

**Prof. Andrea Musacchio, PhD**  
**Director, Department of Mechanistic Cell Biology**  
**Max Planck Institute of Molecular Physiology, Dortmund, Germany**  
**Curriculum vitae**

**Personal**

Born in Rome, 11 July 1964  
Married; two children (born 2006 and 2008)  
Italian citizenship

**Education**

1985-90 Degree in Biology, University of Rome-Tor Vergata (cum laude), Rome (Italy). Advisor: Prof Giovanni Cesareni  
1991-95 PhD in Biochemistry at EMBL-University of Heidelberg (summa cum laude), Heidelberg (Germany). Advisor: Dr Matti Saraste

**Postdoctoral**

1995-98 Postdoctoral Fellow at Harvard Medical School, Boston (USA). Advisor: Prof Stephen C. Harrison

**Appointments**

1999-03 Junior Group Leader, Department of Experimental Oncology, European Institute of Oncology, Milan (Italy)  
2003-11 Senior Group Leader, Department of Experimental Oncology, European Institute of Oncology, Milan (Italy)  
2011- Director, Department of Mechanistic Cell Biology, Max Planck Institute of Molecular Physiology, Dortmund (Germany)

**Honors**

- Human Frontier Science Program postdoctoral fellow (1995-1997)
- American Cancer Society Senior postdoctoral fellow (1997-1998)
- Scholar of the Italian Foundation for Cancer Research (1999-2004)
- EMBO Young Investigator (2000-2004)
- Chiara D'Onofrio Prize (2006)
- ERC Senior Investigator Grant (StG) Awardee with programs KINCON (2008-2013) and RECEPIANCE (2015-2020)
- ERC Synergy Grant (SyG) Awardee with program BIOMEKANET (2021-2027)
- EMBO Member (since 2009)
- Adjunct Professor, University of Duisburg-Essen (since 2012)
- Gottfried Wilhelm Leibniz Prize of the Deutsche Forschung Gemeinschaft (2020)
- Elected Member of the German Academy of Science *Leopoldina* (2023)
- Current or previous recipient of research grants of the Human Frontier Science Program, the European Commission Framework Programs (FP6, FP7, Horizon2020), the Association for International Cancer Research (AICR, UK), the Association for Cancer Research (AIRC, Italy), the Telethon Foundation (Italy), the Italian Ministry of Health (Programma Ricerca Finalizzata, Italy), the Cariplo Foundation (Italy), the National Research Council (CNR, Italy), the Deutsche Forschung Gemeinschaft (DFG, Germany).

**Named Lectures**

- Mendel Lecture, Brno, Czech Republic (2008)
- 5<sup>th</sup> Randall lecture, King's College, London (2013)
- Distinguished Lecture series, KAUST, Saudi Arabia (2017)
- The Drummond Lecture, Queen Mary University of London (2017)
- EMBL Distinguished Speaker Seminar, Heidelberg (2018)

**Community service**

- *Ad hoc* reviewer for scientific journals and granting agencies, including among others, *Cell*, *Molecular Cell*, *Developmental Cell*, *Nature Cell Biology*, *EMBO Journal*, *Current Biology*, *Journal of Cell Science*, *Journal of Cell Biology*, *Nature*, *EMBO Reports*, *Cancer Cell*, *Science*
- Advisory Editor of *EMBO Journal* (2009-2011)
- Advisory Editor of *EMBO Reports* (2009-2020)
- Associate Editor of *Chromosoma* (2006-2020)
- Scientific Director of the Milan branch of SEMM (European School of Molecular Medicine) (2003-2006)
- Editorial Board member, *Cell Research* (since 2009)
- Editorial Board member, *Journal of Cell and Molecular Biology* (since 2009)
- Editorial Board member, *Current Biology* (2012-2020)
- Advisory Board of *Biology Open* (since 2012)
- Editorial Board member, *Journal of Structural Biology* (2014-2020)
- Member of the Board of Reviewing Editors (2015-2017) and Senior Editor of *eLife* (2017-2020)
- Chair, LS1 Review Panel for ERC Starting Investigator Grants (2011-2017)
- EMBL's Scientific Advisory Committee member (SAC, 2011-2017)
- *Ad hoc* on-site reviewer for Cancer Research UK (London and Cambridge, UK)
- *Ad hoc* on-site reviewer for the LMB-MRC (Cambridge, UK)
- *Ad hoc* on-site reviewer for the Crick Institute (London, UK)
- Elected member of the Perspectives Committee of the Max Planck Society (2015-2021)
- Member of the Scientific Advisory Committee of the Armenise-Harvard Foundation (2016-2018)
- Speaker of the International Max Planck Research School (IMPRS) in Chemical and Molecular Biology (PhD program of MPI Dortmund institute run in collaboration with Universities of Dortmund, Bochum, and Essen) (2014-2019)

