

Short CV

Professor Jose Viña is Full Professor in the Department of Physiology (University of Valencia, Spain) and has been working in ageing for over thirty years. He has been leading a successful research group dealing with nutritional aspects, in the first instance, with longevity and, more recently, with frailty and Alzheimer's disease. His major contributions have been: i) Experimental determination that mitochondria are key targets for ageing; ii) Identification of molecular mechanisms to explain why females live longer than males; iii) Identification of new longevity-associated genes, particularly those involved in p53 pathways, telomerase, RAS/GRF1, and antioxidants (G6PD); iv) Generation of a new experimental model for frailty in animals, and; v) Identification of biomarkers of Alzheimer's disease and frailty.

Current post

Professor in Physiology, University of Valencia

Qualifications

Degree in Medicine: 1976

PhD in Medicine: 1978

Fellow of the Real Academia de Medicina de Valencia (Royal Academy of Medicine of Valencia): 2007

Current active research grants

- 2014: Valencian Government. *Signalling by reactive oxygen species in stem cells: Its importance in regenerative medicine*. Reference: PROMETEOII/2014/056
- 2013: European Union. *Utility ofOMIC-Based biomarkers in characterizing older individuals at risk for frailty, its progression to disability and general consequences to health and well-being - THE FRAILOMIC INITIATIVE (FRAILOMIC)*. Reference: FRAILOMIC-HEALTH.2012.2.1.1-2.
- 2016: Spanish Ministry of Education and Science. *Ageing of the brain: Protection against brain impairment and its application in Alzheimer's disease*. Reference: SAF2016-75508-R
- 2015: Institute of Healthcare Carlos III. *A multidisciplinary project to advance in basic mechanisms, diagnosis, prediction, and prevention of cardiac damage in reperfused acute myocardial infarction*. Reference: A multidisciplinary project to advance in basic mechanisms, diagnosis, prediction, and prevention of cardiac damage in reperfused acute myocardial infarction. Integrated Projects of Excellence Call PIE15/00013 (ISCIII)
- 2017: Joint Action (HP-JA) 3rd EU Health Programme. *Managing Frailty. A comprehensive approach to promote a disability-free advanced age in Europe: the ADVANTAGE initiative*. Reference: 724099
- 2017-: Institute of Healthcare Carlos III. CIBER Frailty and Successful Ageing. *Basic Research Group led by José Viña*. Reference: CB16/10/00435
- 2019-: European Union. 'Scaling-up of and evidence-based intervention programme in older people with Diabetes and Frailty in LatinAmerica' Reference: 825546 — DIABFRAIL-LATAM

Postgraduate student supervision

50 successful PhD candidates supervised, five in progress.

Academic prizes and awards

Recipient of the Albert Struyvenberg Medal from the European Society for Clinical Investigation (ESCI) 2017; Doctor Honoris Causa of the University of Rennes2, France, 2012; Doctor Honoris Causa of the University of Buenos Aires, Argentina, November 2008; Honorary Fellow of the Academy of Medicine of Torino, Italy, December 2007; 8th Edition of the award presented by 3M Foundation for Innovation (Research in Alzheimer's disease), July 2006; Alberto Sols prize for best research career in the Valencian Community with special mention of the establishment of a research group working on the role of free radicals in pathophysiology, 2005; Spanish Society of Geriatrics and Gerontology Prize for research in Gerontology in June 2004; National Prize for research in child nutrition, awarded by the Spanish Paediatric Association, May 2004; Prize for the best research development in Nutrition awarded by the Spanish Society for Basic and Applied Nutrition (Granted by the Institute Danone), December, 1998.

Ten selected publications (from 420 peer-reviewed papers, H index=73)

1. Viña, J., Hems, R., Krebs, H.A. (1978) Maintenance of Glutathione Content in Isolated Hepatocytes. *Biochemical Journal* 170:627 – 630. Times cited:169. Impact Factor: 4.0.
2. Sastre, J., Pallardó, F.V., Plá, R., Pellín, A., Juan, G., O'Connor, E., Estrela, J.M., Miquel, J., Viña, J. (1996) Aging of the liver: Age-associated mitochondrial damage in intact hepatocytes. *Hepatology* 24: 1199 – 1205. Times cited: 225. Impact Factor: 11.9.
3. García de la Asunción, J., del Olmo, M.L., Sastre, J., Millán, A., Pellín, A., Pallardó, F.V., Viña, J. (1998) AZT Treatment Induces Molecular and Ultrastructural Oxidative Damage to Muscle Mitochondria - Prevention by Antioxidant Vitamins. *Journal of Clinical Investigation* 102: 4 – 9. Times cited: 195. Impact Factor: 14.4.
4. Vento, M., Asensi, M., Sastre, J., García-Sala, F., Pallardó, F.V., Viña, J. (2001) Resuscitation with Room Air instead of 100%. Oxygen Prevents Oxidative Stress in Moderately Asphyxiated Term Neonates. *Pediatrics* 107: 642 – 647. Times cited: 428. Impact Factor: 6.5.
5. Gómez-Cabrera, M.C., Pallardó, F.V., Sastre, J., Viña, J., García-del-Moral, L. (2003) Allopurinol and markers of muscle damage among participants in the Tour de France. *JAMA* 289 (19):2503-4. Times cited: 125. Impact Factor: 38.2.
6. Matheu, A., Maraver, A., Klatt, P., Flores, I., García-Cao, I., Borrás, C., Flores, J.M., Viña, J., Blasco, M.A., Serrano, M. (2007) Delayed aging through damage protection by the Arf/p53 pathway. *Nature* 448: 375 – 379. Times cited: 432. Impact Factor: 43.8.
7. Tomás-Loba A., Flores I., Fernández-Marcos P.J., Cayuela M.L., Maraver A., Tejera A., Borrás C., Matheu A., Klatt P., Flores J.M., Viña J., Serrano M., Blasco M.A. (2008) Telomerase reverse transcriptase delays aging in cancer-resistant mice. *Cell* 135(4): 609-22. Times cited: 407. Impact Factor: 34.1.
8. Gomez-Cabrera MC, Domenech E, Romagnoli M, Arduini A, Borrás C, Pallardo FV, Sastre J, Viña J. Oral administration of vitamin C decreases muscle mitochondrial biogenesis and hampers training-induced adaptations in endurance performance. *Am J Clin Nutr.* 2008;87(1):142-9. Times cited: 716. Impact factor 6.7
9. Nóbrega-Pereira S, Fernandez-Marcos PJ, Brioché T, Gomez-Cabrera MC, Salvador-Pascual A, Flores JM, Viña J, Serrano M. (2016) G6PD protects from oxidative damage and improves healthspan in mice. *Nat Commun.* 7:10894. Times cited: 59. Impact Factor: 13.1.
10. Knafo S, Sánchez-Puelles C, Palomer E, Delgado I, Draffin JE, Mingo J, Wahle T, Kaleka K, Mou L, Pereda-Perez I, Klosi E, Faber EB, Chapman HM, Lozano-Montes L, Ortega-

Molina A, Ordóñez-Gutiérrez L, Wandosell F, Viña J, Dotti CG, Hall RA, Pulido R, Gerges NZ, Chan AM, Spaller MR, Serrano M, Venero C, Esteban JA. (2016) PTEN recruitment controls synaptic and cognitive function in Alzheimer's models. *Nat Neurosci.* 19(3):443-53. Times cited: 142. Impact Factor: 17.4.