

## Curriculum Vitae

### Helder José Martins Maiato

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#### EDUCATION AND TRAINING:

- 05/2005 Graduated from the *Analytical and Quantitative Light Microscopy* Course, Marine Biological Laboratory, Woods Hole, Massachusetts, USA.
- 08/2003-12/2004 Research Affiliate, Wadsworth Center (Lab. of Prof. Conly L. Rieder) – Division of Molecular Medicine, New York State Department of Health, Albany, New York, USA.
- 04/2003-08/2003 Post-doc Research Fellow (Lab. of Prof. Claudio E. Sunkel) - Institute for Molecular and Cell Biology, Porto, Portugal.
- 09/1998-03/2003 Ph.D. in Biomedical Sciences - Institute for Biomedical Sciences Abel Salazar, University of Porto.
- 09/2000-09/2002 Visiting PhD student, University of Edinburgh (Lab. of Prof. William C. Earnshaw) - Wellcome Trust Centre for Cell Biology, Edinburgh, UK.
- 09/1999-08/2000 PhD student, Institute for Biomedical Sciences Abel Salazar, University of Porto, (Lab. of Prof. Claudio E. Sunkel) – Institute for Molecular and Cell Biology, Porto, Portugal.
- 09/1998-08/1999 Gulbenkian PhD Programme in Biology and Medicine.
- 09/1994-10/1998 Biochemistry degree (4 years undergraduate studies), University of Porto, Portugal.

#### PROFESSIONAL POSITIONS:

- 5/2015-present Founder and CEO, YScience – Science Education, Ltd.
- 1/2014-present Coordinator, Integrative Program on Cancer, Institute for Research and Innovation in Health (i3S), University of Porto, Porto, Portugal.
- 1/2011-present Vice-Coordinator, Division of Molecular and Cellular Biology, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
- 3/2010-12/2010 Coordinator, Division of Structural and Molecular Biology, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
- 11/2009-present Principal Investigator, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
- 3/2008-present Group Leader, Chromosome Instability & Dynamics Laboratory, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
- 9/2005-present Invited Auxiliary Professor, Department of Experimental Biology, Faculty of Medicine – University of Porto, Porto, Portugal
- 12/2004-11/2009 Auxiliary Investigator, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.

#### PUBLICATIONS:

(Original Research)

1. Drpic, D., Pereira, A.J., Barisic, M., Maresca, T., and **Maiato H.** (2015) Polar ejection forces promote the conversion from lateral to end-on kinetochore-microtubule attachments on mono-oriented chromosomes. *Cell Rep.* (in press)
2. Schweizer, N., Pawar, N., Weiss, M., and **Maiato H.** (2015) An organelle-exclusion envelope assists mitosis and underlies distinct molecular crowding in the spindle region. *J. Cell Biol.* DOI: 10.1083/jcb.201506107.
3. Barisic, M., Sousa, R.S., Tripathy, S.K., Magiera, M.M., Zaytsev, A.V., Pereira, A.L., Janke, C., Grishchuk, E.L., and **Maiato, H.** (2015) Microtubule detyrosination guides chromosomes during mitosis. *Science*. DOI: 10.1126/science.aaa5175. (highlighted by Baumann, K. 2015. *Nature Reviews Molecular and Cell Biology*, vol.16, June; Editor's choice in *Science* and *Science Signal.*; ranked "exceptional" by F1000).
4. Carvalho, A.X. , **Maiato, H.** , Maia, A.F., Ribeiro, S.A., Pontes, P., Bickmore, W., Earnshaw, W.C., and Sambade, C. (2015) Reed-Sternberg cells form by abscission failure in the presence of functional Aurora B kinase. *PLoS ONE*. DOI: 10.1371/journal.pone.0124629 (\* equal contribution).
5. Barisic, M., Aguiar, P., Geley, S., and **Maiato, H.** (2014) Kinetochore motors drive congression of peripheral polar chromosomes by overcoming random arm-ejection forces. *Nat. Cell Biol.* 16:1249-1256.
6. Afonso, O., Matos, I., Pereira, A.J., Aguiar, P., Lampson, M.A. and **Maiato, H.** (2014) Feedback control of chromosome separation by a midzone Aurora B gradient. *Science*, 345, 332-336. (with "Perspective" in the same issue; Editor's choice in *Science* and *Science Signal.*)
7. Schweizer, N., Ferrás, C., Kern, D.M., Cheeseman, I.M. and **Maiato, H.** (2013) Spindle assembly checkpoint robustness requires Tpr-mediated regulation of Mad1/Mad2 proteostasis. *J. Cell Biol.* 203, 883-893. (Highlighted by Buchwalter A, Hetzer MW. 2014. *Cell*, 156:868-9)
8. Moutinho-Pereira, S., Stuurman, N., Hornsveld, M., Aguiar, P., Goshima, G., Vale, R.D., and **Maiato, H.** (2013) Genes involved in centrosome-independent mitotic spindle assembly in Drosophila S2 cells. *Proc. Natl. Acad. Sci. USA*, 110, 19808-19813.

