/2005)*. Project **GEN2001-4885-C05-01** from the Spanish Ministry of Science and Technology (Strategic Action on Genomics and Proteomics). *Type of participation*: member of the research team.

- 23.** Ayuda al grupo: Biología molecular de la tolerancia a salinidad y sequía (Support for the group: Molecular biology of salt and drought tolerance) (01/2004 - 12/2005). Consellería de Empresa, Universitat i Ciència, Generalitat Valenciana. *Type of participation:* member of the research team.
- 24.** Licence of technology for salt resistance in plants (09/2000 - 12/2008). Funded by CropDesign N.V. (Zwijnaarde, Bélgica). *Type of participation:* member of the research team.
- 25.** Respuestas de las plantas al estrés abiótico: Correlación con las características edáficas de sus hábitats naturales (Plant responses to abiotic stress: Correlation with the edafic characteristics of their natural habitats) (01/2009 – 12/2011). Project **CGL2008-00438/BOS** from the Spanish Ministry of Science and Innovation, National Plan for R+D. *Type of participation:* applicant and project leader
- 26.** Respuestas de las plantas al estrés abiótico: Correlación con las características edáficas de sus hábitats naturales (07/2011 – 12/2011). Project **FPA/2011/001** from Generalitat Valenciana ('Gerónimo Forteza' Programme for training of technical research personnel). *Type of participation:* applicant and project leader
- 27.** Estudio de los efectos protectores de bioestimulantes frente a estrés abiótico en levaduras y plantas de tomate (Studies on the protective effects of 'biostimulants' against abiotic stress in yeast and tomato plants) (12/2010 – 12/2012). Project funded by the company 'Fertinagro Nutrientes S.L.' *Type of participation:* project leader
- 28.** Los CRFS como alternativa a los fertilizantes tradicionales: Buscando una mejor protección del medio ambiente (CRFS as an alternative to traditional fertilizers: Searching for a better protection of the environment) (2014 – 2017). Project **RTC-2014-1457-5** from the Spanish Ministry of Economy and Competitiveness (programme: Retos-Colaboración 2014). *Type of participation:* member of the research team
- 29.** 'European Plant Breeding College' (2015 – 2017) Project **2015-1-FR01-KA203-015095**. European Commission. *Type of participation:* member of the research team
- 30.** 'Supporting biotechnology students oriented towards an entrepreneurial path (SupBioEnt)' (2017-2019) Project **2017-1-RO01-KA203-037304**. European Commission. *Type of participation:* project leader (of the Spanish partner)
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3. SCIENTIFIC PUBLICATIONS INCLUDED IN CLARIVATE ANALYTICS' WEB OF SCIENCE (CORE COLLECTION, DATABASES: SCI-EXPANDED + CPCI-S)

- 1.** Matilla, A. and Nicolás, G.; **Vicente, O.** and Sierra, J.M. (1980). Preformed mRNA in cotyledons of ungerminated seeds of *Cicer arietinum* L. *Plant Physiol.* **65**, 1128-1132.
- 2.** García-Olmedo, F., Carbonero, P., Hernández-Lucas, C., Paz-Ares, J., Ponz, F., **Vicente, O.** and Sierra, J.M. (1983). Inhibition of eukaryotic cell-free protein synthesis by thionins from wheat endosperm. *Biochim. Biophys. Acta* **740**, 52-56.

