

Prof. Dr. Klemens Rottner

Personal Data:

Date of birth: 8th April 1970 in Ried im Innkreis/Austria
Nationality: Austrian
Family status: Married, one child
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Degrees:

1995 Diploma (Biology)
1999 Dr. rer. nat. (Cell Biology, Immunology)

Education / Professional Experience

1988-1995 Study of Biology (Zoology) at the University of Salzburg/Austria
1995-1999 PhD thesis at the Austrian Academy of Sciences, Institute of Molecular Biology, Department of Cell Biology and at the University of Salzburg/Austria
2000 Postdoctoral fellow in the Dept. of Cell Biology, Institute of Molecular Biology, Salzburg, Austria
2000-2002 'EMBO-longterm-fellow' in the Dept. of Cell Biology, Helmholtz Centre for Infection Research (HZI, formerly called: German Research Centre for Biotechnology, GBF), Braunschweig, Germany
2002-2004 Postdoctoral fellow and Project Leader within the Dept. of Cell Biology, HZI, Braunschweig
2004-2010 Independent Group Leader *Cytoskeleton Dynamics Group*, HZI, Braunschweig
2010-2014 Professor (W2) and Head of Actin Dynamics and Motility Unit, Institute of Genetics, University of Bonn, Bonn, Germany
2010-2016 Co-Speaker of DFG Priority Program SPP1464: Principles and Evolution of Actin-Nucleator Complexes
2014-today Professor (W2) and Head of Division of Molecular Cell Biology, Zoological Institute, Braunschweig University of Technology, Braunschweig, Germany
2014-today Head of Research Group *Molecular Cell Biology* at HZI Braunschweig, Germany

Selected Distinctions

2010 - 2012 Member of the Advisory Board of the German Society for Cell Biology
2012 - 2016 Elected member of the Executive Committee (Vice CEO) of the German Society for Cell Biology
2010/2012/2015 Member of the organizing committee of the International Meeting on Actin Dynamics in Jena (2010) and Regensburg (2012 and 2015)
2010-2012/2014 Lecturer and Co-organizer: Summer School on *Actin Dynamics*, Regensburg, Germany
2018 – 2021 Panel member of the French *Agence Nationale de la Recherche* (ANR) evaluation committee "Cellular Biology, Developmental Biology and Evolution"
2009 – today Editorial Board member of *Journal of Cell Science*
2010 – today Review Editor: *Frontiers in Cellular and Infection Microbiology*
2010 – today Editorial Board member of *Small GTPases*
2011 – today Academic Editor of *PLoS ONE*
2018 – today Editorial Board member of *Scientific Reports*
2020 – today Editorial Board member of *Cells*
2021 – today Associate and (since 2022) Deputy Editor of the *European Journal of Cell Biology*

10 most relevant publications

1. Kage, F., Döring, H., Mietkowska, M., Schaks, M., Grüner, F., Stahnke, S., Steffen, A., Müsken, M., Stradal, T.E., Rottner, K. (2022) Lamellipodia-like actin networks in cells lacking WAVE regulatory complex. *J Cell Sci*, **135**(15):jcs260364.
2. Schaks, M., Singh, S.P., Kage, F., Thomason, P., Klünemann, T., Steffen, A., Blankenfeldt, W., Stradal, T.E., Insall, R., Rottner, K. (2018) Distinct interaction sites of Rac GTPase with WAVE regulatory complex have non-redundant functions in vivo. *Curr Biol*, **28**:3674-3684.
3. Dimchev, G., Steffen, A., Kage, F., Dimchev, V., Pernier, J., Carlier, M.-F., Rottner, K. (2017) Efficiency of lamellipodia protrusion is determined by the extent of cytosolic actin assembly. *Mol Biol Cell*, **28**:1311-25.
4. Kage, F., Winterhoff, M., Dimchev, V., Mueller, J., Thalheim, T., Freise, A., Brühmann, S., Kollasser, J., Block, J., Dimchev, G., Geyer, M., Schnittler, H.-J., Brakebusch, C., Stradal, T.E., Carlier, M.-F., Sixt, M., Käs, J., Faix, J., Rottner, K. (2017) FMNL formins boost lamellipodial force generation. *Nat Commun*, **8**: e14832.
5. Leithner, A., Eichner, A., Müller, J., Reversat, A., Brown, M., Schwarz, J., Merrin, J., de Gorter, D., Schur, F., Bayerl, J., de Vries, I., Wieser, S., Hauschild, R., Lai, F.P., Moser, M., Kerjaschki, D., Rottner, K., Small, J.V., Stradal, T.E., Sixt, M. (2016) Diversified actin protrusions promote environmental exploration but are dispensable for locomotion of leukocytes. *Nat Cell Biol*, **18**:1253-9.
6. Dang, I., Gorelik, R., Sousa-Blin, C., Derivery, E., Guérin, C., Linkner, J., Nemethova, M., Dumortier, J.G., Giger, F.A., Chipysheva, T.A., Ermilova, V.D., Vacher, S., Campanacci, V., Herrada, I., Planson, A.G., Fetics, S., Henriot, V., David, V., Oguievetskaia, K., Lakisic, G., Pierre, F., Steffen, A., Boyreau, A., Peyriéras, N., Rottner, K., Zinn-Justin, S., Cherfils, J., Bièche, I., Alexandrova, A.Y., David, N.B., Small, J.V., Faix, J., Blanchoin, L., Gautreau, A. (2013) Inhibitory signalling to the Arp2/3 complex steers cell migration. *Nature*, **503**:281-4.
7. Block, J., Breitsprecher, D., Kühn, S., Kage, F., Geffers, R., Duwe, P., Rohn, J.L., Baum, B., Brakebusch, C., Geyer, M., Stradal, T.E., Faix, J., Rottner, K. (2012) FMNL2 drives actin-based protrusion and migration downstream of Cdc42. *Curr Biol*, **22**:1005-12.
8. Lai, F.P., Szczodrak, M., Block, J., Faix, J., Breitsprecher, D., Mannherz, H.G., Stradal, T.E., Dunn, G.A., Small, J.V., Rottner, K. (2008) Arp2/3-complex interactions and actin network turnover in lamellipodia. *EMBO J*, **27**: 982-92.
9. Benesch, S., Polo, S., Lai, F.P.L., Anderson, K.I., Stradal, T.E.B., Wehland, J., Rottner, K. (2005) N-WASP deficiency impairs EGF internalization and actin assembly at clathrin coated pits. *J Cell Sci*, **118**:3103-15.
10. Rottner, K., Hall, A., Small, J.V. (1999) Interplay between Rac and Rho in the control of substrate contact dynamics. *Curr Biol*, **9**:640-8.