SaskiaHiltemann

Post-Doctoral Researcher, Bioinformatics & Education

About

Saskia Hiltemann,
Ph.D.

Thérèse
Schwartzestraat 24
2597 XJ, Den Haag
The Netherlands

+31 6 33 951 365 ✆

saskiahilltemann
@gmail.com ✉
@shiltemann ⌂ 🐦 in

ORCiD:
0000-0003-3803-468X

Languages
Fluent: Dutch,English
Some: German &
French

Tech Skills
Galaxy, UNIX, git,
Jekyll, Python, C, C++,
Docker, LaTeX, HTML,
CSS, Javascript

Other Skills
Training, Community
Building, Outreach &
Dissemination, Data
Stewardship

Interests

Bioinformatics, Education & Training, Open Science, FAIR principles, Community Building, Data Stewardship, Genome Sequencing, Plant research, Cancer Research, Microbiome Analysis, Workflows, Automation, Visualisation, Best Practices, Infosec, CTF, Traveling, Hiking, Reading, Puzzles.

Projects

Selection of current and recent projects.

2023-current — **MAdLand Project**
Molecular Adaptation to Land: plant evolution to change
MAdLand is a DFG priority programme investigating the molecular adaptations of plants from water to land. In the context of this project I am responsible for scientific tool development and data stewardship. I work closely together with the DataPLANT/NFDI4Plants consortium as well as the Freiburg Galaxy team. We are strongly committed to making all data and analysis workflows generated within the consortium available to the scientific community through the use of FAIR data initiatives such as DataPLANT ARCs.

2015-current — **Galaxy Training Network (GTN): Training Materials, Infrastructure & Community Building**
GalaxyProject
Co-founder of the GTN platform for the collaborative development of data science training materials. Software development & community building efforts to ensure sustainability of the project, utility for educators, and integrations with FAIR data initiatives. Development of numerous data science tutorials. https://training.galaxyproject.org

2020-2023 — **Gallantries Project: Project Coordinator & Work Package Lead**
ErasmusMC, Erasmus+ KA203 grant
Development of bioinformatics curricula for higher education and workshops for later-career researchers. Building of training infrastructure for educators, with a focus on remote training.

2019-2023 — **CINECA project: Work Package co-lead, Training & Dissemination**
ErasmusMC, Horizon2020 grant
CINECA (Common Infrastructure for National Cohorts in Europe, Canada, and Africa) aims to create a global infrastructure for federated data analysis. Co-lead of the Training & Dissemination work package, technical lead of the Healthcare Interoperability & Clinical Applications work package.

Publications

Selection of scientific publications.

2024 — **FAIR data retrieval for sensitive clinical research data in Galaxy**
Giga Science
DOI: 10.1093/gigascience/giad099

2023	**Galaxy Training: A powerful framework for teaching!**
	PLOS Computational Biology
	DOI: 10.1371/journal.pcbi.1010752

2023   **Galaxy Training: A powerful framework for teaching!**
PLOS Computational Biology
DOI: 10.1371/journal.pcbi.1010752

2022   **FAIR Genomes metadata schema promoting Next Generation Sequencing data reuse in Dutch healthcare and research**
Nature Scientific Data
DOI: 10.1038/s41597-022-01265-x

2019   **Galaxy mothur Toolset (GmT): a user-friendly application for 16S rRNA gene sequencing analysis using mothur**
GigaScience
DOI: 10.1093/gigascience/giy166

2018   **Community-driven data analysis training for biology**
Cell Systems
DOI: 10.1016/j.cels.2018.05.012

2018   **Development and evaluation of a culture-free microbiota profiling platform (MYcrobiota) for clinical diagnostics**
European Journal of Clinical Microbiology & Infectious Diseases
DOI: 10.1007/s10096-018-3220-z

For a full list of publications, please see ORCiD: `https://orcid.org/0000-0003-3803-468X`

Community Activities

ongoing   **ELIXIR Europe: A European life sciences infrastructure**
Galaxy Working Group
Foster the use and development of Galaxy withing the ELXIR Europe community, focusing on making it easier to import data into Galaxy instances, helping to develop and share Galaxy tools and workflows, and increasing the provision of Galaxy training.

ongoing   **MicroGalaxy Community**
Community Building, tool development, workflow development, training, FAIR science
Creating a community around microbial research in Galaxy. Identifying needs of the community and developing solutions to address those needs. Democratizing resources (e.g. tools, databases) for microbial research communities.

ongoing   **Galaxy Intergalactic Utilities Commission (IUC) member**
Galaxy Tool development
Best-practice Galaxy tool development and maintenance. Creating best-practice guidelines to ensure *FAIRness* of tools and workflows as well as integrations with existing FAIR science initiatives.

ongoing   **GalaxyProject Outreach, Training & Support**
Galaxy Working Group
Member of the GalaxyProject Outreach, Training & Support working group. Coordinating Training and outreach activities for the GalaxyProject and its global community of stakeholders

ongoing   **F1000Research Galaxy Gateway**
Advisory Board Member
Provide strategic input on F1000Research directions, with a focus on Galaxy-related publications

Employment History

2024-current   **RPTU - Rheinland-Pfälzische Technische Universität Kaiserslautern**
Computational Systems Biology group, Department of Biology
Post-doctoral Researcher & Bioinformatician
- Data stewardship
- DataPLANT/NFDI4Plants member
- Scientific software development

2023-current   **Albert-Ludwigs-Universität Freiburg**
Institute of Pharmaceutical Sciences, Faculty of Chemistry and Pharmacy
Post-doctoral Researcher & Bioinformatician
- Scientific software development
- Data stewardship
- Galaxy tool and workflow development
- Galaxy Training Network lead

2012-2023   **Erasmus Medical Center, Rotterdam**
Clinical Bioinformatics group, Department of Pathology
Post-doctoral Researcher & Bioinformatician
- *Galaxy tool and workflow development*
- *Education & Curriculum Development*
- *Microbiota Analysis and Antibiotic Resistance Detection*
- *Prostate Cancer Analysis*
- *Software Development and Pipeline building*
- *Galaxy System's Administrator*
- *Training, Outreach & Dissemination*
- *Federated Data Analysis Infrastructure Development*
- *FAIR data analysis*

2010-2012   **After's Cool, The Hague**
Part-time science tutoring
Tutor of High School Students. *Math, Physics, Chemistry*

Education

2021   **Ph.D. Bioinformatics**
Erasmus Medical Center
Thesis: "Jigsaw Genomics: Assembling the pieces toward open and accessible bioinformatics for everyone"

2010   **M.Sc.**
LIACS, University of Leiden & TU Delft
Computer Science, Specialization in Bioinformatics

2008   **B.Sc.**
LIACS, University of Leiden
Computer Science

2002–2005   **B.Sc. course work**
University of Leiden
Physics & Astronomy

2002   **High School (VWO)**
Alfrink College, Zoetermeer
Specialization in Science & Technology