3. Sierra, J.M., Palomo, C., **Vicente, O.** and Ochoa, S. (1983). Mechanisms of activation of eIF-2 kinase in rabbit reticulocyte lysates by oxidized glutathione. *Archivos de Biología y Medicina Experimentales* **16**, R80-R81.
4. Palomo, C., **Vicente, O.**, Sierra, J.M. and Ochoa, S. (1985). Studies on the activation of the heme-stabilized translational inhibitor of reticulocyte lysates by oxidized glutathione and NADPH depletion. *Arch. Biochem. Biophys.* **239**, 497-507.
5. Mateu, M.G., **Vicente, O.** and Sierra, J.M. (1987). Protein synthesis in *Drosophila melanogaster* embryos. Purification and characterization of polypeptide chain-initiation factor 2. *Eur. J. Biochem.* **162**, 221-229.
6. Mateu, M.G., Rocha, E., **Vicente, O.**, Vayreda, F., Navalpotro, C., Andreu, D., Pedroso, E., Giralt, E., Enjuanes, L. and Domingo, E. (1987). Reactivity with monoclonal antibodies of viruses from an episode of foot-and-mouth disease. *Virus Res.* **8**, 261-274.
7. **Vicente, O.** and Filipowicz, W. (1988). Purification of RNA 3'-terminal phosphate cyclase from HeLa cells: Covalent modification of the enzyme with different nucleotides. *Eur. J. Biochem.* **176**, 431-439.
8. Mateu, M.G., Maroto, F.G., **Vicente, O.** and Sierra, J.M. (1989). Phosphorylation and guanine nucleotide exchange on polypeptide chain initiation factor-2 from *Artemia* embryos. *Biochim. Biophys. Acta* **1007**, 55-60.
9. Heberle-Bors, E., Benito Moreno, R.M., Alwen, A., Stöger, E. and **Vicente, O.** (1990). Transformation of pollen. In: Progress in plant cellular and molecular biology (Nijkamp, H.J.J., Van Der Plas, L.H.W. and Van Aartrijk, J., eds.). Kluwer Academic Publishers, Dordrecht. Book Series: *Current Plant Science and Biotechnology in Agriculture* **9**, 244-251.
10. Filipowicz, W. and **Vicente, O.** (1990). RNA 3'-terminal phosphate cyclase from HeLa cells. *Methods Enzymol.* **181**, 499-510.
11. **Vicente, O.**, Garrido, D., Eller, N., Benito Moreno, R.M., Alwen, A. and Heberle-Bors, E. (1990). Embryogenic cultures of tobacco pollen as a model system to study plant rejuvenation. In: Plant Aging: Basic and Applied Approaches (Rodríguez, R., Tamés, R.S. and Durzan, D.J., eds.). Plenum Publishing Corp. (New York) (ISBN: 0-306-43518-7). NATO Advanced Science Institutes Series, Series A: Life Sciences, **186**, 389-393.
12. **Vicente, O.**, Benito Moreno, R.M. and Heberle-Bors, E. (1991). Pollen cultures as a tool to study plant development. *Cell Biol. Rev.* **25**, 295-305. (Review).
13. Zarsky, V., Garrido, D., Rihova, L., Tupy, J., **Vicente, O.** and Heberle-Bors, E. (1992). Derepression of the cell cycle by starvation is involved in induction of tobacco pollen embryogenesis. *Sex. Plant Reprod.* **5**, 189-194.
14. Ylstra, B., Touraev, A., Benito Moreno, R.M., Stöger, E., van Tunen, A.A., **Vicente, O.**, Mol, J.N.M. and Heberle-Bors, E. (1992). Flavonols stimulate development, germination and tube growth of tobacco pollen. *Plant Physiol.* **100**, 902-907.
15. Garrido, D., Eller, N., Heberle-Bors, E. and **Vicente, O.** (1993). De novo transcription of specific mRNAs during the induction of tobacco pollen embryogenesis. *Sex. Plant Reprod.* **6**, 40-45.