9. Drpic, D. Barisic, M., Pinheiro, D., and **Maiato, H.** (2013) Selective tracking of template DNA strands after induction of mitosis with unreplicated genomes (MUGs) in *Drosophila* S2 cells. **Chromosome Res.** 3, 329-37. (special issue on “Biased Chromosome Segregation)
10. Ferreira, J.G., Pereira, A.J., Akhmanova, A., and **Maiato, H.** (2013) Aurora B spatially regulates EB3 phosphorylation to coordinate daughter cell adhesion with cytokinesis. **J. Cell Biol.** 201, 709-24. (highlighted in “In this issue”)
11. Maia, A.R.R., Garcia, Z., Kabeche, L., Barisic, M., Maffini, S., Macedo-Ribeiro, S., Cheeseman, I.M., Compton, D.A., Kaverina, I., and **Maiato, H.** (2012) Cdk1 and Plk1 mediate a CLASP2 phospho-switch that stabilizes kinetochore-microtubule attachments. **J. Cell Biol.** 199, 285-301.
12. Logarinho, E., Maffini, S., Barisic, M., Marques, A., Toso, A., Meraldi, P. and **Maiato, H.** (2012) CLASPs prevent irreversible multipolarity by ensuring spindle pole resistance to traction forces during chromosome alignment. **Nat. Cell Biol.** 14:295-303.
13. **Maiato, H.** and Logarinho, E. (2011) Motor-Dependent and -Independent Roles of CENP-E at Kinetochores: The Cautionary Tale of UA62784. **Chem. Biol.** 18:679-80.
14. Maffini, S., Maia, A.R.R., Manning, A.L., Maliga, Z., Pereira, A.L., Junqueira, M., Shevchenko, A., Hyman, A., Yates III, J.R., Galjart, N., Compton, D.A., and **Maiato, H.** (2009) Motor-independent targeting of CLASPs to kinetochores by CENP-E promotes microtubule turnover and poleward flux. **Curr. Biol.** 19, 1566-72.
15. Matos, I., Pereira, A.J., Lince-Faria, M., Cameron, L.A., Salmon, E.D., and **Maiato, H.** (2009) Synchronizing chromosome segregation by flux-dependent force equalization at kinetochores. **J. Cell Biol.** 186, 11-26. (cover article highlighted in “In Focus”)
16. Moutinho-Pereira, S., Debec, A., and **Maiato, H.** (2009) Microtubule cytoskeleton remodeling by acentriolar MTOCs at the entry and exit from mitosis in *Drosophila* somatic cells. **Mol. Biol. Cell**, 20, 2796-2808.
17. Lince-Faria, M., Maffini, S., Ding, Y., Orr, B., Florindo, C., Sunkel, C.E., Tavares, A., Johansen, J., Johansen, K., and **Maiato, H.** (2009) Spatio-temporal control of mitosis by the conserved spindle matrix protein Megator. **J. Cell Biol.** 184, 647-657. (highlighted in “In this issue”)
18. Pereira, A.L., Pereira, A.J., Maia, A.R.R., Drabek, K., Sayas, C.L., Hergert, P.J., Lince-Faria, M., Matos, I., Duque, C., Stepanova, T., Rieder, C.L., Earnshaw, W.C., Galjart, N., and **Maiato, H.** (2006) Mammalian CLASP1 and CLASP2 cooperate to ensure mitotic fidelity by regulating spindle and kinetochore function. **Mol. Biol. Cell.** 17, 4526-4542.
19. **Maiato, H.**, Hergert, P.J., Pereira, S., Dong, Y., VandenBeldt, K.J., Rieder, C.L., and McEwen, B.F. (2006) The ultrastructure of the kinetochore and kinetochore fiber in *Drosophila* somatic cells. **Chromosoma**, 115, 469-480.
20. **Maiato, H.**, Khodjakov, A., and Rieder C.L. (2005). *Drosophila* CLASP is required for microtubule subunit incorporation into fluxing kinetochore fibers. **Nat. Cell Biol.** 7, 42-47. (highlighted in “News & Views”; ranked “Must Read” w/ F1000 factor 6.6)
21. **Maiato, H.**, Rieder, C.L., and Khodjakov, A. (2004). Kinetochore-driven formation of kinetochore fibers contributes to spindle assembly during animal mitosis. **J. Cell Biol.**, 167, 831-840. (ranked “Exceptional” w/ F1000 factor 8.4)
22. **Maiato, H.**, Fairley E., Rieder, C.L., Swedlow, J., Sunkel, C.E., and Earnshaw, W.C. (2003). Human CLASP1 is an outer kinetochore component that regulates spindle microtubule dynamics. **Cell**, 113, 891-904. (ranked “Must Read” w/ F1000 factor 6.0)
23. **Maiato, H.**, Sampaio, P., Lemos, C.L., Findlay, J., Carmena, M., Earnshaw, W.C., and Sunkel, C.E. (2002). MAST/Orbit has a role in microtubule-kinetochore attachment and is essential for chromosome alignment and maintenance of spindle bipolarity. **J. Cell Biol.**, 157, 749-760. (highlighted in Curr. Biol. “Dispatch”; ranked “Must Read” w/ F1000 factor 6.4)
24. Adams, R.R., **Maiato, H.**, Earnshaw, W.C., and Carmena, M. (2001). Essential roles of *Drosophila* Inner Centromere Protein (INCENP) and Aurora B in Histone H3 phosphorylation, metaphase chromosome alignment, kinetochore disjunction and chromosome segregation. **J. Cell Biol.**, 153, 865-879.
25. Lemos, C.L., Sampaio, P., **Maiato, H.**, Costa, M., Omel'yanchuk, L.V., Liberal, V., and Sunkel, C.E. (2000). MAST, a conserved microtubule-associated protein required for bipolar mitotic spindle organisation. **EMBO J.**, 19, 3668-3682.

(Original Research – as collaborator)

26. Chia, H.T., Gasic, I., Huber-Reggi, S.P., Dudka, D., Barisic, M., **Maiato, H.**, and Meraldi, P. (2015) The equatorial position of the metaphase plate ensures symmetric cell divisions. **eLife**, doi: 10.7554/eLife.05124.
27. Vitiello, E., Ferreira, J., **Maiato, H.**, Balda, M.S., and Matter, K. (2014) The tumour suppressor DLC2 ensures mitotic fidelity by coordinating spindle positioning and cell-cell adhesion. **Nat. Commun.** 5, 5826-5841.
28. Orticello, M., Fiore, M., Totta, P., Desideri, M., Basiric, M., Passeri, D., Lenzi, J., Rosa, A., Orlandi, A., **Maiato, H.**, Del Bufalo, D., Degrossi, F. (2014) N-terminus modified Hec1 Suppresses tumor growth by interfering with kinetochore-microtubule dynamics. **Oncogene**, doi:10.1038/onc.2014.265.
29. Bertalan, Z., La Porta, C.A.M., **Maiato, H.**, and Zapperi, S. (2014) Conformational mechanism for the stability of microtubule-kinetochore attachments. **Biophys. J.** 107, 289-300.
30. Conde, C., Osswald, M., Barbosa, J., Moutinho-Santos, T., Pinheiro, D., Guimarães, S., Matos, I., **Maiato, H.**, and Sunkel, C.E. (2013). *Drosophila* Polo regulates the spindle assembly checkpoint through Mps1-dependent BubR1 phosphorylation. **EMBO J.** 32, 1761-77.