**Organization of scientific meetings**

- 5th International School on the Crystallography of Biological Macromolecules, May 13-17 (2001). Co-Organizer with Sue Bailey (Daresbury Laboratory) and Bauke Dijkstra (University of Groningen)
- First IFOM-IEO-Campus Meeting on Cancer, March 11-14 (2004), Milan, Italy (co-organizer with Kristian Helin and Marco Foiani)
- 106th International Titisee Conference: Reconstituting chromatin: from self-assembly to self-organization, October 10-14 (2012), Titisee (Germany), Chair (with Tom Muir, co-Chair)
- CNRS Jacques Monod Conference Cell division: from single molecule mechanics to multicellular organisms, September 5-9 (2012) Roscoff, France (co-organizer with Ariane Abrieu)
- The 4th EMBO Meeting, September 22-25 (2012), Nice, France (Chair of a Concurrent session on the microtubule cytoskeleton)
- EMBO Conference Series Microtubules: Structure, Regulation and Functions. May 28-31 (2014) EMBL Heidelberg, Germany (co-organizer with Marileen Dogterom and Carsten Janke)
- CNRS Jacques Monod Conference Cell cycle: bridging scales in cell division, October 11-15 (2014) Roscoff, France (co-organizer with Renata Basto)
- Chromatin Regulation in Proliferation and Differentiation (supported by the DFG graduate research training program (RTG1431), Sept. 2-4 (2015) Haus der Technik, Essen, Germany (co-organizer with Hemmo Meyer, Ralf Küppers, and George Iliakis)
- EMBO Symposium Microtubules: From Atoms to Complex Systems. May 29-June 1 (2016) EMBL Heidelberg, Germany (co-organizer with Marileen Dogterom, Carsten Janke, Michel Steinmetz)
- Annual Symposium of the Biomedical Section (BMS) of the Max Planck Society, October 19-20 (2016) Harnack Haus, Berlin (Co-organizer with Sara Wickström)

### Teaching

- “Protein structure and diffraction theory” for undergraduates, University of Milan (2005-6, a 30-hour course)
- Occasional teaching (average of 6-8 hours/year) by invitation for students of Master and PhD programs worldwide, including Milan, Porto, Hong Kong, Essen (yearly), Dortmund, and others
- Visiting Professor at University of Pavia, 12 hours course on the eukaryotic cell cycle (March-April 2017)

