

## **ALLEGATO B**

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### **Titoli/Education**

March 2009

PhD in Biologia

Universita' degli Studi di Milano Bicocca-Piazza dell'Ateneo Nuovo

1 Milano (Italia)

Titolo tesi: "Cellular response to mitotic perturbation: PP2A-mediated control of sister chromatid cohesion and adaptation to spindle assembly checkpoint activation"

Giudizio della commissione: Le ricerche e le metodologie utilizzate sono pertinenti all'argomento e alla finalità della ricerca, e i risultati conseguiti sono di grande interesse nell'ambito della tematica sperimentale affrontata.

November 2005

Laurea in Biotecnologie Industriali (vecchio ordinamento).

Universita' degli Studi di Milano Bicocca-Piazza dell'Ateneo Nuovo  
1 Milano (Italia)

Titolo tesi: "Role of Cdc55, regulatory subunit of PP2A protein phosphatase in the control of sister chromatid separation in *S.cerevisiae*" Punteggio 110/110

### **Contratti di ricerca/Research Experience**

July 2014-2024

Postdoctoral/Research Fellow, Professor Randall King's laboratory  
Blavatnik Institute, Harvard Medical School, Cell Biology

	Department Boston (USA)
2010-2014	Postdoctoral Fellow, Professor Satoshi Yoshida's laboratory Brandeis University, Biology Department, Waltham (USA)
2009-2010	Assegnista di ricerca, Professor Simonetta Piatti's laboratory  Universita' degli Studi di Milano Bicocca- Piazza dell Ateneo Nuovo 1 Milano Milano (Italy)
2005-2009	Graduate Student, Professor Simonetta Piatti's laboratory University of Milano-Bicocca, Biotechnology and Biology Department, Milano (Italy)
2004-2005	Undergraduate Student, Professor Simonetta Piatti's laboratory University of Milano-Bicocca, Biotechnology and Biology Department, Milano (Italy)

### **Teaching and mentoring activity**

2006-2007	Tutor nell ambito di azioni FSE per il Corso di Laboratorio di Tecnologie
Abilitanti 2007-2008	Genetiche del Corso di Laurea Triennale in Biotecnologie presso l
Universita' di	2008-2009 Milano-Bicocca
2009-present	Co-Supervisore di studenti di laurea e dottorato (tesi sperimentale) nell ambito del corso di Laurea Triennale di Biotecnologie e del dottorato di Biotecnologie (Universita' Milano Bicocca, Italia), nell'ambito del Biology Master program (Waltham University, USA), Phd program (Harvard Medical School,USA)
2018-present	Training di nuovi membri di laboratorio (da studenti di laurea a Postdocs), ordine e organizzazione del laboratorio,

## Fellowships and Awards

2023	Robin Reed Memorial Travel Award
2021-2023	Harvard Medical School Cell Biology Education and Fellowship
2011-2013	American Italian Cancer Foundation Postdoctoral Fellowship
2005-2008	PhD fellowship, Ministry of University and Scientific Research

## Editorial activity

- 2024 -present Co-Guest editor (with Dr. Paulo Joao) for *Microorganisms of the special issue "Yeast Genetics and Proteomics"*  
[https://www.mdpi.com/journal/microorganisms/special\\_issues/NJ1H971M20](https://www.mdpi.com/journal/microorganisms/special_issues/NJ1H971M20)
- 2021-present Ad hoc Reviewer for peer-reviewed journals: *Signal Transduction and Targeted Therapy*, *Cells*, *Microorganisms*, *Proteomes*, *International Journal of Molecular Science*
- 2010-present Co-reviewer for peer-reviewed journals: *Journal of Cell Biology*, *Journal of Cell Science*, *Molecular Biology of the Cell*, *Cell Cycle*, *Journal of Biological Chemistry*, *Cancer letters*.