31. Lecland, N., Debec, A., Delmas, A., Moutinho-Pereira, S., Malmanche, N., Bouissou, A., Dupre, C., Jourdan, A., Raynaud-Messina, B., **Maiato, H.**, and Guichet, A. (2013). Insights on mitotic spindle assembly and function using novel *Drosophila* acentriolar cell lines. *Biol. Open*, 2, 314-23
32. Maia, A.R.R., Zhu, X., Miller, P., Gu, G., **Maiato, H.**, and Kaverina, I. (2013) Modulation of Golgi-associated microtubule nucleation throughout the cell cycle. *Cytoskeleton*, 70, 32-43.
33. Drabek, K., Gutiérrez, L., Vermeij, M., Clapes, T., Patel, S.R., Boisset, J.C. van Haren, J., Pereira, A., Liu, Z., Akinci, U., Nikolic, T., van IJcken, W., van den Hout, M., Meinders, M., Melo, C., Sambade, C., Drabek, D., Hendriks, R., Philipsen, S., Mommaas, M., Grosveld, F., **Maiato, H.**, Italiano Jr., J.E., Robin, C., and Galjart, N. (2012) The microtubule plus-end tracking protein CLASP2 is required for hematopoiesis and hematopoietic stem cell maintenance. *Cell Rep.* 2, 781-8.
34. Wandke, C., Barisic, M., Sigl, R., Rauch, V., Wolf, F., Amaro, A., Tan, C.H., Pereira, A.J., Kutay, U., **Maiato, H.**, Meraldi, P. and Geley, S. (2012) Human chromokinesins promote chromosome congression and spindle microtubule dynamics during mitosis. *J. Cell Biol.* 198, 847-863.
35. Yao, C., Rath, U., **Maiato, H.**, Sharp, D., Girton, J., Johansen, K.M. and Johansen, J. (2012) A nuclear-derived proteinaceous matrix embeds the microtubule spindle apparatus during mitosis. *Mol. Biol. Cell*, 23:3532-41.
36. Pires, L.R., Oliveira, H., Barrias, C.C., Sampaio, P., Pereira, A.J., **Maiato, H.**, Simões, S., Pêgo, A.P. (2011) Imidazole-grafted chitosan mediated gene delivery: *in vitro* study on transfection, intracellular trafficking, and degradation. *Nanomedicine*. 6: 1499-512.
37. Olszak, A., van Essen, D., Pereira, A.J., Diehl, S., Manke, T., **Maiato, H.**, Sacconi, S., Heun, P. (2011) Heterochromatin boundaries are hotspots for *de novo* kinetochore formation. *Nat. Cell Biol.* 13:799-808.
38. Manning, A.L., Bakhom, S.F., Maffini, S., Melo, C.C., **Maiato, H.**, Compton, D. (2010) CLASP1, astrin and Kif2b form a molecular switch that regulates kinetochore microtubule dynamics to promote mitotic progression and fidelity. *EMBO J.* 29, 3531-43.
39. Ding, Y., Yao, C., Lince-Faria, M., Rath, U., Cai, W., **Maiato, H.**, Girton, J., Johansen, K., and Johansen, J. (2009) Chromator is required for proper microtubule spindle formation and mitosis in *Drosophila*. *Dev. Biol.* 334, 253-63.
40. Reis, R., Gouveia, S., Pereira, A., Matos, I., Sampaio, P., **Maiato, H.**, and Sunkel, C.E. (2009) Dynein and Mast/Orbit/CLASP play antagonistic roles in regulating kinetochore microtubule plus-end dynamics. *J. Cell Sci.*, 122, 2543-2553.
41. Coelho, P.A., Queiroz-Machado, J., Carmo, A.M., Moutinho-Pereira, S., **Maiato, H.**, and Sunkel, C.E. (2008) Dual role of Topoisomerase II in centromere resolution and Aurora B activity. *PLoS Biol.* 6, e207.
42. Leung, G., Williams, B., **Maiato, H.**, Li, Z., Williams, E.V., Kirkpatrick, C., Rieder, C.L., and Goldberg, M.L. (2007) Mitch: a rapidly-evolving component of the Ndc80 kinetochore complex required for proper chromosome segregation in *Drosophila*. *J. Cell Sci.*, 120, 3522-3533.
43. Efimov, A., Kharitonov, A., Efimova, N., Loncarek, J., Miller, P.M., Andreyeva, N., Gleeson, P., Galjart, N., Maia, A.R.R., McLeod, I., Yates, J.R., Khodjakov, A., **Maiato, H.**, Akhmanova, A., and Kaverina, I. (2007) Asymmetric CLASP-dependent nucleation of noncentrosomal microtubules at the trans-Golgi network. *Dev. Cell*, 12, 817-930.
44. VandenBeldt, K.J., Barnard, R.M., Hergert, P.J., Meng, X., **Maiato, H.** and McEwen, B.F. (2006) Kinetochores use a novel mechanism for coordinating the dynamics of individual microtubules within a kinetochore fiber. *Curr. Biol.* 16, 1217-1223.

(Invited - Methods)

45. Barisic, M., Pereira, A.J. and **Maiato, H.** (2012) Fluorescent Speckle Microscopy in Culture Cells. *Method Enzymol.* 504:147-61.
46. Moutinho-Pereira, S., Matos, I. and **Maiato, H.** (2010) *Drosophila* S2 cells as a model system to investigate mitotic spindle dynamics, architecture, and function. *Methods Cell Biol.* 97, 243-57.
47. Pereira, A.J. and **Maiato, H.** (2010) Improved kymography tools and its applications to mitosis. *Methods.* 51, 214-19.
48. Pereira, A.J., Matos, I., Lince-Faria, M., and **Maiato, H.** (2009). Dissecting mitosis with laser microsurgery and RNAi in *Drosophila* cells. *Methods Mol. Biol.* 545, 145-64. (cover article)
49. **Maiato, H.**, Sunkel, C.E., and Earnshaw, W.C. (2003). Dissecting Mitosis by RNAi in *Drosophila* tissue culture cells. *Biol. Proced. Online*, 5, 153-161.

(Invited – Reviews, Commentaries and Book Chapters)

50. Barisic, M., and **Maiato, H.** (2015) The Mitotic Spindle. *Encyclopedia of Cell Biology* (in press).
51. Barisic, M., and **Maiato, H.** (2015) Cracking the (tubulin) code of mitosis. *Oncotarget*, 6, 19356-19357.
52. Pereira, A.L., and **Maiato, H.** (2015) Microtubule plus-end-tracking proteins. *eLS*, DOI:10.1002/9780470015902.a0025979
53. **Maiato, H.**, Afonso, O., and Matos, I. (2014) A chromosome separation checkpoint. *BioEssays*, 37, 257-66. (cover article)
54. Afonso, O., Matos, I., and **Maiato, H.** (2014) Spatial control of the anaphase-telophase transition. *Cell Cycle*, 13, 2985-2986.
55. **Maiato, H.**, and Logarinho, E. (2014) Mitotic spindle multipolarity without centrosome amplification. *Nat. Cell Biol.* 16, 386-394.
56. Moutinho-Santos, T. and **Maiato, H.** (2014) Plk1 puts a (Has)pin on the mitotic histone code. *EMBO Rep.* 15, 203-4.

57. Ferreira, J.G., Pereira, A.L., and **Maiato, H.** (2014) Microtubule plus-end tracking proteins and their roles in cell division. *Int. Rev. Cell Mol. Biol.* 309, 59-140.
58. Schweizer, N., Weiss, M., and **Maiato, H.** (2014) The dynamic spindle matrix. *Curr. Opin. Cell Biol.* 24, 1-7. (cover article)
59. **Maiato, H.** and Barral, Y. (2013) Unbiased about chromosome segregation: give me a mechanism and I will make you “immortal”. *Chromosome Res.* 21, 189-91.
60. Earnshaw, W.C.,...**Maiato, H.**, ...Cleveland, D.W. [57 authors] (2013) Esperanto for Histones: CENP-A, not CenH3, is the centromeric histone H3 variant. *Chromosome Res.* 21, 101-6
61. Pereira, A.J. and **Maiato, H.** (2012) Maturation of the kinetochore-microtubule interface and the meaning of metaphase. *Chromosome Res.* 20, 563-77.
62. Maia, A.R.R. and **Maiato, H.** (2011) Aurora mitochondrialis drives fission during mitosis. *Dev. Cell*, 21, 387-8.
63. Matos, I. and **Maiato, H.** (2011) Prevention and correction mechanisms behind anaphase synchrony – implications for the genesis of aneuploidy. *Cytogenet. Genome Res.* 133, 243-253 (special hard-cover issue on “Aneuploidy”)
64. **Maiato, H.** and Lince-Faria, M. (2010) The perpetual movements of anaphase. *Cell. Mol. Life Sci.* 67, 2251-69.
65. **Maiato, H.** (2010) Mitosis: wisdom, knowledge and information. *Cell. Mol. Life Sci.* 67, 2141-43.
66. **Maiato, H.**, Sampaio, P., and Sunkel, C.E. (2004). Microtubule-associated proteins and their essential roles during mitosis. *Int. Rev. Cytol.*, 241, 53-153.
67. Rieder, C.L. and **Maiato, H.** (2004). Stuck in division or passing through: what happens when cells cannot satisfy the spindle assembly checkpoint. *Dev. Cell*, 7, 637-651.
68. **Maiato, H.**, DeLuca, J., Salmon, E.D., Earnshaw, W.C. (2004). The dynamic kinetochore microtubule interface. *J. Cell Sci.* 117, 5461-5477.
69. **Maiato, H.** and Sunkel, C.E. (2004). Kinetochore-microtubule interactions during cell division. *Chromosome Res.* 12, 585-597.
70. **Maiato, H.**, Rieder, C.L., Earnshaw, W.C., and Sunkel, C.E. (2003). How do kinetochores CLASP dynamic microtubules? *Cell Cycle*, 2, 511-514.