### Publications and preprints (~27700 citations, H-index 84, Google Scholar)

1. Hedtfeld M, Dammers A, Koerner C & Musacchio A (2023) A validation strategy to assess the role of phase separation as determinant of macromolecular localization, *Molecular Cell*, in review ([https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4472737](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4472737))
2. Polley S, Raisch T, Koerner M, Terbeck M, Gräter F, Raunser S, Aponte-Santamaría C, Vetter IR & **Musacchio A** (2023) Insights into human outer kinetochore assembly and force transmission from a structure-function analysis of the KMN network. *bioRxiv*. doi.org/10.1101/2023.08.07.552315 (*Nat Struct Mol Biol*, in press)
3. Cmentowski V, Ciossani G, d'Amico E, Wohlgemuth S, Owa M, Dynlacht B & **Musacchio A** (2023) RZZ-Spindly and CENP-E form an integrated platform to recruit dynein to the kinetochore corona. *EMBO J*. e114838. doi: 10.15252/embj.2023114838
4. Polley S, Müschenborn H, Terbeck M, De Antoni A, Vetter IR, Dogterom M, **Musacchio A\***, Volkov VA\* & Huis in 't Veld PJ\* (2022) Stable kinetochore-microtubule attachment requires loop-dependent Ndc80-Ndc80 binding. *EMBO J*. e112504. doi: 10.15252/embj.2022112504
5. Chen C, Piano V, Alex A, Han SJY, Huis In 't Veld PJ, Roy B, Fergle D, **Musacchio A** & Joglekar AP (2023). *Nat Commun*. **14**:1529. doi: 10.1038/s41467-023-37235-z
6. Di Cesare E, Moroni S, Bartoli J, Damizia M, Giubettini M, Koerner C, Krenn V, **Musacchio A**, Lavia P (2023) Aurora B SUMOylation Is Restricted to Centromeres in Early Mitosis and Requires RANBP2. *Cells* **12**:372. doi: 10.3390/cells12030372
7. Schwietert F, Volkov VA, Huis In 't Veld PJ, Dogterom M, **Musacchio A** & Kierfeld J (2022) Strain stiffening of Ndc80 complexes attached to microtubule plus ends. *Biophys J*. **21**:4048-4062. doi: 10.1016/j.bpj.2022.09.039
8. d'Amico E, MUD Ahmad, Cmentowski V, Girbig M, Müller F, Wohlgemuth S, Brockmeyer A, Maffini S, Janning P, Vetter IR, Carter AP, Perrakis A & **Musacchio A** (2022) Conformational transitions of the mitotic adaptor Spindly underlie its interaction with Dynein and Dynactin, *J Cell Biol*. **221**(11):e202206131. doi: 10.1083/jcb.202206131
9. Celestino R, Gama JB, Castro-Rodrigues AF, Barbosa DJ, Rocha H, d'Amico E, **Musacchio A**, Carvalho AX, Morais-Cabral JH & Gassmann R (2022) JIP3 interacts with dynein and kinesin-1 to regulate bidirectional organelle transport. *J Cell Biol*. **221**:e202110057. doi: 10.1083/jcb.202110057
10. Pesenti M, Raisch T, Conti D, Walstein K, Hofmann I, Vogt D, Pumbaum D, Vetter IR\*, Raunser S\* & **Musacchio A\*** (2022) Structure of the human inner kinetochore CCAN complex and its significance for human centromere organization, *Mol Cell* **82**:2113-2131.e8. doi: 10.1016/j.molcel.2022.04.027 (\*co-corresponding)
11. Raisch T, Ciossani G, d'Amico E, Cmentowski V, Carmignani S, Maffini S, Merino F, Wohlgemuth S, Vetter IR\*, Raunser S\* & **Musacchio A\*** (2022) Structure of the RZZ complex and molecular basis of Spindly-driven corona assembly at human kinetochores, *EMBO J* **41**:e110411. doi: 10.15252/embj.2021110411 (\*co-corresponding)
12. **Musacchio A** (2022) On the role of phase separation in the biogenesis of membraneless compartments, *EMBO J*. **41**:e109952. doi: 10.15252/embj.2021109952.
13. Martin IM, Aponte-Santamaría C, Schmidt L, Hedtfeld M, Iusupov A, **Musacchio A** & Gräter F (2021) Phosphorylation tunes elongation propensity and cohesiveness of INCENP's intrinsically disordered region, *J Mol Biol* **434**:167387. DOI: 10.1016/j.jmb.2021.167387
14. Huis In 't Veld PJ, Wohlgemuth S, Koerner C, Müller F, Janning P & **Musacchio A** (2021) Reconstitution and use of highly active human CDK1: Cyclin-B:CKS1 complexes, *Protein Sci*. **31**:528-537. doi: 10.1002/pro.4233.
15. van den Boom J, Kueck AF, Kravic B, Müschenborn H, Pan D, Kaschani F, Kaiser M, **Musacchio A** &

