

Moritz Glaser - Curriculum Vitae

Education, Awards & Scholarship

since 2024	Studies of Computer Science B.Sc. at Technical University Berlin
2024	won Young Investigator Award from DGHO cancer research
since 2023	Studies of Medicine at Charité University Hospital Berlin Scholar of German Academic Scholarship foundation (Studienstiftung)
2023	Graduation from Secondary School: Otto-Kühne-Schule (871/900 pts, 97%)

Research Projects

since 2024	Improving generalization in functional effect predictors and experimenting with RL Fine-Tuning strategies for Protein-Language Models
since 2023	Built State-of-the-Art Protein-LLM-based Mutation Effect predictor ESM-Effect & robust Benchmarks (first-author publication , Pre-Print)
2024	Researched β-catenin mutations in NSCLC with evidence of EGFR-targeted therapy resistance (paper submitted)
2023	Established preclinical platform for ROS1 mutation testing in research internship
2021-2023	Investigated impact of ROS1 mutations in lung cancer (first-author publication)

Personal Data

X/Twitter:	@MoritzGls	Personal Website: https://moritzgls.github.io/
GitHub:	https://github.com/moritzgls	Date of Birth: 31 January 2005 (19 years)

Experiences

2024	participated in the Mediterranean Machine Learning Summer School sponsored by Google DeepMind and presented a Poster with the state-of-progress for ESM-Effect
since 2023	subsequent research project on Machine Learning-based mutation functional effect prediction
2023	2-months Research Internship at the Brägelmann Lab , Department of Translational Genomics, University Cologne, established a platform for ROS1 mutation testing via viral transduction of BaF3 cell lines

Publication of final Manuscript from *ROS1* research project as first author in Lung Cancer Journal

- 2022 participated in 5th **Berlin-Oxford Summer School on Open and Responsible Research** organised by Oxford University and Charité Berlin
- since 2022 **Poster presentations at international oncology congresses** (e.g. ESMO 2022 & 2023, WCLC 2022), public talk at the DGHO Annual Meeting 2022, 2023 and 2025 in Vienna (Austria), Hambourg (Germany) and Basel (Switzerland)
- since 2021 Summer Academy and subsequent **research project** on *ROS1* & *CTNNB1* mutations in lung cancer at the **Lung Cancer Group Cologne**

Proficiencies and Skills

- Programming Languages: **Python** (proficient), **C** (beginner), R (basic), MIPS
- Machine & Deep Learning: **PyTorch**, Scikit-Learn and LightGBM
- Statistics & Visualisation: **SciPy**, **Matplotlib**, Seaborn and Plotly
- Data: **NumPy** and Pandas
- Lab skills: **qRT-PCR**, Western Blot, Gibbson Cloning, **Viral transduction**, Transfection, **cell culture**, Plasmid Amplification in *E. Coli*, etc.
- Language: English (excellent oral and writing abilities, Cambridge Advanced C1)
French (intermediate level, DELF B1)

Publication List

1. ESM-EFFECT: an Effective and Efficient Fine-Tuning Framework towards accurate Prediction of Mutation's Functional Effect

Moritz Glaser, Johannes Brägelmann - [BioRxiv](#) 2025

2. *CTNNB1* (β -catenin) mutations in NSCLC: clinicogenomic characteristics, prognostic value and predictive implications for EGFR targeted therapy resistance and immunotherapy

M Glaser *et al.* DGHO cancer research society congress 2024 (full paper submitted)

3. Clinicopathologic and molecular characteristics of small-scale *ROS1*-mutant non-small cell lung cancer (NSCLC) patients

M Glaser *et al.* [Lung Cancer](#), 2023