**Total citations: 3021; h-index: 24** (Citation source: Google Scholar)

#### **PATENTS:**

1. New microscopy technique (WO2013162391 A1)
2. New anti-mitotic polypeptide (UK Patent Application No. 1217791.1)

#### **INDEPENDENT RESEARCH FUNDING:**

1. Gulbenkian Program in the Frontiers of Life Sciences; **50 000 Eur**; 2007-2008.
2. POCI/SAU-MMO/58353/2004; Portuguese Science & Technology Foundation; **94 980 Eur**; 2005-2007.
3. PTDC/SAU-OB/66113/2006; Portuguese Science & Technology Foundation; **145 000 Eur**; 2007-2010.
4. PTDC/BIA-BCM/66106/2006; Portuguese Science & Technology Foundation; **150 000 Eur**; 2008-2010.
5. PTDC/SAU-GMG/099704/2008; Portuguese Science & Technology Foundation; **198 000 Eur**; 2010-2013.
6. PTDC/SAU-ONC/112917/2009; Portuguese Science & Technology Foundation; **178 299 Eur**; 2011-2014.
7. L-V-675/2005; Luso-American Foundation; **40 000 Eur**; 2005-2006.
8. 2-01/08; FLAD/NSF 2007 – Research Networks Portugal-USA; **4 500 Eur**; 2008-2010.
9. Gulbenkian Program for Research Stimulation; Calouste Gulbenkian Foundation; **12 500 Eur**; 2006.
10. PESSOA Program (Portuguese/French cooperation grant); GRICES/EGIDE; **4 000 Eur**; 2006-2007.
11. PESSOA Program (Portuguese/French cooperation grant); GRICES/EGIDE **3 600 Eur**; 2009-2010.
12. Crioestaminal Award; **20 000 Eur**; 2007-2008.
13. RGY0076/2010; **Human Frontiers Science Program** – Young Investigator Grant; **300 000 Eur**; 2010-2014.
14. 7<sup>th</sup> Framework Programme “Ideas”, **European Research Council Starting Grant** – **PRECISE**; **1 485 097 Eur**; 2011-2015.
15. Research contract with Cyplasin Biomedical Ltd. (London, UK); **100 000 Eur**; 2014-2015.
16. FLAD Grants on Portugal-USA collaborative projects - **FLAD Life Science 2020**; **400 000 Eur**; 2015-2018.
17. The Louis-Jeantet Young Investigator Career Award; **96 300 Eur**; 2016-2017.

#### **POST-DOC AND STUDENT SUPERVISION:**

**Post-docs:** (present) Dr. Marin Barisic, Dr. Cristina Ferrás, Dr. Ana Pereira, Dr. António Pereira, Dr. Jorge Ferreira, Dr. Tatiana Moutinho dos Santos, Dr. Ana Carvalho Figueiredo, Dr. Ariana Azevedo; (past) Dr. Elsa Logarinho (PI at IBMC) , Dr. Paulo Aguiar (PI at INEB), Dr. Zaira Garcia (Biotech), Dr. Mariana Faria (Lab. Manager), Dr. Stefano Maffini (Post-doc), Dr. Sara Pereira (MD student). **PhD Students:** (present) Olga Afonso, Ana Luisa Ferreira, Danica Drpic, Joana Macedo; (Graduated) Ana Rita Maia, Irina Matos, Ana Lúcia Pereira, Sara Moutinho Pereira, Daniel Osório, António Pereira, Jorge Ferreira, Nina Schweizer. **Master Students:** (present) Filipe Sousa, Miriam Zagers; (Graduated) Andrea Marques, Ana Rita Maia, Ana Luisa Ferreira, Marten Hornsveldt, Mariana Cunha, Cristina Ferreira.