- Meyer H (2021) Substrate loop insertion by VCP/p97 during PP1 complex disassembly, *Nature Struct Mol Biol.* **28**:964-971. doi: 10.1038/s41594-021-00684-5.
16. Walstein K, Petrovic A, Pan D, Hagemeyer B, Vogt D, Vetter IR & **Musacchio A** (2021) Assembly principles and stoichiometry of a complete human kinetochore module, *Sci Adv.* **7**:eabg1037. doi: 10.1126/sciadv.abg1037
  17. Mueller F, Friese A, Pathe C, da Silva RC, Rodriguez KB, **Musacchio A\*** & Bange T\* (2021) Overlap of NatA and IAP substrates implicates N-terminal acetylation in protein stabilization, *Sci Adv.* **7**:eabc8590. doi: 10.1126/sciadv.abc8590. (\*co-corresponding)
  18. Piano V, Alex A, Stege P, Maffini S, Stoppiello GA, Huis In 't Veld PJ, Vetter IR & **Musacchio A** (2021) CDC20 assists its catalytic incorporation in the mitotic checkpoint complex. *Science* **371**(6524):67-71. doi: 10.1126/science.abc1152.
  19. Singh P, Pesenti ME, Maffini S, Carmignani S, Hedtfeld M, Petrovic A, Srinivasamani A, Bange T & **Musacchio A** (2021) BUB1 and CENP-U, primed by CDK1, are the main PLK1 kinetochore receptors in mitosis, *Mol Cell.* **81**:67-87. doi: 10.1016/j.molcel.2020.10.040.
  20. Kong M, Cutts EE, Pan D, Beuron F, Kaliyappan T, Xue C, Morris EP, **Musacchio A**, Vannini A & Greene EC (2020) Human Condensin I and II Drive Extensive ATP-Dependent Compaction of Nucleosome-Bound DNA. *Mol Cell.* **79**:99-114. doi: 10.1016/j.molcel.2020.04.026.
  21. Allan LA, Camacho Reis M, Ciossani G, Huis In 't Veld PJ, Wohlgemuth S, Kops GJ, **Musacchio A** & Saurin AT (2020) Cyclin B1 scaffolds MAD1 at the kinetochore corona to activate the mitotic checkpoint. *EMBO J.* e103180. doi: 10.15252/embj.2019103180.
  22. Huis In 't Veld PJ, Volkov VA, Stender ID, **Musacchio A\*** & Dogterom M\* (2019) Molecular determinants of the Ska-Ndc80 interaction and their influence on microtubule tracking and force-coupling. *Elife* **8**. pii: e49539. doi: 10.7554/eLife.49539 (\*co-corresponding).
  23. Pan D\*, Walstein K, Take A, Bier D, Kaiser N & **Musacchio A\*** (2019) Mechanism of centromere recruitment of the CENP-A chaperone HJURP and its implications for centromere licensing, *Nature Commun* **10**:4046. doi: 10.1038/s41467-019-12019-6 (\*co-corresponding).
  24. Alex A, Piano V, Polley S, Stuiver M, Voss S, Ciossani G, Overlack K, Voss B, Wohlgemuth S, Petrovic A, Wu Y, Selenko P, **Musacchio A\*** & Maffini S\* (2019) Electroporated recombinant proteins as tools for in vivo functional complementation, imaging and chemical biology. *Elife*, e48287. doi: 10.7554/eLife.48287 (\*co-corresponding).