16. Wilson, C., Eller, N., Gartner, A., **Vicente, O.** and Heberle-Bors, E. (1993). Isolation and characterization of a tobacco cDNA clone encoding a putative MAP kinase. *Plant Mol. Biol.* **23**, 543-551.
17. Olmedilla, A., Testillano, P.S., **Vicente, O.**, Delseny, M. and Risueño, M.C. (1993). Ultrastructural rRNA localization in plant cell nucleoli: RNA/RNA in situ hybridization, autoradiography and cytochemistry. *J. Cell Sci.* **106**, 1333-1346.
18. Swoboda, I., Scheiner, O., Kraft, D., Breitenbach, M., Heberle-Bors, E. and **Vicente, O.** (1994). A birch gene family encoding pollen allergens and pathogenesis-related proteins. *Biochim. Biophys. Acta* **1219**, 457-464.
19. Einzenberger, E., Eller, N., Heberle-Bors, E. and **Vicente, O.** (1995). Isolation and expression during pollen development of a tobacco cDNA clone encoding a protein kinase homologous to shaggy/glycogen synthase kinase-3. *Biochim. Biophys. Acta* **1260**, 315-319.
20. Zarsky, V., Garrido, D., Eller, N., Tupy, J., **Vicente, O.**, Schöffl, F. and Heberle-Bors, E. (1995). The expression of a small heat shock gene is activated during induction of tobacco pollen embryogenesis by starvation. *Plant Cell Environ.* **18**, 139-147.
21. Swoboda, I., Jilek, A., Ferreira, F., Hoffmann-Sommergruber, K., Scheiner, O., Kraft, D., Breiteneder, H., Pittenauer, E., Schmid, E., **Vicente, O.**, Heberle-Bors, E., Ahorn, H. and Breitenbach, M. (1995). Isoforms of Bet v 1, the major birch pollen allergen, analyzed by liquid chromatography, mass spectrometry and cDNA cloning. *J. Biol. Chem.* **270**, 2607-2613.
22. Touraev, A., Lezin, F., Heberle-Bors, E. and **Vicente, O.** (1995). Maintenance of gametophytic development after symmetrical division in tobacco microspore culture. *Sex. Plant Reprod.* **8**, 70-76.
23. Garrido, D., **Vicente, O.**, Heberle-Bors, E. and Rodríguez-García, M.I. (1995). Cellular changes during the acquisition of embryogenic potential in isolated pollen of *Nicotiana tabacum*. *Protoplasma* **186**, 220-230.
24. Swoboda, I., Dang, T.C.H., Heberle-Bors, E. and **Vicente, O.** (1995). Expression of Bet v 1, the major birch pollen allergen, during anther development: an in situ hybridization study. *Protoplasma* **187**, 103-110.
25. González-Melendi, P., Testillano, P.S., Ahmadian, P., Fadón, B., **Vicente, O.** and Risueño, M.C. (1995). In situ characterization of the late vacuolated microspore as a convenient stage to induce embryogenesis in *Capsicum*. *Protoplasma* **187**, 60-71.
26. Swoboda, I., Scheiner, O., Heberle-Bors, E. and **Vicente, O.** (1995). cDNA cloning and characterization of three genes in the *Bet v 1* gene family that encode pathogenesis-related proteins. *Plant Cell Environ.* **18**, 865-874.
27. Wilson, C., Anglmayer, R., **Vicente, O.** and Heberle-Bors, E. (1995). Molecular cloning, functional expression in *Escherichia coli*, and characterization of multiple mitogen-activated-protein kinases from tobacco. *Eur. J. Biochem.* **233**, 249-257.

