

Saskia Hiltemann

Post-Doctoral Researcher, Bioinformatics & Education



About

Saskia Hiltemann,
Ph.D.

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ORCID:
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Languages

Fluent: Dutch, English
Some: German &
French

Tech Skills

Galaxy, UNIX, GitHub,
Jekyll, Python, C, C++,
Docker, LaTeX, HTML,
CSS, Javascript

Other Skills

Training, Community
Building, Outreach &
Dissemination

Interests

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

Projects

Selection of recent projects.

2015-current **Galaxy Training Network (GTN): Training Materials, Infrastructure & Community Building**

GalaxyProject

Co-founder of the GTN infrastructure for the collaborative development of Galaxy training materials. Community building efforts to ensure utility for educators. Development of numerous tutorials on the topics of Metagenomics, Sequence Analysis, Galaxy Development and Visualisation. <https://training.galaxyproject.org>

2023-current **MAdLand Project**

Molecular Adaptation to Land: plant evolution to change
Scientific tool development and Data stewardship

2020-2023 **Gallantries Project, Project Coordinator & Work Package Lead**

ErasmusMC, Erasmus+ KA203 grant

Development of bioinformatics curricula for higher education and later-career researchers training workshops. Building of training infrastructure for educators, with a focus on remote training

2019-2023 **CINECA project, Work Package co-lead of Training & Dissemination**

ErasmusMC, Horizon2020 grant

CINECA (Common Infrastructure for National Cohorts in Europe, Canada, and Africa) aims at creating a global infrastructure for federated data analysis. Co-lead of the Training & Dissemination workpackage, and also involved in the Healthcare Interoperability & Clinical Applications work package.

Publications

Selection of scientific publications.

2023 **Galaxy Training: A powerful framework for teaching!**

PLOS Computational Biology

DOI: 10.1371/journal.pcbi.1010752

2020 **Galactic Circos: User-friendly Circos plots within the Galaxy platform**

GigaScience

DOI: 10.1093/gigascience/giaa065

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| 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 |
| 2017 | ASaiM: a Galaxy-based framework to analyze raw shotgun data from microbiota
GigaScience
DOI: 10.1093/gigascience/giy057 |
| 2015 | Discriminating somatic and germline mutations in tumor DNA samples without matching normals
Genome Research
DOI: 10.1101/gr.183053.114 |
| 2014 | iReport: a generalised Galaxy solution for integrated experimental reporting
GigaScience
DOI: 10.1186/2047-217X-3-19 |

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

Community Activities

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| ongoing | MicroGalaxy Community co-lead
Community Building, Tool development, workflow development, training
Creating a community around microbial analysis in Galaxy. Identifying needs of the community and developing solutions to address those needs. |
| ongoing | Galaxy Intergalactic Utilities Commision (IUC) member
Galaxy Tool development
Best-practice Galaxy tool development and maintenance. |
| ongoing | Galaxy Working Groups
Galaxy, Training, Outreach
Member of the Galaxy Outreach & Training working group. |

Grants

Selection of grants obtained.

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| 2020 | Gallantries Project
Erasmus+ Programme of the European Union
Grant number KA203, 2020-1-NL01-KA203-064717 https://gallantries.github.io/ |
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2019	Cineca Project Horizon 2020 Grant Agreement No 825775, https://www.cineca-project.eu/
2019	Gallantries Pilot Project Mozilla Mini Science Grants

Employment History

2023-current	Albert-Ludwigs-Universität Freiburg something Post-doctoral Bioinformatician <ul style="list-style-type: none"> • Data stewardship • Galaxy tool and workflow development • Plant genome analysis • Scientific software development
2012-2023	Erasmus Medical Center, Rotterdam Bioinformatician & Scientific Researcher Post-doctoral Researcher & Bioinformatician <ul style="list-style-type: none"> • <i>Galaxy tool and workflow development</i> • <i>Education & Curriculum Development</i> • <i>Microbiota Analysis and Antibiotic Resistance Detection</i> • <i>Prostate Cancer Analysis</i> • <i>Software Development and Pipeline building</i> • <i>Galaxy System's Administrator</i> • <i>Training, Outreach & Dissemination</i> • <i>Federated Data Analysis Infrastructure Development</i> • <i>FAIR data analysis</i>
2010-2012	After's Cool, The Hague Tutor of High School Students. Tutor of High School Students. <i>Math, Physics, Chemistry</i>

Education

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