

Short CV Michael Schlierf

Professor for Molecular Biophysics, B CUBE, TU Dresden, Tatzberg 41, 01307 Dresden, Germany

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Personal Details and Work Experience

personal DOB 1. November 1978, Nürnberg, Germany; married, 1 child
2017 – present Professor Molecular Biophysics at B CUBE & Applied Physics, TU Dresden
2010 – 2017 Independent group leader at B CUBE, TU Dresden

Current Fields of Interest

Biophysical chemistry of (i) the development and transmittance of antibiotic resistances; (ii) liquid - liquid phase separations of multi-component systems; (iii) membrane protein (mis)folding; (iv) polymer dynamics in solution; Development of single-molecule techniques for *in vitro* & *in vivo* studies and drug screening

Educational Background

2008 – 2010 Postdoc, Physics Department, U Illinois, USA, Prof. Taekjip Ha
2005 – 2008 Dr. rer. nat., Physik, TU München, Germany, Prof. Dr. Matthias Rief
1999 – 2004 Diplom-Physik, LMU München, Germany & Physique fondamentale, Université Paris XI, France

Honors, Awards & Recognitions

2014, '18, '21 Dresden Outstanding Mentor Award and GA Betreuerpreis finalist
2014 – 2017 TU Dresden Young Investigator
2009 – 2010 DFG Postdoctoral Fellowship SCHL1896/1-1
2005 – 2008 PhD-Scholarship *Studienstiftung des deutschen Volkes*
2005 – 2008 PhD-Scholarship *Doctorate Program Nano-Bio-Technology*

Extracurricular activities

2022 – present CMCB and EXC PoL IT strategy development (CDIO)
2019 – 2023 (Co-) Director of B CUBE (7+ research groups; ~100 persons)
2018 – 2024 Study dean of MSc NanoBioPhysics and MSc Physics of Life
2020 – present Vorstandsmitglied Forschungsgemeinschaft Mukoviszidose e.V.
2018, 2019 Panel member of the French funding organization ANR
2012 – present Presentation of our lab at *Dresden Long Night of Sciences* and other public outreach events
2011 – present Ad-hoc peer review for journals, grants, theses, tenure evaluations

Current Funding

2026 – 2032	560 kEUR	DFG RTG 3120 Biomolecular Condensates
2025 – 2026	122 kEUR	BMFTR GO-Bio <i>initial</i> (w. E. Vorobevskaia)
2024 – 2026	250 kEUR	SMWA-EFRE Validation Grant
2024 – 2028	380 kEUR	DFG NFDI4BIOIMAGE Research Data Management for CMCB
2024 – 2026	288 kEUR	DFG SCHL1896/9-1
2024 – 2027	257 kEUR	DFG SCHL1896/4-3
2024 – 2027	362 kEUR	DFG SCHL1896/6-1

Publications & Patents

62 original publications, 4 review articles, 2 commentaries, 2 book chapters, 3 patents
h-index 31, i10-index 49, 3973 citations 10 Jan 2026) link to [Google Scholar](#) or [Pubmed](#)

Selected publications and patents:

- Trussina IREA, Hartmann A, Natarajan J, Fischer CM, Ausserwöger H, Knowles TPJ, [Schlierf M](#), Franzmann TM, Alberti S[‡] 2025. *RNA helicase DDX3X resolves RNA-RNA interactions within RNP granules to rescue mRNA availability* **Molecular Cell** 85(3) 585-601
- Vorobevskaia E, Loot C, Mazel D, [Schlierf M](#)[‡] 2024. *The recombination efficiency of the bacterial integron depends on the mechanical stability of the synaptic complex* **Science Advances** adp8756
- Hartmann A[‡], Sreenivasa K*, Schenkel M*, Chamachi N*, Schake P*, Krainer G, [Schlierf M](#)[‡] 2023. *An automated single-molecule FRET platform for high-content, multiwell plate screening of biomolecular conformations and dynamics* **Nature Communications** 14, 6511
- Chamachi N*, Hartmann A*, Ma MQ, Svirina A, Krainer G[‡], [Schlierf M](#)[‡] 2022. *Chaperones Skp and SurA dynamically expand unfolded OmpX and synergistically disassemble oligomeric aggregates* **PNAS** 119(9) e2118919119
- Vorobevskaia E, [Schlierf M](#) 2024. *Peptides and Peptidomimetics to Destabilize the Synaptic Complex of a Recombinase*. EP № 24169777.0 and PCT/EP2025/060037 (filed)