28. Hesse, M., **Vicente, O.** and Heberle-Bors, E. (eds.) (1995). Sexual plant reproduction research. *Protoplasma* Vol. **187**, 1-2.
29. Touraev, A., Ilham, A., **Vicente, O.** and Heberle-Bors, E. (1996). Stress-induced microspore embryogenesis in tobacco: an optimized system for molecular studies. *Plant Cell Rep.* **15**, 561-565.
30. Swoboda, I., Hoffmann-Sommergruber, K., O'Ríordáin, G., Scheiner, O., Heberle-Bors, E. and **Vicente, O.** (1996). Bet v 1 proteins, the major birch pollen allergens and members of a family of conserved pathogenesis-related proteins, show ribonuclease activity in vitro. *Physiol. Plant.* **96**, 433-438.
31. Touraev, A., Indrianto, A., Wratschko, I., **Vicente, O.** and Heberle-Bors, E. (1996). Efficient microspore embryogenesis in wheat (*Triticum aestivum* L.), induced by starvation at high temperature. *Sex. Plant Reprod.* **9**, 209-215.
32. Touraev, A., Pfosser, M., **Vicente, O.** and Heberle-Bors, E. (1996). Stress as the major signal controlling the developmental fate of tobacco microspores: towards a unified model of induction of microspore/pollen embryogenesis. *Planta* **200**, 144-152.
33. Bueno, M.A., Gómez, A., Boscaiu, M., Manzanera, J.A. and **Vicente, O.** (1997). Stress-induced formation of haploid plants through anther culture in cork oak (*Quercus suber*). *Physiol. Plant.* **99**, 335-341.
34. Wilson, C., Heberle-Bors, E. and **Vicente, O.** (1997). A conserved motif at the carboxy terminus of MAP kinases. *J. Mol. Evol.* **44**, 683-685.
35. Bueno, M.A., Gómez, A., **Vicente, O.** and Manzanera, J.A. (1996). Stability in ploidy level during somatic embryogenesis in *Quercus canariensis*. In: Somatic cell genetics and molecular genetics of trees (Ahuja, M.R., Boerjan, W. and Neale, D.B., eds.). Kluwer Academic Publishers (Dordrecht) (ISBN: 0-7923-4179-1). Book Series: Forestry Sciences, **49**, 23-28.
36. Touraev, A., **Vicente, O.** and Heberle-Bors, E. (1997). Initiation of microspore embryogenesis by stress. *Trends Plant Sci.* **2**, 297-302. (Review).
37. Wilson, C., Voronin, V., Touraev, A., **Vicente, O.** and Heberle-Bors, E. (1997). A developmentally regulated MAP kinase activated by hydration in tobacco pollen. *Plant Cell* **9**, 2093-2100.
38. Wilson, C., Pfosser, M., Jonak, C., Hirt, H., Heberle-Bors, E. and **Vicente, O.** (1998). Evidence for the activation of a mitogen-activated-protein kinase upon phosphate-induced cell cycle re-entry in tobacco cells. *Physiol. Plant.* **102**, 532-538.
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- 106.** Kozminska, A., Al Hassan, M., Wiszniewska, A., Hanus-Fajerska, E., Boscaiu, M. and **Vicente, O.** (2019). Responses of succulents to drought: Comparative analysis of four *Sedum* (Crassulaceae) species. *Sci. Hort.* **243**, 235-242; doi: 10.1016/j.scienta.2018.08.028
- 107.** Kozminska, A., Wiszniewska, A., Hanus-Fajerska, E., Boscaiu, M., Al Hassan, M., Halecki, W. and **Vicente, O.** (2019). Identification of salt and drought biochemical stress markers in several *Silene vulgaris* populations. *Sustainability* **11**, 800; doi:10.3390/su11030800
- 108.** Andújar, I., Gómez, D., Pérez, L., **Vicente, O.**, and Lorenzo, J.C. (2019). Auxins, auxin transport inhibitors, and competitors for auxin receptors do not show statistically significant differences in 212 molecular descriptors. *Rom. Biotech. Lett.*, **24**, 407-411; doi: 10.25083/rbl/24.3/407.411
- 109.** Plesa, I.M., Al Hassan, M., González-Orenga, S., Sestras, A.F., **Vicente, O.**, Prohens, J., Boscaiu, M. and Sestras, R.E. (2019). Responses to Drought in Seedlings of European Larch (*Larix decidua* Mill.) from Several Carpathian Provenances. *Forests* **10**, 511; doi:10.3390/f10060511
- 110.** Arteaga, S., Yabor, L., Torres, J., Solbes, E., Muñoz, E., Díez, M.J., **Vicente, O.** and Boscaiu, M. (2019). Morphological and Agronomic Characterization of Spanish Landraces of *Phaseolus vulgaris* L. *Agriculture – Basel* **9**, 149; doi:10.3390/agriculture9070149
- 111.** Plazas, M., Nguyen, H.T., González-Orenga, S., Fita, A., **Vicente, O.**, Prohens, J. and Boscaiu, M. (2019). Comparative analysis of the responses to water stress in eggplant (*Solanum melongena*) cultivars. *Plant Physiol. Biochem.* **143**, 72-82. doi: 10.1016/j.plaphy.2019.08.031
- 112.** Boscaiu, M., **Vicente, O.**, Bautista, I., Ranga, F. and Socaciu, C. (2019). HPLC-DAD-ESI+-MS phytochemical profiles of several *Rosmarinus officinalis* accessions from Spain as influenced by different environmental stress conditions. *Studia UBB Chemia*, **64**, 163-180; doi:10.24193/subbchem.2019.3.14
- 113.** González-Orenga, S., Al Hassan, M., Llinares, J.V., Lisón, P., López-Gresa, M.P., Verdeguer, M., **Vicente, O.** and Boscaiu, M. (2019). Qualitative and quantitative differences in osmolytes accumulation and antioxidant activities in response to water deficit in four Mediterranean *Limonium* species. *Plants* **8**, 506; doi:10.3390/plants8110506
- 114.** González-Orenga, S., Ferrer-Gallego, P.P., Laguna, E., López-Gresa, M.P., Donat-Torres, M.P., Verdeguer, M., **Vicente, O.** and Boscaiu, M. (2019). Insights on salt tolerance of two endemic *Limonium* species from Spain. *Metabolites*, **9**, 294; doi:10.3390/metabo9120294
- 115. Vicente, O.** and Matei, F. (2019). Developing innovative tools to support educational programmes in Biotechnology and Entrepreneurship. *J. Biotechnol.* **305S**, S8-S9; doi:10.1016/j.jbiotec.2019.05.045