  25. Weith M, Seiler J, van den Boom J, Kracht M, Hülsmann J, Primorac I, Del Pino Garcia J, Kaschani F, Kaiser M, **Musacchio A**, Bollen M & Meyer H (2018) Ubiquitin-Independent Disassembly by a p97 AAA-ATPase Complex Drives PP1 Holoenzyme Formation. *Mol Cell* **72**:766-777. doi: 10.1016/j.molcel.2018.09.020.
  26. Pesenti ME, Prumbaum D, Auckland P, Smith CM, Faesen AC, Petrovic A, Erent M, Maffini S, Pentakota S, Weir JR, Lin YC, Raunser S, McAinsh AD & **Musacchio A** (2018) Reconstitution of a 26-Subunit Human Kinetochore Reveals Cooperative Microtubule Binding by CENP-OPQUR and NDC80. *Mol Cell.* **71**:923-939. doi: 10.1016/j.molcel.2018.07.038.
  27. Pan D, Brockmeyer A, Mueller F, **Musacchio A** & Bange T (2018) A simplified protocol for cross-linking mass spectrometry using the MS-cleavable cross-linker DSBU with efficient cross-link identification. *Anal Chem.* **90**:10990-10999. doi: 10.1021/acs.analchem.8b02593.
  28. Sacristan C, Ahmad MUD, Keller J, Fermie J, Groenewold V, Tromer E, Fish A, Melero R, Carazo JM, Klumperman J, **Musacchio A**, Perrakis A & Kops GJ (2018) Dynamic kinetochore size regulation promotes microtubule capture and chromosome biorientation in mitosis. *Nat Cell Biol.* **20**:800-810. doi: 10.1038/s41556-018-0130-3.
  29. Ciossani G, Overlack K, Petrovic A, Huis in 't Veld P, Koerner C, Wohlgemuth S, Maffini S & **Musacchio A** (2018) Kinetochore recruitment of CENP-F illustrates how paralog divergence shapes kinetochore composition and function. *J Biol Chem.* **26**:10084-10101. doi: 10.1074/jbc.RA118.003154.
  30. Volkov VA, Huis In 't Veld PJ, Dogterom\* M & **Musacchio A\*** (2018) Multivalency of NDC80 in the outer kinetochore is essential to track shortening microtubules and generate forces. *Elife*, e36764. doi: 10.7554/eLife.36764. (\*co-corresponding)
  31. Pentakota S, Zhou K, Smith C, Maffini S, Petrovic A, Morgan GP, Weir JR, Vetter IR, **Musacchio A\*** & Luger K\* (2017) Decoding the centromeric nucleosome through CENP-N. *Elife*, e33442. doi: 10.7554/eLife.33442 (\*co-corresponding).
  32. Overlack K, Bange T, Weissmann F, Faesen AC, Maffini S, Primorac I, Müller F, Peters JM & **Musacchio A** (2017) BubR1 Promotes Bub3-Dependent APC/C Inhibition during Spindle Assembly