## Peer reviewed Publications

\*Co-first authors #Co-corresponding authors

- **Rossio V<sup>#</sup>** and Paulo JA<sup>#</sup> (2025) Comprehensive Analysis of the Proteome of *S. cerevisiae* Wild-Type and *pdr5D* Cells in Response to Bisphenol A (BPA) Exposure **Microorganisms**, 13(1),114; [doi.org/10.3390/microorganisms13010114](https://doi.org/10.3390/microorganisms13010114)
- **Rossio V<sup>#</sup>** and Paulo JA<sup>#</sup> (2024) Comparative Proteome-Wide Abundance Profiling of Yeast Strains Deleted for Cdc48 Adaptors. **Proteomes**, 12 (4), 31; doi: 10.3390/proteomes12040031
- **Rossio V<sup>#</sup>**, Liu X and Paulo JA<sup>#</sup> (2024) Proteome Profiling of *S. cerevisiae* Strains

- Lacking the Ubiquitin-Conjugating Enzymes Ubc4 and Ubc5 During Exponential Growth and After Heat Shock Treatment. *Microorganisms*, 12(11),2235; doi: 10.3390/microorganisms12112235
- **Rossio V**, Paulo JA, Liu X, Gygi SP and King RW (2024) Specificity profiling of deubiquitylases against endogenously generated ubiquitin-protein conjugates. *Cell Chemical Biology*, 31(7):1349-1362; doi: 10.1016/j.chembiol.2024.05.001
  - **Rossio V<sup>#</sup>** and Paulo JA<sup>#</sup> (2023). Comparison of the proteomes and of the phosphoproteomes of *S. cerevisiae* cells harvested with different strategies. *Proteomes*, 11 (4), 28; doi:10.3390/proteomes11040028
  - **Rossio V<sup>#</sup>**, Liu X and Paulo JA<sup>#</sup> (2023). Comparative Proteomic Analysis of two commonly used laboratory yeast strains: W303 and BY4742. *Proteomes*, 11 (4), 30; doi: 10.3390/proteomes11040030
  - **Rossio V**, Paulo JA and King RW (2023). Identification of Deubiquitinase substrates in *Xenopus* egg extract. *Methods in Mol. Biol*, 2591:219-236 doi: 10.1007/978-1-0716-2803-4\_13
  - Abyadeh M, Gupta V, Liu X, **Rossio V**, Mirzaei M, Cornish J, Paulo JA and Haynes P (2023) Proteome-wide profiling using sample multiplexing of a human cell line treated with cannabidiol (CBD) and tetrahydrocannabinol (THC). *Proteomes*, 11 (4), 36; doi: 10.3390/proteomes11040036
  - Zhang T, Liu X, **Rossio V**, Shane D, Gigy SP and Paulo JA (2023). Enhancing proteome coverage by using strong anion exchange in tandem with basic-pH reversed-phase chromatography for sample multiplexing-based proteomics. *J. Proteome Research*, 23(8):2870-2881; doi: 10.1021/acs.jproteome.3c00492
  - Liu X, **Rossio V**, Gygi SP and Paulo JA (2023). Enriching cysteine-containing peptides using a sulfhydryl-reactive alkylating reagent with a phosphonic acid group, and immobilized metal affinity chromatography. *J. Proteome Research*, 22(4):1270-1279; doi: 10.1021/acs.jproteome.2c00806
  - Liu X, **Rossio V**, and Paulo JA (2023). Spin column-based peptide fractionation alternatives for streamlined tandem mass tag (SL-TMT) sample processing. *J Proteomics*, 276: 104839; doi: 10.1016/j.jprot.2023.104839
  - **Rossio V<sup>#</sup>** and Paulo JA<sup>#</sup> (2022). Quantitative proteome dataset profiling *UBC4* and *UBC5* deletion strains in *Saccharomyces cerevisiae*. *Data in Brief*, 45:108737; doi: 10.1016/j.dib.2022.108737
  - **Rossio V<sup>#</sup>** and Paulo JA<sup>#</sup> (2022). Quantitative proteomics and phosphoproteomics datasets of DNA replication and mitosis in *Saccharomyces cerevisiae*. *Data in Brief*, 45:108741; doi: 10.1016/j.dib.2022.108741
  - Liu X\*, **Rossio V\***, Thakurta SG, Flora A, Foster L, Bomgarden R. D, Gygi SP and Paulo JA (2022). Fe<sup>3+</sup>-NTA magnetic beads as an alternative to spin column-based phosphopeptide enrichment. *J Proteomics*, 260:104561; doi: 10.1016/j.jprot.2022.104561
  - **Rossio V**, Paulo JA, Chick J, Brasher B, Gygi SP and King RW (2021). Proteomics of broad deubiquitylase inhibition unmasks redundant enzyme function to reveal substrates and assess enzyme specificity. *Cell Chem Biol*, 28(4):487-502;

