

# CURRICULUM VITAE

**Maria K. Vartiainen**

*1<sup>st</sup> of June, 2018*

## PERSONAL INFO

- Date and place of birth: August 13<sup>th</sup> 1976, Helsinki Finland
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## CURRENT POSITIONS

- Research director, Institute of Biotechnology (BI), University of Helsinki Sep/2007 →  
<http://www.biocenter.helsinki.fi/bi/vartiainen/>
- Scientific leader of the Light Microscopy Unit, at BI Jan/2010 →  
<http://www.biocenter.helsinki.fi/bi/lmu/>

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## DEGREES

- **Docent** in Cell Biology (live-cell imaging), University of Jyväskylä, Finland Apr/2008
- **PhD** degree, University of Helsinki, Finland (Biochemistry) Nov/2002
- **M.Sc.** University of Jyväskylä, Finland (molecular biology) Aug/1999

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## PREVIOUS EMPLOYMENT RELATIONSHIPS

- Academy of Finland Research Fellow Aug/2008-Oct/2014
- Post-doctoral fellow, Laboratory of Richard Treisman, Cancer Research UK, London, UK Dec/2003-Jul/2007
- Post-doctoral fellow, Laboratory of Laura Machesky, University of Birmingham, UK Mar/2003-Nov/2003
- PhD student, Laboratory of Pekka Lappalainen, Institute of Biotechnology, University of Helsinki Mar/1999-Feb/2003
- Master's thesis student, University of Jyväskylä Jun/1998-Feb/1999

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## CAREER BREAKS

- Maternity leaves May/2016-Oct/2016, Aug/2013-Feb/2014, Dec/2009-Aug/2010

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## SCIENTIFIC ACKNOWLEDGEMENTS AND AWARDS

- HiLIFE Fellowship 2017-2020
- L'Oréal and Unesco For Women in Science award 2014
- Biocentrum Helsinki membership 2014-2016
- EMBO Long term Fellowship 2003-2005
- The best doctoral thesis published in series: "Dissertationes Biocentri 2003 Viikki Universitatis Helsingiensis"

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## CURRENT RESEARCH FUNDING

- Jane and Aatos Erkko foundation € 586 000 (2017- 2020)
- Sigrid Juselius Foundation € 210 000 (2018-2021)
- HiLIFE Fellowship € 180 000 (2017-2020)
- Finnish Cancer Foundation € 30 000 (2017-2018)

- Academy of Finland Project grant € 530 000 (2017-2021)
- ERC Starting Grant € 1 500 000 (2012-2018)

## RESEARCH LEADERSHIPS AND SUPERVISIONS

Current supervisor commissions: 4 post-doctoral fellows, 6 PhD students, 1 technician and core facility personnel of 4

Completed supervisor commissions:

Post-doctoral supervisions (4), Supervised PhD theses (3), supervised Pro gradu theses (3)

## OTHER SCIENTIFIC EXPERT POSITIONS AND SCIENTIFIC ACHIEVEMENTS

Members and positions of trust in scientific communities

Board member and Finnish representative in European Cytoskeletal Forum (ECF) (2011-)

Organizer of the annual ECF2017 meeting <https://cytoskeleton2017.com/>

Memberships in editorial boards of scientific journals

Scientific Reports (2015-)

Referee of scientific journals (not comprehensive)

Cell, Nature Cell Biology, eLife, Nature Methods, Journal of Cell Biology, Current Biology, Nature Communications, PNAS, Nucleic Acid Research, Genes and Development, Journal of Cell Science, Molecular Biology of the Cell, Molecular and Cellular Biology, PLOS Pathogens.

International peer-review of funding applications (not comprehensive)

ERC Starting grant, review of applications, 2017; The French National Research Agency (ANR), panel member for Cell and Developmental Biology, 2015; Human Frontier Science Program, review of application, 2015; Israel Science Foundation (ISF), review of grant application 2015; Flanders Research Foundation (FVO), review of grant application 2015

## TEN MOST IMPORTANT PUBLICATIONS

1. Nevzorov I, Sidorenko E, Wang W, Zhao H, **Vartiainen MK**. Myosin-1C uses a novel phosphoinositide-dependent pathway for nuclear localization. *EMBO Rep*. 2018 Feb;19(2):290-304.
2. Virtanen, JA, **Vartiainen MK**. Diverse functions of different forms of nuclear actin. *Curr Opin Cell Biol* 46:33-38, 2017. Review.
3. Rajakyla EK, Viita T, Huet G, **Vartiainen MK**. RNA export factor Ddx19 is required for nuclear import of the SRF coactivator MKL1. *Nat Commun* 6: 5978, 2015.
4. Dopie J, Huet G, Rajakyla EK, Ferrantelli E, **Vartiainen MK**. Genome-wide RNAi screen for nuclear actin import factors reveals a network of cofilin regulators. *J Cell Sci* 128(13): 2388-2400, 2015
5. Ahtiainen L, Lefebvre S, Lindfors PH, Renvoisé E, Shirokova V, **Vartiainen MK**, Thesleff I, Mikkola ML. Directional cell migration, but not proliferation, drives hair placode morphogenesis. *Dev Cell*. 28(5):588-602, 2014.
6. Grosse R, **Vartiainen MK**. To be or not to be assembled: progressing into nuclear actin filaments. *Nat Rev Mol Cell Biol* Nov;14(11):693-7, 2013. Review.
7. Ho CY, Jaalouk DE, **Vartiainen MK**, Lammerding, J. Lamin A/C and emerin regulate MKL1/SRF activity by modulating actin dynamics. *Nature* 497(7450): 507-11, 2013.
8. Huet G, Rajakylä EK, Viita T, Skarp KPS, Crivaro M, Dopie J, **Vartiainen MK**. Actin-regulated feedback loop based on Phacr4, PP1 and cofilin maintains actin monomer homeostasis. *J Cell Sci* 126: 497-507, 2013.
9. Dopie J, Skarp KP, Rajakylä EK, Tanhuanpää K, **Vartiainen MK**. Active maintenance of Nuclear actin by Importin 9 supports Transcription. *PNAS* 109: E544-52, 2012.
10. **Vartiainen MK\***, Guettler S\*, Larijani B, Treisman R (2007). Nuclear actin regulates dynamic subcellular localization and activity of the SRF cofactor MAL. *Science* Jun 22; 316 (5832) 1749-52 \* equal contribution