

Curriculum Vitae

Personal Data

Title	M.Sc.
First name	Carsten Alexander
Name	Baltes
Current position	PhD student (finishing spring 2025)
Current institution(s)/site(s), country	Saarland University, natural science faculty, Group of Franziska Lautenschläger, Saarbrücken, Germany
Identifiers/ORCID	0000-0002-3596-1915

Qualifications and Career

Stages	Periods and Details
Degree programme	Biophysics Master, 2018-2021, Saarland University, Germany Cell Physics Master, 2018-2019, Strasbourg University, France Biophysics Bachelor, 2014-2018, Saarland University, Germany
Doctorate	Since 2021, Franziska Lautenschläger PhD, Physics, natural science faculty, Saarland University, Germany

Activities in the Research System

Since October 2023: Member of the examination board for the master studies of biophysics at Saarland University

February 2022: Organisation of an international mini symposiums between Germany and the United Kingdom about “cancer cell biology and cellular biophysics”

Supervision of Researchers in Early Career Phases

Master students

- November 2022 – June 2024: Kathi Kaiser

Bachelor Students:

- Since July 2023: Kristin Sander

Scientific Results

Publications

- Evans, C.A.; Kim, H.R.; Macfarlane, S.C.; Nowicki, P.I.A.; **Baltes, C.**; Xu, L.; Widengren, J.; Lautenschläger, F.; Corfe, B.M.; Gad, A.K.B. Metastasising Fibroblasts Show an HDAC6-Dependent Increase in Migration Speed and Loss of Directionality Linked to

Major Changes in the Vimentin Interactome. *Int. J. Mol. Sci.* **2022**, *23*, 1961. <https://doi.org/10.3390/ijms23041961>

2. **Baltes C**, Thalla DG, Kazmaier U, Lautenschläger F. Actin stabilization in cell migration. *Front Cell Dev Biol.* 2022 Aug 11;10:931880. doi: 10.3389/fcell.2022.931880. PMID: 36035985; PMCID: PMC9403840.
3. Ullrich KA, Derdau J, **Baltes C**, et al. IL-3 receptor signalling suppresses chronic intestinal inflammation by controlling mechanobiology and tissue egress of regulatory T cells; *Gut* 2023;72:2081-2094.
4. A. A. Fischer, H. B. Robertson, D. Kong, M. M. Grimm, J. Grether, J. Groth, **C. Baltes**, M. Fliegau, F. Lautenschläger, B. Grimbacher, H. Ye, V. Helms, W. Weber, Engineering Material Properties of Transcription Factor Condensates to Control Gene Expression in Mammalian Cells and Mice. *Small* 2024, 20, 2311834. <https://doi.org/10.1002/smll.202311834>

Talks, Poster, Manuscripts, etc...

1. *Poster*
Baltes C, Nolle F, Kaiser K, Gjana E, Sander K, Jacobs K, Hawkins R, Lautenschläger F. Actin filament length is crucial in mesenchymal migration but not in amoeboid migration. *Cell Bio* 2024, San Diego, USA
2. *Poster*
Baltes C, Thalla DG, and Lautenschläger F. Does size matter? Actin stabilization in cell migration. *Cell Physics* 2023, Saarbrücken Germany
3. *Talk*
Baltes C, Thalla DG, and Lautenschläger F. Does size matter? Actin stabilization in cell migration. *DPG Spring Meeting* 2023, Dresden Germany
4. *Poster*
Baltes C, Thalla DG, and Lautenschläger F. Does size matter? Actin stabilization in cell migration. *Physics of the Cell* 2022, EMBO Workshop, Ein Gedi Israel
5. *Poster*
Baltes C, Herrmann J, Müller R, Lautenschläger F. Stabilizing and elongating actin filaments alters the position of nuclei in migrating cells in confinement. *Cell Physics* 2021, Saarbrücken Germany
6. *Talk*
Baltes C, Terriac E, Lautenschläger F. Cytoskeletal organization within polar cells and interaction between different components. *DPG Spring Meeting* 2019, Regensburg Germany

7. *Manuscript*

Baltes C, Nolle F, Kaiser K, Gjana E, Sander K, Jacobs K, Lautenschläger F. Actin filament length is crucial in mesenchymal migration but not in amoeboid migration.

Other Information

Languages:

- German native
- English Advanced C1
- French Upper intermediate B2