## INVITED SPEAKER:

1. TEDx FCTUNL, Lisbon (Portugal). "Wisdom, knowledge and information – from Thomas S. Eliot to Frank Zappa", June 2015.
2. EMBO Dynamic Kinetochore Workshop, Copenhagen (Denmark), "Polar ejection forces and Cdk1 regulate kinetochore-microtubule attachment stability on mono-oriented chromosomes", May 2015.
3. Institut Pasteur, Paris (France), "Cracking the code behind chromosome segregation fidelity", January 2015.
4. Warwick Medical School, Warwick (UK), "Motors, clocks and rulers in chromosome segregation", October 2014.
5. National University of Ireland, Galway (Ireland), "A Chromosome Separation Checkpoint", September 2014.
6. Instituto de Medicina Molecular, 2<sup>nd</sup> IMM PostDoc Day, Lisbon (Portugal), "A Chromosome Separation Checkpoint", June 2014.
7. Genome Regulation and Nuclear Dynamics in Health and Disease, DKFZ-ZMBH Alliance Forum, Heidelberg (Germany), "A Chromosome Separation Checkpoint", April 2014.
8. Centre for Genomic Regulation (CRG), Barcelona (Spain), "Motors, clocks and rulers in chromosome segregation", April 2014.
9. Insect Biomedical Research Center International Symposium "Regulation of cell proliferation and development by microtubule associated proteins", Kyoto Institute of Technology, Kyoto (Japan), "The role of CLASPs in cell division (and beyond)", March 2014.
10. Hong Kong University – Pasteur Research Pole, Hong Kong, "How cells divide", March 2014.
11. BiotechHealth PhD Program, ICBAS, Porto (Portugal), "The Engines of Life", January 2014.
12. The 2013 American Society for Cell Biology Annual Meeting, New Orleans, LA (USA), "Functional coordination between kinetochore and arm-associated motors explains chromosome congression in human cells", December 2013.
13. Department of Physiology, University of Pennsylvania, Philadelphia, PA (USA), "Motors, Clocks and Rulers in Chromosome Segregation", December 2013.
14. Department of Genetics, University of Cambridge, Cambridge (UK), "Motors, Clocks and Rulers in Chromosome Segregation", November 2013.
15. 8<sup>th</sup> Young European Scientist Meeting, Porto (Portugal), "How do cells divide (and what can go wrong)", September 2013.
16. EMBO Drosophila Cell Division Cycle Workshop, Totnes (UK), "Feedback control of the anaphase-telophase transition", September 2013.
17. Dartmouth Medical School, Hanover NH (United States), "Motors, Clocks and Rulers in Chromosome Segregation", August 2013.
18. Gordon Research Conferences on Motile and Contractile Systems, Colby-Sawyer College, New London NH (United States), "Functional Coordination of Kinetochore and Arm Motors Explains Chromosome Congression in Humans", July 2013.
19. EMBO workshop on Chromosome Segregation and Aneuploidy, Breukelen (The Netherlands), "Feedback control of the anaphase-telophase transition", June 2013.
20. 3<sup>rd</sup> Dynamic kinetochore workshop, Institute for Molecular and Cell Biology, "Kinetochore motors dominate over polar ejection forces to drive chromosome congression in humans", Porto (Portugal), May 2013.
21. IV Jornadas de Ciência e Medicina, University of Minho, Braga (Portugal), "How do cells divide (and what can go wrong)", April 2013.
22. Palestras de Química, University of Porto, Porto (Portugal), "How do cells divide (and what can go wrong)", March 2013.
23. University of Milano, Milano (Italy), "Spatial and temporal control of chromosome segregation", March 2013.
24. University of Geneva, Geneva (Switzerland), "Spatial and temporal control of chromosome segregation", February 2013.
25. Molecular Biology of the Cell Course, Institut Pasteur/Institut Curie (France), "How cells divide", January 2013.
26. London Research Institute, Cancer Research UK, London (UK), "Spatial and temporal control of chromosome segregation", November 2012.
27. Keynote speaker, Nordic Mitosis Network Meeting, Turku (Finland), "Spatial and temporal control of chromosome segregation", November 2012.
28. ETH, Institute of Biochemistry, Zurich (Switzerland), "Spatial and temporal control of chromosome segregation", November 2012.
29. European Science Foundation Exploratory Workshop on "Physics of Cancer", Varenna (Italy), "The role of chromosome-mediated forces in mitotic spindle architecture", September, 2012.
30. Cancer Research Institute, University of Cambridge, Cambridge (UK), "How mitotic spindles adapt to the presence/absence of centrosomes", July 2012.
31. The Cancer Institute, Japanese Foundation for Cancer Research, Tokyo (Japan), "Design principles behind mitotic spindle architecture", July 2012.
32. 2<sup>nd</sup> EMBO Microtubule Workshop, Heidelberg (Germany), "Molecular basis of mitotic spindle adaptation to the presence/absence of centrosomes", May 2012.
33. University of Geneva, Geneva (Switzerland), "Design principles behind mitotic spindle architecture", March 2012.
34. ETH, Institute of Biochemistry, Zurich (Switzerland), "Design principles behind mitotic spindle architecture", March 2012.

35. University College of London, London (UK), "How to make a precise chromosome segregation machine", January 2012.
36. Institut Curie, Paris (France), "How to make a precise chromosome segregation machine", January 2012.
37. Molecular Biology of the Cell Course, Institut Pasteur/Institut Curie (France), "How cells divide", January 2012.
38. Keynote speaker, Gotta/Bettencourt-Dias/Meraldi joint lab retreat, Sintra (Portugal), "*Feedback control of spindle elongation during anaphase*", November 2011.
39. 2<sup>nd</sup> ITQB PhD Students' Meeting, Oeiras (Portugal), "How to make a precise chromosome segregation machine", October 2011.
40. Gulbenkian Science Institute, Oeiras (Portugal), "How to make a precise chromosome segregation machine", October 2011.
41. 22<sup>nd</sup> European Drosophila Research Conference, Lisbon (Portugal), "Acentrosomal spindle assembly in Drosophila somatic cells", September 2011
42. Nuclear envelope and the cytoskeleton, Les Treilles (France), "*Feedback control of spindle elongation*", April 2011
43. Biozentrum, University of Basel, Basel (Switzerland), "How to make a precise chromosome segregation machine", March 2011
44. ETH, Institute of Biochemistry, Zurich (Switzerland), "How to make a precise chromosome segregation machine", March 2011
45. Institute of Molecular Medicine, Lisbon (Portugal), "How to make a precise chromosome segregation machine", March 2011
46. Wellcome Trust Centre for Gene Regulation and Expression, Dundee, (Scotland, UK), "How to make a precise chromosome segregation machine", February 2011
47. CNRS, Université de Toulouse, Toulouse (France), "How to make a precise chromosome segregation machine", February 2011
48. Centro Andaluz de Biología del Desarrollo, Seville (Spain), "How to make and break a chromosome segregation machine – an acentrosomal perspective", October 2010
49. Université Pierre et Marie Curie, "How to make and break a chromosome segregation machine – an acentrosomal perspective", September 2010
50. Conférences Jacques-Monod, Cell Division: Time and Space, Roscoff (France), "Spatiotemporal control of mitosis by the spindle matrix", September 2010.
51. Utrecht University, Utrecht (The Netherlands), "How to make and break a chromosome segregation machine – an acentrosomal perspective", July 2010.
52. EMBO workshop on Chromosome Segregation and Aneuploidy, Edinburgh (UK), "Comparative genomic analysis of centrosomal and acentrosomal spindle assembly in Drosophila cells reveals a unique molecular pathway", June 2010.
53. ETH, Institute of Biochemistry, Zurich (Switzerland), "How to make and break a chromosome segregation machine – an acentrosomal perspective", February 2010.
54. Institute Jacques Monod, "Spatiotemporal control of chromosome segregation", Paris (France), November 2009.
55. Universidade de Évora, "The 'birth' of the cell", Évora (Portugal), November 2009.
56. Imaging approaches to study cytoskeleton dynamics, Centre de Regulació Genòmica, "Seeing and touching inside the living dividing cell", Barcelona (Spain), November 2009.
57. Gulbenkian Science Institute, "Spatiotemporal control of chromosome segregation", Oeiras (Portugal), October 2009.
58. Albert Einstein College of Medicine, "*Spatiotemporal control of chromosome segregation*", New York, NY, (USA), October 2009.
59. Iowa State University, "*Spatiotemporal control of chromosome segregation*", Ames, IA, (USA), October 2009.
60. António Xavier Seminar Series, "*Spatiotemporal control of chromosome segregation*", Instituto de Tecnologia Química e Biológica, Universidade de Lisboa, Oeiras (Portugal), October 2009.
61. 1<sup>st</sup> Dynamic kinetochore workshop, Marie Curie Research Institute, "*Spatiotemporal control of the spindle checkpoint by the spindle matrix*", Oxted (UK), May 2009.
62. Mechanisms of chromosome segregation – a tribute to Miguel Mota, IBMC, Porto, March 2009.
63. 48<sup>th</sup> Annual Meeting of the American Society for Cell Biology, San Francisco, CA (USA), "*Control of mitosis by the spindle matrix*", December 2008.
64. Portuguese Institute of Oncology, "*Spatio-temporal control of chromosome segregation*", November 2008.
65. International Conference on Microscopy and Microanalysis, 43<sup>rd</sup> Annual Meeting of the Portuguese Microscopy Society, "*Microtubule cytoskeleton remodelling at the entry and exit from mitosis*", Porto (Portugal), October 2008.
66. EMBO Workshop in Chromosome Segregation: Centromeres & Kinetochores, Arcachon (France), "*Mitotic control by the spindle matrix*", September 2008.
67. 7<sup>th</sup> Annual ELSO Meeting, Nice (France), "*Synchronizing chromosome segregation and force distribution at kinetochores*", August 2008.
68. Science 2008 Meeting of the Associate Laboratories, Lisbon (Portugal), "*Spatio-temporal control of chromosome movement during cell division*", July 2008.