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4. PATENTS

1. Manzanera, J.A., Bueno, M.A., **Vicente, O.** & Gómez, M.A. "Método para la obtención de embriones y plantas haploides de alcornoque

APPLICATION N^o 200001953

PRIORITY COUNTRY: Spain

PRIORITY DATE: 01/08/2000

PATENT HOLDERS: Universidad Politécnica de Madrid / Instituto Nacional de Investigación Agraria / Universidad Politécnica de Valencia

2. Oscar Vicente Meana, Marta Roldán Medina, Ramón Serrano Salom, Javier Forment Mullet, Miguel Á. Naranjo Olivero, Roc Ros Palau, & Rodolpho Arthur Kahnou. "Protection against environmental toxicity through manipulation of the processing of messenger RNA precursors"

APPLICATION N^o 20040203157

PRIORITY COUNTRY: Spain

PRIORITY DATE: 14/10/2004

PATENT HOLDER: Universidad Politécnica de Valencia

INTERNATIONAL APPLICATION: US [435468000 (USPTO)]

LICENSED TO:: *Ann R. Pokalsky Dilworth & Baresse – Uniondale, NY*

3. Oscar Vicente Meana, Miguel Á. Naranjo Olivero & Lucrecia Bourgon Baquedano. "Método de evaluación de la eficacia de genes de tolerancia a estrés abiótico en plantas transgénicas"

APPLICATION N^o P200602583

PRIORITY COUNTRY: Spain

PRIORITY DATE: 3/10/2006

PATENT HOLDER: Universidad Politécnica de Valencia

VI. PROFESSIONAL / MANAGEMENT ACTIVITIES AND OTHER MERITS

1. Scientific Assessment / Evaluation Activities

- Member of the panel of experts responsible for the scientific assessment of the EU Alþan Programme (High Level Scholarships for Latin America), in its five calls (2002 to 2006).
- Since 2002. Evaluation of scientific projects for the the Spanish 'National Evaluation and Foresight Agency' (ANEP) and, occasionally, for other Spanish and foreign granting agencies.
- 2012. Member of one of the panels of experts responsible for the evaluation of the National Research Institutes R & D system in Romania, within a programme organised by the NACA (National Authority for Scientific Research).
- Since 2016. Evaluator of research projects for the 'Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI)', Romania.
- 2018/2019. Project evaluator, COST Actions (EU)
- Scientific reviewer for several journals in the areas of "Plant Science" and "Ecology", including: Acta Physiologiae Plantarum / Archives of Agronomy and Soil Science / Arid Land Research and Management / Ecological Engineering / Environmental and Experimental Botany / Functional Plant Biology / Journal of Biotechnology / Plant Biosystems / Plant and Soil / Protoplasm / Turkish Journal

of Botany, among others (data from 2017 included in my profile in the Publons platform: <https://publons.com/author/1361841/oscar-vicente#profile>)

2. Participation in Editorial Boards of scientific journals

- Associate Editor of *Frontiers in Plant Science* (since 2015)
- Managing editor of *The EuroBiotech Journal* (Official journal of EBTNA)
- Member of the Editorial Boards (and reviewer) of the journals: *Notulae Botanicae Horti Agrobotanici* (since 2007), *Notulae Scientia Biologicae* (since 2009) and *Bulletin USAMV* (since 2013), published by AcademicPres, Cluj-Napoca
- 2015 - 2017: Associate Editor of *Frontiers in Physiology*

3. Membership in Scientific Societies

- Member of: Spanish Society for Biochemistry and Molecular Biology (SEBBM) / Spanish Society of Plant Physiology (SEFV) / Society for Experimental Biology (SEB)
- Honorary Member of the 'Transylvanian Society of Horticulture and Forestry'
- Member of the 'European Biotechnology Thematic Network Association' (EBTNA).

4. International Representation

- 2004 - 2011: representative of the Polytechnic University of Valencia in the Teaching Committee of the Course 'Job Creation Oriented Biotechnology', International First Level Degree (three years) organised in Perugia (Italy) by a Consortium of eleven European universities. Reviewer of 'Stage Reports' and 'Degree Theses' of JCOB students.
- 2004 - 2011. representative and 'contact person' of the Polytechnic University of Valencia in the European Biotechnology Thematic Network, supported by the Erasmus Lifelong Learning Programme, EU projects BIOTECHUNTE (Agr. nº 110769-cp-2-2004-it-erasmus-tn, 2005-2007) and EUROBIOTECH (Agr. nº 134310-llp-1-2007-1-it-erasmus-enw, 2008-2010)
- Since 2012. Coordinator and representative of EBTNA in Spain
- Since 2014. Member of the Executive Committee, EBTNA
- 2018. General Secretary, EBTNA
- Since 2019. Vice-president of EBTNA

5. Other merits and activities

- Since 2006. Member of the Research Ethics Committee of the Polytechnic University of Valencia
- 2014. Polytechnic University of Valencia's Award for 'Research Activity'
- 2016. Medal '*Honoris et Gratitude*' awarded by the University of Agricultural Sciences and Veterinary Medicine (USAMV), Cluj-Napoca (Romania).
- 2017. **Doctor Honoris Causa**, University of Agricultural Sciences and Veterinary Medicine (USAMV), Cluj-Napoca (Romania)