

Name: GIULIANO CALLAINI

Date and place of birth: 30-05-1955 Monticiano (SI)

Citizenship: Italian

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Education

1978 Degree cum laude in Biology at the University of Siena

1981: fellowship from the CNR.

1983-1992: staff scientist at the Department of Evolutionary Biology of the University of Siena.

1992-2000: Associate professor of Zoology at the University of Siena.

2000 Full Professor of Developmental Biology, Department of Life Sciences, University of Siena

haward "G. B. Grassi" of the National Academy of Lincei

Teaching activities:

First level Biological Sciences graduate courses on "Developmental Biology"

Second level Biology graduate course on "Molecular Biology of Development "

Research interest

The research activity is mainly addressed to the study of the role of centrosomes in meiotic and mitotic spindle organization and to the mechanisms governing cell division and centriole/centrosome assembly. Particular attention is also paid to the role of the centriole in the assembly of the ciliary structures during human brain development. The model systems used are the fruit-fly *Drosophila melanogaster* to analyse centriole assembly and iPSC-derived brain organoids to model microcephaly due to nonfunctional centrosomes and cilia.

Technical skills and competences

Immunofluorescence techniques to study cell cycle and centrioles/centrosomes in cultured cells and tissues. Sample analysis with conventional microscopy, Apotome and Laser Scanning Confocal Microscopy. Preparation of samples for conventional Electron Microscopy observations and pre- and post-embedding for ultrastructural localization of selected antigens. Correlative microscopy.

Scientific collaborations: D.M.Glover, Dept. of Genetics, Cambridge, UK; M. Bettencourt-Dias A. Institut Gulbenchian, Portugal; Timothy Megraw, Florida State University, USA; . Jay Gopalakrishnan, University of Colonia, Germany; Cayetano Gonzalez, ICREA, The Barcelona Institute of Science and Technology, Spain.

Relevant publications

Riparbelli MG, Persico V, Callaini G. (2021). **Cells**. doi: 10.3390/cells10081997

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- Panda P, Kovacs L, Dzhindzhev N, Fatafska A, Persico V, Geymonat M, Riparbelli MG, Callaini G, Glover DM. (2020). **J Cell Biol**. doi: 10.1083/jcb.201912154.
- Riparbelli MG, Persico V, Callaini G. (2020) **Cells**. doi: 10.3390/cells9122684.
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- Reina J., Gottardo M., Riparbelli M.G., Llamazares S., Callaini G., Gonzalez C. (2018). **J. Cell Biol**. 217: 2365-2372.
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- Coelho P.A., Bury L., Sharif B., Riparbelli M.G., Fu J., Callaini G., Glover D.M, Zernicka-Goetz M. (2013). **Dev Cell**. 27: 586-597
- Gottardo M., Callaini G., Riparbelli M.G. (2013). **J. Cell Sci**. 126: 5441-5452
- Bassi Z.I., Audusseau M., Riparbelli M.G., Callaini G., D'Avino P.P. (2013). **Proc Natl Acad Sci USA**. 110: 9782-9787.
- Delgehyr N., Rangone H., Fu J., Mao G., Tom B., Riparbelli M.G., Callaini G., Glover D.M. (2012). **Curr. Biol**. 22: 502-509.
- Riparbelli M.G., Colozza G., Callaini G. (2009). **J. Cell Sci**. 122: 3613-3618
- Rodrigues-Martins A., Riparbelli M.G., Callaini G., Glover D. M., Bettencourt-Dias M. (2007). **Science**, 316: 1046-1050.
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