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

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