Giovanni Palla

PhD candidate - Munich School for Data Science, Institute of Computational Biology, Helmholtz - TU Munich

Education

- 10/2019- **PhD candidate**, *Prof Dr Fabian Theis's group*, Machine Learning and Single-Cell Genomics,
- present Institute of Computational Biology, Helmholtz Center Munich, Munich, Germany.
- 09/2016- MSc in Drug Innovation 9.1/10 cum laude, Graduate School of Life Sciences, Utrecht
- 11/2018 University, Utrecht, The Netherlands.
- 09/2013- BSc in Biomolecular Sciences and Technology 110/110 cum laude, University of Trento,
- 07/2016 Trento, Italy.
- 06/2012 High School Diploma-Scientific Field, Liceo Scientifico G.B. Quadri, Vicenza, Italy.

Publications

- 2023 Mapping cells through time and space with Moscot, *Klein**, *Palla**, *Lange**, *Klein**, *Piran** et al., 10.1101/2023.05.11.540374.

 bioRxiv
- 2023 SpatialData: an open and universal data framework for spatial omics, *Marconato**, *Palla**, *Yamauchi**, *Virshup** et al., 10.1101/2023.05.05.539647.

 bioRxiv
- The scverse project provides a computational ecosystem for single-cell omics data analysis, *Virshup**, *Bredikhin**, *Heumous**, *Palla**, *Sturm**, *Gayoso** et al., 10.1101/2023.05.11.540374. bioRxiv
- 2022 Modeling Single-Cell Dynamics Using Unbalanced Parameterized Monge Maps, *Eyring**, *Klein**, *Palla** et al., Talk @ NeurIPS LMRL Workshop 2022, 10.1101/2022.10.04.510766.
- 2022 Uncertainty Quantification for Atlas-Level Cell Type Transfer, *Engelmann**, *Hetzel**, *Palla** et al., Poster @ ICML 2022 Workshop on Computational Biology, arXiv:2211.03793.
- Squidpy: a scalable framework for spatial omics analysis, *Palla**, *Spitzer* et al.*, 10.1038/s41592-021-01358-2.
 - Nature Methods
- 2022 Spatial components of molecular tissue biology, *Palla**, *Fischer* et al.*, 10.1038/s41587-021-01182-1.
 - Nature Biotechnology
- 2020 Latent Factor Modeling of scRNA-Seq Data Uncovers Dysregulated Pathways in Autoimmune Disease Patients, *Palla** et al., 10.1016/j.isci.2020.101451. iScience 2020

Talks and Posters

- 2023 **Poster**, *Mapping cells through time and space with Moscot*, Single Cell Genomics 2023. Engelberg, Switzerland
- 2023 Poster, SpatialData and Moscot for the integrative analysis of spatial omics data, Human Cell Atlas General Meeting 2023.
 Toronto, Canada

- 2022 **Poster**, *SpatialData: a FAIR framework for spatial multiomics data*, Single Cell Genomics 2022. Utrecht, Netherlands
- 2022 **Invited talk**, ECCB 2022 Workshop on Spatial Transcriptomics and cell-cell communication modeling.

Sitges, Spain - Virtual

Presentations and Lectures

- 2023 **Lecturer**, *Spatial Omics Data Analysis*, MSc in Bioinformatics and Functional Genomics, IFOM. Milan, Italy
- 2022 **Lecturer**, *Spatial Omics Data Analysis*, MSc in Bioinformatics, University of Verona. Verona, Italy
- 2022 **Instructor**, *Spatial Omics Data Analysis*, SciLife Lab, 1-week course. Stockholm, Sweden Virtual
- 2022 Instructor, Advanced topics in single-cell analysis, Swiss Institute for Bioinformatics, 1-week course.
 Basel, Switzerland

Internships

- 06/2023- **Intern**, *BioML team*, Microsoft Research, Cambridge, MA, USA. 08/2023
- 11/2018- **Intern**, *Dr Enrico Ferrero's team*, Autoimmunity, Transplantation & Inflammation, Novartis 08/2019 Institute for Biomedical Research, Basel, Switzerland.
- 11/2017- **Intern Otto Bayer fellow**, *Dr Judith Zaugg's group*, Structural and Computational Biology 08/2018 Unit, European Molecular Biology Laboratory, Heidelberg, Germany.

Grants, Honors & Awards

- 2023 **SpatialData: A FAIR Framework for Multimodal Spatial Omics**, *CZI Single Cell Data Insight grant*, Key personnel, Pls: Moore, Stegle.
- 2022 **Interactive Visualization of Spatial Omics Data**, *napari Plugin Accelerator*, Key personnel, PI: Theis.
- 2021 Add On fellowship, Joachim Herz Stiftung.
- 2017 Otto Bayer Fellowship, Bayer Foundation.
- 2017 **Erasmus Scholarship**, *Utrecht University*.
- 2016 Young Innovators Honor Program, Utrecht University.
- 2013 Merit award for outstanding results in undergraduate studies, University of Trento.

Teaching and Mentorship experience

- 2019- **Spatialdata, Squidpy and Scverse teams**, worked with students and research assistants on implementations, project management.
- 2019- **MSc and Bsc Thesis supervision**, Supervised 4 master students and 1 bachelor student for their thesis.

Journal and Conference reviewing

- 2023- Optimal Transport and Machine Learning workshop, NeurlPS.
- 2023- Nature Methods.

2021- **Bioinformatics**.

Extra-Curricular Activities

- 11/2019- Student representative, MUNICH SCHOOL FOR DATA SCIENCE, Munich, Germany.
- 12/2022 Interdisciplinary graduate program between Helmholtz Munich, TUM, LMU and DLR.
- 11/2016- Board Member, Club Alpbach Trentino, Trento, Italy.
- 09/2018 Part of the Forum Alpbach Network, European Forum Alpbach, Austria.
- 08/2016 Scholarship holder, European Forum Alpbach, Alpbach, Austria.
- 12/2015- Board member, OWL OPEN WET LAB, MUSE (Science Museum), Trento, Italy.
- 12/2016 First Biohacking association in Italy. Responsible for the joint-editorial staff with local newspapers.
- 01/2015- Science Communicator, RAGIONEVOLMENTE, Trento.
- 08/2016 Public events of science communication held in Trento and Bolzano.