- Checkpoint Signaling. *Curr Biol.* **7**:2915-2927. doi: 10.1016/j.cub.2017.08.033.
33. Vader G & **Musacchio A** (2017) The greatest kinetochore show on earth. *EMBO Rep.* **18**, 1473-1475. doi: 10.15252/embr.201744541.
34. Mosalaganti S, Keller J, Altenfeld A, Winzker M, Rombaut P, Saur M, Petrovic A, Wehenkel A, Wohlgemuth S, Müller F, Maffini S, Bange T, Herzog F, Waldmann H, Raunser S\* & **Musacchio A\*** (2017) Structure of the RZZ complex and molecular basis of its interaction with Spindly. *J Cell Biol.* **216**:961-981. doi: 10.1083/jcb.201611060 (\*co-corresponding).
35. **Musacchio A** & Desai A (2017) A Molecular View of Kinetochore Assembly and Function. *Biology (Basel).* **6**. pii: E5. doi: 10.3390/biology6010005
36. Faesen AC, Thanasoula M, Maffini S, Breit C, Müller F, van Gerwen S, Bange T & **Musacchio A** (2017) Basis of catalytic assembly of the mitotic checkpoint complex. *Nature* **542**:498-502. doi: 10.1038/nature21384.
37. Pan D, Klare K, Petrovic A, Take A, Walstein K, Singh P, Rondelet A, Bird AW & **Musacchio A** (2017) CDK-regulated dimerization of M18BP1 on a Mis18 hexamer is necessary for CENP-A loading. *Elife* **6**. pii: e23352. doi: 10.7554/eLife.23352.
38. Huis In 't Veld PJ, Jeganathan S, Petrovic A, Singh P, John J, Krenn V, Weissmann F, Bange T & **Musacchio A** (2016) Molecular basis of outer kinetochore assembly on CENP-T. *Elife* **5**. pii: e21007. doi: 10.7554/eLife.21007.
39. Petrovic A, Keller J, Liu Y, Overlack K, John J, Dimitrova Y, Jenni S, van Gerwen S, Stege P, Wohlgemuth S, Rombaut P, Herzog F, Harrison SC, Vetter IR & **Musacchio A** (2016) Structure of the MIS12 complex and molecular basis of its interaction with CENP-C at human kinetochores. *Cell* **167**:1020-1040. <http://dx.doi.org/10.1016/j.cell.2016.10.005>.
40. Weir JR, Faesen AC, Klare K, Petrovic A, Basilico F, Fischböck J, Pentakota S, Keller J, Pesenti ME, Pan D, Vogt D, Wohlgemuth S, Herzog F & **Musacchio A** (2016) Insights from biochemical reconstitution into the architecture of human kinetochores. *Nature* **537**:249-253. doi: 10.1038/nature19333.
41. Borisy G, Heald R, Howard J, Janke C, Musacchio A & Nogales E (2016) Microtubules: 50 years on from the discovery of tubulin. *Nat Rev Mol Cell Biol.* **17**:322-8. doi: 10.1038/nrm.2016.45.
42. Friese A, Faesen AC, Huis In 't Veld PJ, Fischböck J, Prumbaum D, Petrovic A, Raunser S, Herzog F & **Musacchio A** (2016) Molecular requirements for the inter-subunit interaction and kinetochore recruitment of SKAP and Astrin. *Nat Commun.* **7**:11407. doi: 10.1038/ncomms11407.
43. Pesenti ME, Weir JR & **Musacchio A** (2016) Progress in the structural and functional characterization of kinetochores. *Curr Opin Struct Biol.* **37**:152-63. doi: 10.1016/j.sbi.2016.03.003.
44. Liu Y, Petrovic A, Rombaut P, Mosalaganti S, Keller J, Raunser S, Herzog F & **Musacchio A** (2016) Insights from the reconstitution of the divergent outer kinetochore of *Drosophila melanogaster*. *Open Biol.* **6**. doi: 10.1098/rsob.150236.
45. O'Connor A, Maffini S, Rainey MD, Kaczmarczyk A, Gaboriau D, **Musacchio A** & Santocanale C (2015) Requirement for PLK1 kinase activity in the maintenance of a robust spindle assembly checkpoint. *Biol Open* bio.014969. doi: 10.1242/bio.014969.
46. Breit C, Bange T, Petrovic A, Weir JR, Müller F, Vogt D & **Musacchio A** (2015) Role of Intrinsic and Extrinsic Factors in the Regulation of the Mitotic Checkpoint Kinase Bub1. *PLoS One* **10**:e0144673. doi: 10.1371/journal.pone.0144673.
47. Krenn V & **Musacchio A** (2015) The Aurora B Kinase in Chromosome Bi-Oriented and Spindle Checkpoint Signaling. *Front Oncol.* **5**:225. doi: 10.3389/fonc.2015.00225.
48. **Musacchio A** (2015) The Molecular Biology of Spindle Assembly Checkpoint Signaling Dynamics. *Curr Biol.* **25**:R1002-18. doi: 10.1016/j.cub.2015.08.051.
49. Klare K, Weir JR, Basilico F, Zimniak T, Massimiliano L, Ludwigs N, Herzog F & **Musacchio A** (2015) CENP-C is a blueprint for constitutive centromere-associated network assembly within human kinetochores. *J Cell Biol.* **210**:11-22. doi: 10.1083/jcb.201412028.
50. **Musacchio A** (2015) Closing the Mad2 cycle. *Elife* **4**. doi: 10.7554/eLife.08283.
51. Altenfeld A, Wohlgemuth S, Wehenkel A, Vetter IR & **Musacchio A** (2015) Complex assembly, crystallization and preliminary X-ray crystallographic analysis of the human Rod-Zwisch-ZW10 (RZZ) complex. *Acta Crystallogr F Struct Biol Commun.* **71**:438-42. doi: 10.1107/S2053230X15004343
52. Tachiwana H, Müller S, Blümer J, Klare K, **Musacchio A** & Almouzni G (2015) HJURP Involvement in