doi:10.1016/j.chembiol.2020.12.007

- Jonasson EM\*, **Rossio V\***, Hatakeyama R, Abe M, Ohya Y and Yoshida S (2016). PP2A-Cdc55 in complex with Zds1/2 proteins promotes Rho1-dependent glucan synthesis by inhibiting the Rho1 GAP, Lrg1. *J Cell Biol*, 212(1):51-61; doi: 10.1083/jcb.201508119
  - *Highlighted in J Cell Biol: Cdc55 keeps Rho1 focused on growth J. Cell Biol* (2016) 212 (1):2
- Botchkarev V, **Rossio V** and Yoshida S (2014). The budding yeast Polo-like kinase Cdc5 is released from the nucleus during anaphase for timely mitotic exit. *Cell Cycle*, 13(20):3260-70; doi: 10.4161/15384101.2014.953882
- **Rossio V**, Kazatskaya A, Hirabayashi M and Yoshida S (2014). Comparative genetic analysis of PP2A<sup>Cdc55</sup> regulators in budding yeast. *Cell Cycle*, 13(13): 2073-83; doi: 10.4161/cc.29064
- **Rossio V**, Michimoto T, Sasaki T, Ohbayashi I, Kikuchi Y and Yoshida S (2013). Nuclear PP2A<sup>Cdc55</sup> prevents APC-Cdc20 activation during the spindle assembly checkpoint (SAC). *J Cell Sci*, 126(19):4396-405; doi: 10.1242/jcs.127365
  - *Recommended at Faculty Opinions* <https://facultyopinions.com/article/718047833>
- Ikui AE, **Rossio V**, Schroeder L and Yoshida S (2012). A yeast GSK-3 kinase Mck1 promotes Cdc6 degradation to inhibit DNA re-replication. *Plos Genetics*, 12; e1003099; doi: 10.1371/journal.pgen.1003099
- **Rossio V** and Yoshida S (2011). Spatial regulation of Cdc55-PP2A by Zds1/ Zds2 controls mitotic entry and mitotic exit in budding yeast. *J Cell Biol*, 193(3): 445-54; doi: 10.1083/jcb.201101134.
  - *Highlighted at J Cell Biol Proteins keeps Cdc55 in its place J. Cell Biol* (201)193(3)426
- **Rossio V**, Galati E, Ferrari M, Pelliccioli A, Sutani T, Shirahige K, Lucchini G and Piatti S (2010). The RSC chromatin-remodeling complex influences mitotic exit and adaptation to the spindle assembly checkpoint by controlling the Cdc14 phosphatase. *J Cell Biol*, 191(5):981-97; doi: 10.1083/jcb.201007025
- **Rossio V**, Galati E and Piatti S (2010). Adapt or die: how eukaryotic cells respond to prolonged activation of the spindle assembly checkpoint. *Biochem Soc Trans* 38(6):1645-9. Review. doi: 10.1042/BST0381645
- Chiroli E, **Rossio V**, Lucchini G and Piatti S (2007). The budding yeast PP2A<sup>Cdc55</sup> phosphatase prevents the onset of anaphase in response to morphogenetic defects. *J Cell Biol*, 177 (4) 599-611; doi: 10.1083/jcb.200609088

#### Publications under review

- Parmar S, Zuniga N, **Rossio V**, Liu X and Paulo JA Temporal Proteomic Profiling of Pheromone-Induced Cell Cycle Re-Entry in *Saccharomyces cerevisiae*

#### Meetings and conferences

- **Life and death of proteins** Nov 2023 Rom, Italy. **Rossio V**, Paulo JA, Gygi SP and

King RW “Comparing DUB activity across hundreds of ubiquitylated substrates reveals their specificity and candidate substrates”