69. Microtubule dynamics workshop, Marie Curie Research Institute, Oxted (UK), *“Remodelling the microtubule cytoskeleton at the entry and exit from mitosis”*, May 2008.
70. Max Planck Institute for Immunobiology, Freiburg (Germany), *“Microtubule cytoskeleton remodelling at the entry and exit from mitosis”*, April 2008.
71. Gulbenkian Frontiers of Science Conference – *“O ‘Nascimento’ da célula”*, Calouste Gulbenkian Foundation, Lisbon (Portugal), April 2008.
72. Institut Jacques Monod, Paris (France), *“Microtubule cytoskeleton remodelling by acentriolar MTOCs”*, March 2008.
73. 47<sup>th</sup> Annual Meeting of the American Society for Cell Biology, Washington, DC (USA), *“A new flux for CLASPs”*, December 2007.
74. ETH, Institute of Biochemistry (Zurich), *“Synchronizing chromosome segregation”*, October 2007.
75. Nuclear transport and mitosis, the evolving relationship, Les Treilles (France), *“Synchronizing Chromosome Segregation”*, July 2007.
76. 7th International Chromosome Segregation and Aneuploidy Workshop, Naantali (Finland), *“Synchronizing Chromosome Segregation”*, June 2007.
77. FASEB Summer Research Conference. Mitosis: Spindle Assembly and Function, Indian Wells, CA (USA), *“Synchronizing Chromosome Segregation”*, June 2007.
78. Utrecht University, Utrecht (The Netherlands), *“Getting the right chromosomes at the right time - one for all and all for one”*, February 2007.
79. Erasmus Medical Center, Rotterdam (The Netherlands), *“Mitotic Fidelity - The Importance of Being Synchronous”*, February 2007.
80. Gulbenkian Science Institute, Oeiras (Portugal), *“Ensuring mitotic fidelity in mammals”*, January 2007.
81. Crioestaminal Award, Porto (Portugal), *“Dissecting cell division and aneuploidygenesis with laser microsurgery in living cells”*, November 2006.
82. Institut Jacques Monod, Paris (France), *“Ensuring mitotic fidelity – beyond the spindle-assembly checkpoint”*, November 2006.
83. Rinberg Meeting of the Max Planck Institute for Biochemistry, Rinberg (Germany), *“Ensuring mitotic fidelity in mammals – beyond the spindle-assembly checkpoint”*, November 2006.
84. Institut de Recerca Biomedica, Barcelona (Spain), *“Ensuring mitotic fidelity – beyond the spindle-assembly checkpoint”*, November 2006.
85. 2<sup>nd</sup> Workshop Marie Curie Training Network ‘Spindle Dynamics’, Evora (Portugal), *“Ensuring mitotic fidelity – beyond the spindle-assembly checkpoint”*, September 2006.
86. Max Planck Institute for Biochemistry, Martinsried (Germany), *“Dissecting mitotic spindle morphogenesis in animal somatic cells”*, June 2006.
87. 3<sup>rd</sup> *Drosophila* Cell Cycle Workshop, Porto (Portugal), *“The structure and function of the Drosophila kinetochore”*, June 2006.
88. Workshop “Ethics in animal research” - *Why does a cell biologist need animals?* - Institute for Molecular and Cell Biology (Portugal), April 2006.
89. 4<sup>th</sup> Meeting of the Portuguese *Drosophila* Group, Institute for Molecular and Cell Biology, Porto, (Portugal) *“The Drosophila kinetochore”*, December 2005.
90. 1<sup>st</sup> Workshop on Advanced Light Microscopy and Flow Cytometry, Institute for Molecular and Cell Biology, Porto (Portugal), *“Live (Light) Cell Microscopy”*, November 2005.
91. Department of Pathology, University of Frankfurt, Frankfurt (Germany), *“Molecular Dissection of the Multinucleation Phenotype Behind Hodgkin Disease”*, April 2005.
92. Institute for Molecular and Cell Biology, Porto (Portugal), Minisymposium *“Microtubule Dynamics: from Cell Polarity to Chromosome Segregation”*, April 2005
93. Physics Seminars, Department of Physics, School of Sciences at University of Minho, Braga (Portugal), *“Dissecting Cell Division with Laser Microsurgery in Living Cells”*, February 2005.
94. 3<sup>rd</sup> Meeting of the Portuguese *Drosophila* Group, Gulbenkian Science Institute, Oeiras, (Portugal) *“Kinetochores and Mitotic Spindle Morphogenesis”*, December 2004.
95. 44<sup>th</sup> American Society for Cell Biology Annual Meeting, Washington, DC (USA), *“Kinetochore-driven formation of kinetochore fibers contributes to spindle assembly during mitosis in animals”*, December 2004.
96. 8<sup>th</sup> Portuguese Human Genetics Society, Porto (Portugal), *“The dynamic kinetochore-microtubule interface”*, November 2004.
97. 6<sup>th</sup> International Chromosome Segregation and Aneuploidy Conference, *“CLASPs mediate microtubule subunit incorporation at the kinetochore”*, Cortona (Italy), September, 2004.
98. Marine Biological Laboratory, Woods Hole, MA (USA), *“The kinetochore-microtubule interface”*, July 2004.
99. Institute for Molecular and Cell Biology, Porto (Portugal), *“Kinetochores as architects and choreographers of the mitotic spindle”*, March 2004.
100. IPATIMUP, Porto (Portugal) *“Variations on Spindle Assembly”*, December 2003.

