

# Dr Jorge Almiro P. Paiva

Department of Integrative Plant Biology

Cell by Design Team

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## ACADEMIC AND RESEARCH CAREER

PhD in Biology Nova University, 2006

Master in Tropical Agriculture Production, Technical university of Lisbon, 1999

Degree in Agronomic Engineering, Technical university of Lisbon, 1993

Senior Researcher at Integrative Plant Biology

## Research profile

- regulation, at transcriptional and post-transcriptional levels, of secondary cell walls biosynthesis, in woody plants.
- study of molecular mechanisms associated with wood formation and adaptation of woody species
- post- transcriptional regulation by smallRNAs and epigenomic regulation
- Enhancement of ligno-cellulosic products for energy production
- Biodiversity studies of agroforestry systems for developed of sustainable production

## MAJOR RESEARCH PROJECTS

- Nacional Science Center (Poland)  
Project title: PurpleWalls - Unraveling genome expression (de) regulation to modulate wood formation in *Salix purpurea*: an integrative approach  
Principal Investigator: J. A. P. Paiva  
Duration: 2016–2019
- Fundação para a Ciência e Tecnologia (Portugal)  
Project no. PTDC/AGR-FOR/0931/2014  
Project title: egoSELF: An Integrative Biology approach to study the molecular basis of inbreeding depression in *Eucalyptus globulus*  
Principal Investigator: J. A. P. Paiva  
Duration: 2016–2019  
  
Project no. PTDC/AGR-GPL/098179/2008  
Project title: Did you ask for something small? The microRNAs power in a *Eucalyptus* tension world! (the microEGo project)  
Principal Investigator: J. A. P. Paiva  
Duration: 2010–2013  
  
Project no. SOBREIRO/0015/2009  
Project title: TransCorkQ - Transcriptomic analysis of cork quality and cambial differentiation in *Quercus suber*  
Principal Investigator: J. A. P. Paiva  
Duration: 2009-2010  
  
Project no: PTDC/AGR-GPL/66564/2006  
Project title: GenEglobwq - Pesquisa de genes candidatos subjacentes a um QTL para o rendimento em pasta em *Eucalyptus globulus*.  
Principal Investigator: J. A. P. Paiva  
Duration: 2008-2010  
  
Project no. P-KBBE/AGR-GPL/0001/2010  
Project title: TREEFORJOULES - Improving eucalypt and poplar wood properties for bioenergy  
Principal Investigator (Portugal): J. A. P. Paiva  
Duration: 2011-2015

## MAJOR PUBLICATIONS

- Ribeiro T, Barreia RM, Bergès H, Marques C, Loureiro J, Morais-Cecílio L\*, **Paiva JAP\*** (2016). Advancing Eucalyptus Genomics: Cytogenomics Reveals Conservation of Eucalyptus Genomes. *Front. Plant Sci.*, 22 April 2016, <http://dx.doi.org/10.3389/fpls.2016.00510> (\*corresponding authors)
- Kazana, V., Tsourgiannis L, Iakovoglou V., Stamatiou C., Alexandrov A., Araújo S., Bogdan S., Bozic G., Brus R., Bossinger G., Boutsimea A., Celepirovic N., Cvrcková H., Fladung M., Ivankovic M., Kazaklis A., Koutsona P., Luthar Z., Máchová P., Malá J, Mara K, Mataruga M, Moravcikova J, Paffetti D, **Paiva JAP**, Raptis D, Sanchez X, Sharry S, Salaj T, Šijacic-Nikolic M., Tel-Zur N, Tsvetkov I, Vettori C, Vidal N. 2016. "Public attitudes towards the use of transgenic forest trees: a cross-country pilot survey." *iForest - Biogeosciences and Forestry* 0(0): 1220-1229. doi: 10.3832/ifor1441-008 [all authors, but 1st were positioned by alphabetic-order]
- Yu H, Soler M, Clemente HS, Mila I, **Paiva JAP**, Myburg AA, Bouzayen M, Grima-Pettenati J, Cassan-Wang H. 2015. Comprehensive Genome-wide Analysis of the Aux/IAA Gene Family in Eucalyptus: Evidence for the Role of EgrIAA4 in Wood Formation. *Plant Cell Physiol.* 2015 Apr;56(4):700-14. doi: 10.1093/pcp/pcu215. Epub 2015 Jan 9.
- Soler M, Camargo, Oliveira ELO, Carocha V, Cassan-Wang H, Savelli B, Hefer CA, **Paiva JAP**, Alexander AM, Grima-Pettenati J. 2014. The *Eucalyptus grandis* R2R3-MYB transcription factor family: evidence for woody growth-related evolution and function. *New Phytol.* 206(4):1364-77. doi: 10.1111/nph.13039. Epub 2014 Sep 24.
- Carocha V, Soler M, Hefer C, Cassan-Wang H, Fevereiro P, Myburg AA, **Paiva JAP** and Grima-Pettenati J. Genome-wide analysis of the lignin toolbox of *Eucalyptus grandis*. 206(4):1297-313. doi: 10.1111/nph.13313. Epub 2015 Feb 12.
- Carvalho A, Graça C, Carocha, V, Pêra S, Lousada J, Lima-Brito J, **Paiva JAP\***. 2015. An improved total RNA isolation from secondary tissues of woody species for coding and non coding gene expression analyses. *Wood Science and Technology* 49:647–658 DOI 10.1007/s00226-015-0709-9 [\*corresponding autor]
- Myburg AA, et al. (2014) The genome of *Eucalyptus grandis*. *Nature* (2014) doi:10.1038/nature13308
- Pereira-Leal JB, et al. (2014) A comprehensive assessment of the transcriptome of cork oak (*Quercus suber*) through EST sequencing. *BMC Genomics* 2014, 15:371 doi:10.1186/1471-2164-15-371 [all authors, but 1st and last one, were positioned by alphabetic-order]
- Yu H, Soler M, Mila I, San Clemente H, Savelli B, Dunand C, **Paiva JAP**, Myburg AA, Bouzayen M, Grima-Pettenati J, Cassan-Wang H. 2014. Genome-wide characterization and expression profiling of the AUXIN RESPONSE FACTOR (ARF) gene family in *Eucalyptus grandis*. *PLoS One.* 2014 Sep 30;9(9):e108906. doi: 10.1371/journal.pone.0108906. eCollection 2014. (IF=3.534).