- **ASCB/EMBO meeting** Dec. 2019 Washington DC, USA. **Rossio V**, Paulo JA, Chick J, Gygi SP and King RW “Broad inhibition of deubiquitinases unmasks functional redundancy revealing novel substrates of and enabling profile specificity of these enzymes”.
- **Armenise-Harvard Foundation 16th Symposium: From Molecular Mechanisms to Precision Medicine** June 2016 Gubbio, Italy. Richeson K, **Rossio V**, and King RW “Using small molecule inhibitors to understand APC/C regulation by the spindle checkpoint”.
- **American Society for Cell Biology meeting** Dec 2014 Philadelphia, USA. Botchkarev V, Eapen V, **Rossio V**, Matthews A, Yoshida S and Haber J “The budding yeast Polo-like kinase Cdc5 is spatially regulated for mitotic exit and adaptation to DNA damage”.
- **Gordon Research Conference: Plant and Microbial Cytoskeleton**, Aug. 2014 Andover, USA. Botchkarev V, **Rossio V** and Yoshida S “The budding yeast Polo-like kinase Cdc5 is released from the nucleus during anaphase for timely mitotic exit”.
- **Cell Division: from single molecule mechanics to multicellular organisms**, Sept 2012 Roscoff, France. **Rossio V**, Kouitiro Y, Kikuchi Y and Yoshida S “The role of PP2A<sup>cdc55</sup> in the Spindle Assembly Checkpoint”.
- **Yeast Genetics and Molecular Biology**, Aug 2012 Princeton, USA. Jonasson E, **Rossio V**, Abe M, Hatakeyama R, Ilter D, Ohya Y, Pellman D and Yoshida S “A mechanism for decoupling cell wall stress response and cell wall glucan synthesis”.
- **Yeast Genetics and Molecular Biology**, Aug 2012 Princeton, USA. Ikui AE, **Rossio V** and Yoshida S “A yeast GSK-3 kinase Mck1 promotes Cdc6 degradation to inhibit DNA re-replication”.
- **The Cell Cycle** Cold Spring Harbor, May 2012 New York, USA. Ikui AE, **Rossio V** and Yoshida S “A yeast GSK-3 kinase Mck1 promotes Cdc6 degradation to inhibit DNA re-replication” .
- **The Yeast Cell Biology** Cold Spring Harbor Aug 2011 New York, USA. Jonasson E, **Rossio V**, Abe M, Ilter D, Carbajal-Gonzalez B, Ohya Y, Pellman D and Yoshida S “Cdc55/PP2A is a target of the Rho1 GTPase and maintains Rho1 activity by inhibition of the Rho1 GAP Lrg1”.
- **The Cell Cycle** Cold Spring Harbor Meeting, May 2010 New York, USA. **Rossio V**, Galati E, Lucchini G and Piatti S “A novel role for the RSC chromatin-remodeling complex in the adaptation to the spindle assembly checkpoint by controlling activation of the Cdc14 phosphatase”.
- **FASEB conference: Mitosis: spindle assembly and function** Aug 2009 Lucca, Italy. **Rossio V**, Galati E, Lucchini G and Piatti S “Rsc2-RSC complex is involved in the early release of Cdc14 from nucleolus and promotes adaptation to SAC activation”.
- **The cell cycle and genomic instability** April 2008, Roscoff, France. **Rossio V**,

Galati E, Lucchini G and Piatti S “Search for factors involved in the adaptation to the spindle assembly checkpoint”.

- **The yeast cell biology** Cold Spring Harbor, Aug 2007 New York, USA. Chiroli E, **Rossio V**, Lucchini G and Piatti S “Budding yeast protein phosphatase PP2A<sup>Cdc55</sup> prevents anaphase onset in response to morphogenetic defects”.
- **Meeting of the Italian yeast groups** June 2007, Firenze, Italy. **Rossio V**, Galati E, Piatti S and Lucchini G “Search for factors involved in the adaptation to the spindle assembly checkpoint”.
- **Meeting of the Italian yeast groups** June 2007, Firenze, Italy. Chiroli E, **Rossio V**, Lucchini G and Piatti S “The protein phosphatase PP2A<sup>Cdc55</sup> controls sister chromatids separation in response to morphogenetic defects in budding yeast”.
- **Cohesin Biology and the Cohesinopathies**, May 2007, Varenna, Italy. Chiroli E, **Rossio V**, Lucchini G and Piatti S “Control of sister chromatid separation by budding yeast PP2A<sup>Cdc55</sup> protein phosphatase in response to morphogenetic defects”.
- **Scientific Convention Telethon XIV**, March 2007, Salsomaggiore Terme, Italy. Chiroli E, Rancati G, **Rossio V**, Venturetti M, Sala L, Gotti L, Galati E, Lucchini G, Fraschini R and Piatti S “Unravelling the molecular bases of the mosaic variegated aneuploidy (mva) genetic disease by studying the mechanisms controlling aneuploidy occurrence in the budding yeast model system”.
- **SIBBM The Cell Cycle**. 8-10 June 2006, Roma, Italy. Chiroli E, **Rossio V**, Lucchini G and Piatti S “Regulation of sister chromatid separation in response to morphogenesis checkpoint activation in budding yeast: involvement of the protein phosphatase PP2A<sup>Cdc55</sup>”.

Milano, Italy 28 December 2024