101. 1<sup>st</sup> Meeting of the Portuguese *Drosophila* Group, Gulbenkian Science Institute, Oeiras (Portugal), “*Microtubule-kinetochore attachment in Drosophila cells*”, December 2002.
102. Department of Pathology, University of Frankfurt, Frankfurt (Germany), “*How kinetochores CLASP dynamic microtubules*”, November 2002.
103. Gulbenkian Science Institute, Oeiras (Portugal), “*How kinetochores attach to dynamic microtubules*”, October 2002.
104. VIII Annual Meeting of the Gulbenkian PhD Programme in Biology and Medicine, Curia (Portugal), “*Role of microtubule-plus-end-associated proteins in kinetochore attachment and spindle function during mitosis*”, September 2002.
105. Institute for Molecular and Cell Biology, Porto (Portugal), “*Role of CLASPs in kinetochore-microtubule attachment and mitotic spindle bipolarity*”, February 2002.
106. Wellcome Trust Centre for Cell Biology, Institute of Cell and Molecular Biology, University of Edinburgh, Edinburgh (UK), “*Orbiting around MAST and CLASPs*”, October 2001.
107. VII Annual Meeting of the Gulbenkian PhD Programme in Biology and Medicine, Curia (Portugal), “*Orbiting around MAST*”, September 2001.
108. 5<sup>th</sup> International Chromosome Segregation and Aneuploidy Conference, Chartres (France), “*MAST is required for metaphase chromosome alignment and to maintain bipolar spindle stability during metaphase-anaphase transition*”, July 2001.
109. VI Annual Meeting of the Gulbenkian PhD Programme in Biology and Medicine, Curia (Portugal), “*Cell Division with multiple asters*”, September 2000.
110. V Annual Meeting of the Gulbenkian PhD Programme in Biology and Medicine, Curia (Portugal), “*Role of Centrosomal Proteins in Cell Division: Implications for Human Cancers*”, September 1999.

#### **THESIS COMMITTEES AND JURY:**

1. Member of the Ph.D. Dissertation Committee of Rita Reis, Institute for Molecular and Cell Biology/ICBAS, University of Porto, Portugal.
2. Member of the Ph.D. Dissertation Committee of Daniela Brito, School of Public Health, Department of Biomedical Sciences, Wadsworth Center, Albany, New York, USA.
3. Member of the Ph.D. Dissertation Committee of Agatha Olzak, Max Planck Institute for Immunobiology, Freiburg, Germany.
4. Member of the Ph.D. Dissertation Committee of Chia Huei Tan, ETH, Institute of Biochemistry, Zurich, Switzerland.
5. Member of the Ph.D. Dissertation Committee of Kamila Kowa, Universite de Geneve, Geneve, Switzerland.
6. Member of the Jury (examiner) for the Ph.D. Dissertation of Pedro Carvalho, ICBAS, University of Porto, Portugal.
7. Member of the Jury (examiner) for the Ph.D. Dissertation of Ana Sofia Gírio Veloso, Instituto de Tecnologia Química e Biológica, Universidade Nova de Lisboa, Portugal.
8. Member of the Jury (examiner) for the Ph.D. Dissertation of Tatiana Moutinho, ICBAS, University of Porto, Portugal.
9. Member of the Jury (examiner) for the Ph.D. Dissertation of Mariana Lince Faria, Faculdade de Ciências, University of Lisbon, Portugal.
10. Member of the Jury (examiner) for the Ph.D. Dissertation of Christel Verollet, Ecole Doctorale Biologie-Sante-Biotechnologies de Toulouse, Universite Paul Sabatier, Institute National Polytechnique, France.
11. Member of the Jury (examiner) for the Ph.D. Dissertation of Ana Lúcia Gomes Almeida Pereira Mena, Instituto de Tecnologia Química e Biológica, Universidade Nova de Lisboa, Portugal.
12. Member of the Jury for the Ph.D. Dissertation of Rita Reis, ICBAS, University of Porto, Portugal.
13. Member of the Jury (examiner) for the Ph.D. Dissertation of Jessica Azoury, Universite Paris VI Pierre et Marie Curie, CNRS, France.
14. Member of the Jury for the Master Dissertation (Biochemistry) of Diana Pinheiro, Faculdade de Ciências/ICBAS, University of Porto, Portugal.
15. Member of the Jury for the PhD Dissertation of José Antão, ITQB, Universidade Nova de Lisboa, Portugal.
16. Member of the Jury for the PhD Dissertation of Aureliana Sousa, ICBAS, University of Porto, Portugal.
17. Member of the Jury (examiner) for the Ph.D. Dissertation of Joana Borlido, University of Cambridge, UK.
18. Member of the Jury (examiner) for the Master Dissertation (Bioengineering) of Mariana Osswald, Faculdade de Engenharia/ICBAS, University of Porto, Portugal.
19. Member of the Jury (examiner) for the Ph.D. Dissertation (Bioengineering) of Nicolas Lecland, Universitat Pompeu Fabra, Barcelona, Spain.

#### **AWARDS, HONORS AND FELLOWSHIPS:**

1. The Louis-Jeantet Young Investigator Career Award 2015
2. Cover of “Diário de Notícias” newspaper on the January 7, 2015 issue.
3. FLAD Life Science 2020 Award for Basic Research 2015

4. Pfizer Award for Basic Research 2014
5. Finalist (only European PhD student in the top 10), ASCB Kaluza Prize for outstanding research by a graduate student (as supervisor of Olga Afonso)
6. Featured on the European Research Council brochure "Spotlight on ERC projects (Cell Biology)"
7. Portuguese Human Genetics Society Award 2013 (as supervisor of Dr. Elsa Logarinho)
8. Featured on "People & Ideas", *J. Cell Biol.* Vol. 202, pages 722-723, 2013
9. Cover of "Público" newspaper on the November 27, 2012 issue.
10. Pfizer Award for Basic Research 2011
11. Gulbenkian Prize in the Frontiers of Life Sciences 2007
12. Crioestaminal Award 2006
13. Jacinto Magalhães Award 2005
14. Gulbenkian Prize for Research Stimulation 2005
15. Robert J. Colinas Postdoctoral Award 2005
16. Portuguese Human Genetics Society Award 2004
17. Featured scientist at the *microMODERN* exhibit of art in science, a benefit for the San Francisco AIDS Foundation, LIMN Gallery, San Francisco, CA, USA, December 11-20, 2003.
18. Post-doctoral fellowship (SFRH / BPD / 11592 / 2002) from the Science and Technology Foundation, Ministry of Science and Technology of Portugal
19. Gulbenkian PhD Programme in Biology and Medicine studentship (Praxis XXI/ BD21906/ 99)

