

Dr. rer. nat. Nantia Leonidou



Postdoc - DKFZ Heidelberg

Role in LiSyM-Cancer

- SMART-NAFLD
- Klingmüller Lab

Expertise

- Mathematical Modeling
- Signaling and Metabolism
- Bioinformatics
- Data analysis
- Machine Learning

Professional Experience

- Cluster of Excellence: Controlling Microbes to Fight Infections (CMFI) – Computer Modeling and Experimental Validation of Microbial Interactions
- German Center for Infection Research (DZIF) part of part of the network for research on Healthcare-Associated and Antibiotic-Resistant Bacterial Infections (HAARBI) – Computational Systems Biology of Infections and Antimicrobial-Resistant Pathogens

Degrees

- **PhD (Dr. rer. nat.)**
University of Tübingen
PhD thesis at the Department for Computer Science
Computational Systems Biology and In Silico Modeling for Infectious Disease Intervention
- **Master of Science:**
University of Tübingen
Master thesis at the Department for Computer Science
Tissue-specific reconstruction of constraint-based metabolic models based on ReconX
- **Bachelor of Science:**
University of Tübingen
Bachelor thesis at the Department for Computer Science
An integrated analysis tool for SILAC proteomics

Honors and Awards

- ILW Recognition Award, German Informatics Society (GI) and German Association for Medical Informatics, Biometry and Epidemiology (GMDS)

Publications

2025-11-01	Diclofenac and acetaminophen dim the acute-phase response but amplify expression of the iron regulator hepcidin in liver cancer cells <i>Cell Systems</i>
2025-06-17	Genome-scale metabolic model of <i>Staphylococcus epidermidis</i> ATCC 12228 matches <i>in vitro</i> conditions <i>mSystems</i>
2025-05-23	Metabolic modeling elucidates phenformin and atpenin A5 as broad-spectrum antiviral drugs against RNA viruses <i>Communications Biology</i>
2024-09-26	FROG Analysis Ensures the Reproducibility of Genome Scale Metabolic Models
2024-09-23	Exploring the metabolic profile of <i>A. baumannii</i> for antimicrobial development using genome-scale modeling <i>PLOS Pathogens</i>
2024-06-04	Genome-scale model of <i>Rothia mucilaginosa</i> predicts gene essentialities and reveals metabolic capabilities <i>Microbiology Spectrum</i>
2023-07-01	SBOannotator: a Python tool for the automated assignment of systems biology ontology terms <i>Bioinformatics</i>
2023-03-23	New workflow predicts drug targets against SARS-CoV-2 via metabolic changes in infected cells <i>PLOS Computational Biology</i>