Dr. rer. nat. Johannes Maria Auth



Postdoc – Modeling and Simulation of
Biological Processes – University of Augsburg

Role in LiSyM-Cancer

- SMART-NAFLD > WP4 “Multiomics Analysis of MASLD Progression”

Expertise

- Biomedical Data Science (Multiomics Data Analysis, Computational Modeling)
- Molecular Genetics (Cell Culture, Flow Cytometry, Proximity Ligation Assays)
- Theoretical Neuroscience (Computational & Mathematical Modeling)

Professional Experience

- Since 2024, Postdoc - Chair of Simulation and Modeling of Biological Processes, Augsburg University, Augsburg, Germany
    - Supervisor: Prof. Dr. Andreas Raue

Degrees

- PhD
  2019-2024, Weizmann Institute of Science, Rehovot, Israel
  PhD thesis in Molecular Genetics:
  Asymmetric Crosstalk Between the BMP and TGF-β Pathways Resolves Signaling Ambiguity
  - Supervisor: Dr. Yaron Antebi
- PhD
  2017-2019, Weizmann Institute of Science, Rehovot, Israel
  PhD thesis in Theoretical Neuroscience:
  Modeling Input-Dependent Memory Segmentation with Hebbian Cell Assemblies (discontinued)
  - Supervisor: Prof. Dr. Misha Tsodyks
- Master of Science
  2012-2016, Georg-August-University, Göttingen
  Master thesis in Biophysics & Complex Systems:
  The Influence of Different Learning Strategies on the Self-Organized Formation of Hebbian Cell Assemblies
  - Supervisor: Dr. Christian Tetzlaff
- Bachelor of Science
  2008-2011, Georg-August-University, Göttingen
  Bachelor thesis in Physics at the Max-Planck-Institute for Dynamics and Self-Organization, Göttingen:
  Pairwise Signal Correlation in Neuronal Networks
  - Supervisor: Prof. Tatjana Tchumatchenko

Honors and Awards (selection)

- 2022, Anita Roberts Memorial Travel Award: Best Abstract by a Graduate Student to the TGF-β Superfamily Conference
- 2017-2019, Minerva Foundation Doctoral Fellowship, German-Israeli Scientific Cooperation of the Max-Planck-Society