#### **ORGANIZATION OF MEETINGS, SEMINARS AND COURSES:**

1. Co-organizer of the Mini-symposium "*Microtubule Dynamics: from Cell Motility to Chromosome Segregation*", Institute for Molecular and Cell Biology, Porto, Portugal, April 2005.
2. Appointed member of the organizing committee for the seminar series at the Institute for Molecular and Cell Biology, Porto, Portugal, 2005-2006.
3. Hosted over 40 Research Seminars with National and International invited speakers at the Institute for Molecular and Cell Biology between 2005-2014.
4. Organizer of the workshop on "*Management and Project Leadership*", Institute for Molecular and Cell Biology, Porto, Portugal, November 2005.
5. Co-organizer of the Annual Meeting of the Portuguese Human Genetics Society, Porto, Portugal, November 2007
6. Organizer of the Mini-symposium "*Mechanisms of chromosome segregation – a tribute to Miguel Mota*", Institute for Molecular and Cell Biology, Porto, Portugal, March 2009.
7. Organizer of the Cell Cycle Course, 2008, 2009, 2010, GABBA PhD Programme, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
8. Organizer and member of the Scientific Committee of the 1<sup>st</sup> I<sup>3</sup>S Retreat, Póvoa de Varzim, Portugal, May 2010.
9. Organizer of the 3<sup>rd</sup> Dynamic Kinetochore Workshop, Porto, Portugal, May 2013.
10. Organizer of the "Scientific Writing" module, Doctoral Program in Molecular and Cell Biology, 2014, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
11. Organizer of the "Quantitative Biology" module, Doctoral Program in Molecular and Cell Biology, 2014, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
12. Chair, Mitosis minisymposium, ELSO/EMBO meeting, Nice, France, August 2008,
13. Chair, Environmental Carcinogens and Aneuploidy, Chromosome Segregation and Aneuploidy Workshop, Naantali, Finland, June 2007,
14. Chair, Imaging approaches to study cytoskeleton dynamics workshop, CRG, Barcelona, Spain, November 2009
15. Chair, Science Heartbeat, GABBA Annual Symposium, Porto, Portugal, July 2013
16. Chair, Mitosis and Cell Division, EMBO Drosophila Cell Division Cycle Workshop, Totnes, UK, September 2013
17. Chair, Kinetochore-Microtubule Interactions, EMBO Dynamic Kinetochore Workshop, Copenhagen, Denmark, May 2015

#### **TEACHING EXPERIENCE:**

1. Hong Kong University – Pasteur Research Pole, Cell Biology Course, 2014, Hong Kong.
2. Institut Curie/Institut Pasteur, Molecular Biology of the Cell Course, 2011-2013, Paris, France.
3. Doctoral Program in Molecular and Cell Biology, 2014, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal, "Scientific Writing" module.
4. Doctoral Program in Molecular and Cell Biology, 2014, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal, "Quantitative Biology" module.
5. Gulbenkian Programme of Advanced Medical Training (with Champalimaud Foundation), 2008-2011, Gulbenkian Institute of Science, Oeiras, Portugal.

6. IGC PhD Programme - Integrative Biology and Biomedicine – IBB, 2013-2014, Gulbenkian Institute of Science, Oeiras, Portugal.
7. CNC PhD Programme, 2006-2009, University of Coimbra, Portugal.
8. GABBA PhD Programme, 2005-2012, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
9. GABBA PhD Programme, 2002, Institute for Molecular and Cell Biology, University of Porto, Porto, Portugal.
10. Master Course in Forensic Medicine, 2005-2006, Institute for Biomedical Sciences Abel Salazar, University of Porto, Porto, Portugal.
11. Master Course in Cell and Molecular Biology, 2007-2008, University of Coimbra, Coimbra, Portugal.
12. Undergraduate Courses of Biochemistry, Biology and Geology – “Mitosis”, Cell Biology Class, 2005-2009, Faculty of Sciences, University of Porto, Porto, Portugal.
13. Invited Auxiliary Professor, Department of Experimental Biology, Faculty of Medicine, University of Porto, Porto, Portugal, since September 2005.

#### **PUBLIC UNDERSTANDING OF SCIENCE:**

1. **Maiato, H.** *Nós, a ciência e os outros*. Portefólio Magazine, Fundação Eugénio de Almeida, 2007
2. Jury, Laboratório de Imagens – A ciência em fotografia, Centro Cultural de Belém, February 2006.
3. Forum “Novas Fronteiras da Ciência e do Conhecimento”.
4. Bettencourt-Dias, M., **Maiato, H.**, Jacinto, A. (2009). Cell Biology in Portugal – navigating to the future, *ASCB Newsletter*, 32: 11-13.
5. **Maiato, H.** Mudar uma capital para governar um País, In: *Ideias Perigosas para Portugal*. João Caraça e Gustavo Cardoso. Tinta da China, Portugal, 2010; pag. 240-245.
6. Lecturer, public session on the ERC program, Faculdade de Ciências da Universidade do Porto, November 2010.
7. More than 30 interviews/documentaries broadcasted on TV, Radio, Internet and Newspapers over the last 10 years.
8. Organized/Participated in several public sessions about science with school kids at IBMC and Visionarium.
9. Organized and taught a “microscopy session” to kinder garden kids at Colégio Oceanus (V. N. Gaia), October 2012.
10. Cover of “Público” newspaper on the November 27, 2012 issue.
11. Cover of “Diário de Notícias” newspaper on the January 7, 2015 issue.
12. European Research Council information session, Spotlight on ERC projects (Cell Biology), American Society for Cell Biology Annual Meeting, New Orleans, December 2013.

#### **AD HOC REVIEWER (JOURNALS):**

Cell, Developmental Cell, Current Biology, Nature Reviews in Molecular and Cell Biology, Nature Cell Biology, Nature Chemical Biology, Nature Communications, Nature Protocols, eLife, PLoS Biology, PLoS ONE, PNAS, Journal of Cell Biology, EMBO Journal, EMBO Reports, Oncogene, Cancer Research, Cell Research, Molecular Biology of the Cell, Molecular and Cellular Biology, Journal of Cell Science, Cell Motility & Cytoskeleton, Frontiers in Molecular and Cellular Oncology, BMC Cell Biology, Chromosoma, Chromosome Research, Journal of Biophotonics, Targets.

#### **AD HOC REVIEWER (GRANTS):**

European Research Council; Human Frontier Science Program; National Science Foundation (USA); Wellcome Trust (UK); Cancer Research UK; Worldwide Cancer Research (former AICR); ETH – Swiss Federal Institute of Technology (Switzerland); Dutch Cancer Society (The Netherlands); Netherlands Organisation for Scientific Research (The Netherlands); Danish Council for Independent Research; Agence Nationale de la Recherche (France); Fundação para a Ciência e a Tecnologia (Portugal)

#### **EXTERNAL EVALUATION COMMITTEES:**

1. Institute of Biology of Rennes, Agence d'évaluation de la recherche et de l'enseignement supérieur (France)
2. Ministry of Education, Lifelong Learning and Religious Affairs (Greece)
3. Institute of Human Genetics/CNRS (Montpellier), Agence d'évaluation de la recherche et de l'enseignement supérieur (France)
4. Laboratory of Cellular and Molecular Biology of Control of Proliferation/CNRS (Toulouse), Agence d'évaluation de la recherche et de l'enseignement supérieur (France)

#### **EDITORIAL AND CONSULTING BOARDS:**

1. Member of the Editorial Advisory Board of the journal *Chromosome Research* (2011-).
2. Guest-Editor of a special issue of *Cellular and Molecular Life Sciences* on “Mitosis” (Volume 67, Number 13 / July, 2010).
3. Guest-Editor of a special issue of *Chromosome Research* on “Biased Chromosome Segregation” (Volume 3, Number 21 / May, 2013).
4. Member of the Consulting Board of the Mathematical Engineering course, 2<sup>nd</sup> Cycle, Department of Mathematics, Faculdade de Ciências da Universidade do Porto (2010-)

5. Appointed ***National Counsellor for Science and Technology*** to the Portuguese Prime Minister (2012-)

**SCIENTIFIC SOCIETIES:**

1. Member, American Society for Cell Biology (2003- )
2. Ambassador, American Society for Cell Biology (2010- )