

ROSENBAUER, JAKOB, DR. RER. NAT.

GENERAL INFORMATION



Postdoc

Department of Neurology, Heidelberg University, Mannheim Medical Faculty;
Clinical Cooperation Unit Neuroimmunology and Brain Tumor Immunology
German Cancer Research Center (DKFZ)
Theodor-Kutzer-Ufer 1-3, 68167, Mannheim, Germany
Email: jakob.rosenbauer@dkfz-heidelberg.de
Tel: +49 6221 423858

●DOB: 09.12.1993 ●Sex: Male ●Nationality: German

B01

ACADEMIC EDUCATION & QUALIFICATION

Year(s)	Education
2015-2017	M.Sc. Physics, Karlsruhe Institute of Technology
2012-2015	B.Sc. Physics, Karlsruhe Institute of Technology

SCIENTIFIC EDUCATION & QUALIFICATION

Year(s)	Education
2018-2021	Dr. rer. nat Physics, Heinrich–Heine University & Jülich Research Center Thesis: <i>Multiscale modeling of tumor development</i>

PROFESSIONAL EXPERIENCE

Year(s)	Experience
2024 - Present	Postdoc, Clinical Cooperation Unit Neuroimmunology and Brain Tumor Immunology, German Cancer Research Center
2021-2023	Postdoc, Department Cell and Molecular Biology, Karolinska Institute, Stockholm
2021	Postdoc, Jülich Supercomputing Center, Jülich Research Center, Jülich

OTHER QUALIFICATIONS/ROLES/RESPONSIBILITIES

Year(s)	Honors (selected)
2024	Mannheim-Heidelberg Health and Life Science Alliance Fellowship
2021	EMBO Postdoctoral Fellowship

SELECTED PUBLICATIONS

- Multiscale Modeling of Spheroid Tumors: Effect of Nutrient Availability on Tumor Evolution
Jakob Rosenbauer, Marco Berghoff, James A. Glazier, Alexander Schug; *The Journal of Physical Chemistry B* 2023.
- Development of a scoring function for comparing simulated and experimental tumor spheroids
Julian Herold, Eric Behle, **Jakob Rosenbauer**, Jacopo Ferruzi, Alexander Schug; *PLOS Computational Biology* 2023.
- Assembly of Multi-Spheroid Cellular Architectures by Programmable Droplet Merging
Haijun Cui, Xianxian Wang, Janine Wesslowski, Tina Tronser, **Jakob Rosenbauer**, Alexander Schug, Gary Davidson, Anna A Popova, Pavel A Levkin; *Advanced Materials* 2021. <https://doi.org/10.1002/adma.202006434>
- Cells in Silico—introducing a high-performance framework for large-scale tissue modeling,
Marco Berghoff, **Jakob Rosenbauer**, Felix Hoffmann, Alexander Schug, **Shared first author**; *BMC Bioinformatics* 2020.
- Modeling of Wnt-mediated Tissue Patterning in Vertebrate Embryogenesis
Jakob Rosenbauer, Chengting Zhang, Benjamin Mattes, Ines Reinartz, Kyle Wedgwood, Simone Schindler, Claude Sinner, Steffen Scholpp, Alexander Schug; *PLOS Computational Biology* 2020.
- Wnt/PCP controls spreading of Wnt/ β -catenin signals by cytonemes in vertebrates,
Benjamin Mattes, Yonglong Dang, Gediminas Greicius, Lilian Tamara Kaufmann, Benedikt Prunsche, **Jakob Rosenbauer**, Johannes Stegmaier, Ralf Mikut, Suat Özbek, Gerd Ulrich Nienhaus, Alexander Schug, David M Virshup, Steffen Scholpp; *eLife* 2019.