- De Novo CenH3(CENP-A) and CENP-C Recruitment. *Cell Rep.* **11**:22-32. doi: 10.1016/j.celrep.2015.03.013.
53. Faesen AC & **Musacchio A** (2015) The (Phospho) Needle in the (MELT) Haystack. *Mol Cell* **57**:765-6. doi: 10.1016/j.molcel.2015.02.026.
54. Meyer R, Faesen A, Vogel K, Jeganathan S, **Musacchio A** & Niemeyer CM. (2015) DNA-Directed Assembly of Capture Tools for Constitutional Studies of Large Protein Complexes. *Small* **11**:2669-74. doi: 10.1002/sml.201403544.
55. Overlack K, Primorac I, Vleugel M, Krenn V, Maffini S, Hoffmann I, Kops GJ & **Musacchio A** (2015) A molecular basis for the differential roles of Bub1 and BubR1 in the spindle assembly checkpoint. *Elife* **4**:e05269. doi: 10.7554/eLife.05269.
56. Vader G & **Musacchio A** (2014) HORMA Domains at the Heart of Meiotic Chromosome Dynamics. *Dev Cell.* **31**:389-91. doi: 10.1016/j.devcel.2014.11.009.
57. Eiteneuer A, Seiler J, Weith M, Beullens M, Lesage B, Krenn V, **Musacchio A**, Bollen M & Meyer H (2014) Inhibitor-3 ensures bipolar mitotic spindle attachment by limiting association of SDS22 with kinetochore-bound protein phosphatase-1. *EMBO J.* **33**:2704-2720.
58. Basilico F, Maffini S, Weir JR, Prumbaum D, Rojas AM, Zimniak T, De Antoni A, Jeganathan S, Voss B, van Gerwen S, Krenn V, Massimiliano L, Valencia A, Vetter IR, Herzog F, Raunser S, Pasqualato S & **Musacchio A** (2014) The pseudo GTPase CENP-M drives human kinetochore assembly. *Elife* **8**:e02978. doi: 10.7554/eLife.02978
59. Overlack K, Krenn V & **Musacchio A** (2014) When Mad met Bub. *EMBO Rep.* **15**:326-8. doi: 10.1002/embr.201438574
60. Petrovic A, Mosalaganti S, Keller J, Mattiuzzo M, Overlack K, Krenn V, De Antoni A, Wohlgemuth S, Cecatiello V, Pasqualato S, Raunser S & **Musacchio A** (2014) Modular Assembly of RWD Domains on the Mis12 Complex Underlies Outer Kinetochore Organization. *Mol Cell* **53**:591-605. doi: 10.1016/j.molcel.2014.01.019.
61. Krenn V, Overlack K, Primorac I, van Gerwen S & **Musacchio A** (2014) KI motifs of human Knl1 enhance assembly of comprehensive spindle checkpoint complexes around MELT repeats. *Curr Biol* **24**:29-39. doi: 10.1016/j.cub.2013.11.046.
62. **Musacchio A** & Helin K (2013) Cell cycle, differentiation and disease. *Curr Opin Cell Biol.* 2013 Oct 16. doi:pil: S0955-0674(13)00151-8. 10.1016/j.ceb.2013.09.003.
63. Primorac I, Weir JR, Chirolì E, Gross F, Hoffmann I, van Gerwen S, Ciliberto A & **Musacchio A** (2013) Bub3 reads phosphorylated MELT repeats to promote spindle assembly checkpoint signaling. *Elife* **2**:e01030. doi: 10.7554/eLife.01030.
64. Primorac I & **Musacchio A** (2013) Panta rhei: The APC/C at steady state. *J Cell Biol.* **201**:177-89. doi: 10.1083/jcb.201301130.
65. Earnshaw WC, Allshire RC, Black BE, Bloom K, Brinkley BR, Brown W, Cheeseman IM, Choo KH, Copenhaver GP, Deluca JG, Desai A, Diekmann S, Erhardt S, Fitzgerald-Hayes M, Foltz D, Fukagawa T, Gassmann R, Gerlich DW, Glover DM, Gorbsky GJ, Harrison SC, Heun P, Hirota T, Jansen LE, Karpen G, Kops GJ, Lampson MA, Lens SM, Losada A, Luger K, Maiato H, Maddox PS, Margolis RL, Masumoto H, McAinsh AD, Mellone BG, Meraldi P, **Musacchio A**, Oegema K, O'Neill RJ, Salmon ED, Scott KC, Straight AF, Stukenberg PT, Sullivan BA, Sullivan KF, Sunkel CE, Swedlow JR, Walczak CE, Warburton PE, Westermann S, Willard HF, Wordeman L, Yanagida M, Yen TJ, Yoda K & Cleveland DW (2013) *Chromosome Res.* **21**:101-6. doi: 10.1007/s10577-013-9347-y
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