

Lars Schöbitz - CV

Environmental engineer and data scientist working in the global water, sanitation and hygiene (WASH) sector. Open Science Specialist at ETH Zurich, where I help researchers make their work reproducible and their data open. I founded and lead openwashdata, teach data science with R, and write and manage the grants that fund this work.

View this CV online at www.lse.de.

Contact

✉ lars@lse.de
🌐 <https://www.lse.de>
🐙 github.com/larnsce
📞 0000-0003-2196-5015
🌐 [linkedin.com/in/larsschoebitz](https://www.linkedin.com/in/larsschoebitz)

Technical Skills

R / tidyverse



Quarto / R Markdown



Git / GitHub



R Shiny



Reproducible research



SQL



HTML / CSS



Languages

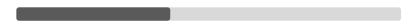
German (native)



English (fluent)



Swedish



French



Work Experience

Open Science Specialist

Zurich, CH

ETH Zurich - Global Health Engineering

2021 - Current

- Support faculty, PhD and MSc students in applying reproducible workflows in their research.
- Oversee reproducibility and open science aspects of published journal papers; manage online and social media channels.
- Set up organisational work, task and project management tools.

Director & Founder

Zurich, CH

Lars Schöbitz GmbH

2018 - Current

- Teaching Data Science with R.
- Consultant for city-wide faecal sludge management systems.
- Supporting organisations in establishing strong monitoring and evaluation frameworks.

Data Science Instructor

Zurich, CH

Statistical Office of the Canton of Zurich

2021

- Teaching a Data Science with R course to civil servants.

Data Science Instructor

Boulder, USA

University of Colorado Boulder

2021

- Developed and taught an online module to teach R.

Data and Impact Expert

Essex, UK

Aquaconsult Limited

2018 - 2021

- Venture Advisor for the Transition to Scale Program in Urban Sanitation by Grand Challenges Canada.
- Support to Clean Team (Ghana), Eau&Vie (Bangladesh) and Safi Sana (Ghana).

Data Science Intern

Zurich, CH

Statistical Office of the Canton of Zurich

2020

- Developed an R Shiny dashboard for analytics of incoming data analysis requests and an R package for web analytics with Matomo.
- Published a fully reproducible news article; supported COVID-19 monitoring and data analysis; organised a session at DINAcon 2020.

Consultant

Duebendorf, CH

Eawag / Sandec

2020

- Supported the preparation of factsheets for a publication on city-wide inclusive sanitation (CWIS) approaches and tools.

Lead Consultant

Cap-Haitien, Haiti

Inter-American Development Bank

2019 - 2020

- Led a team of consultants developing city-wide faecal sludge management systems.
- Detailed review of a design proposal for a faecal sludge treatment plant; preparation of a Shit Flow Diagram (SFD) for Cap-Haitien.

Data Scientist

Putnam, USA

Biomass Controls PBC

2017 - 2020

- Building tools for data visualisation and business intelligence using the R Shiny framework.
- Support of R&D work and preparation of results for publications and conferences.

Data Scientist

London, UK

Gather

2018

- Supported conceptualization of a data dive for urban sanitation data.
- Cleaned and prepared toilet census data (Kanyama compound, Lusaka, Zambia) for analysis.

Consultant

Geneva, CH

World Health Organization

2016 - 2018

- Global monitoring of the sanitation chain: proof of concept testing for monitoring indicators on safely managed sanitation (SDG 6.2) and safely treated wastewater (SDG 6.3).
- Production of country files for SDG 6.3.1 (proportion of wastewater safely treated).

Research Project Manager

Duebendorf, CH

Eawag / Sandec

2012 - 2016

- Project management with global, multi-disciplinary teams (RRR Business Models, SFD Methods and Tools development).
- Research lead on projects developing diagnostic tools for faecal sludge management.
- Mentor, lecturer and networker.

Research Assistant

Durban, ZA

PRG, University of KwaZulu-Natal

2011 - 2012

- Collected water samples from a DEWATS plant; emptied pit latrines; built a rig to separate pit contents into constituents for analysis.

Education

RStudio Instructor Programme

RStudio (Posit)

2019 - 2020

- Certified as an RStudio (Posit) Instructor.

Environmental and Hygiene Engineering (Dipl.-Ing.)

Giessen, DE

Mittelhessen University of Applied Sciences (THM)

2008 - 2012

- Thesis: Performance Evaluation of a full-scale DEWATS plant in South Africa.

ERASMUS Exchange

Umea, SE

Umea University

2010

- Main subject: Northern Aquatic Systems, including sampling of surface water and analysis of DOC, COD, main nutrients and heavy metals.

Change and Project Management

Mikkeli, FI

Mikkeli University of Applied Sciences

2009

Open Data & Software

AGUASAN Workshop 2027 - Publishing WASH Data Together

AGUASAN Community of Practice / SDC Water Network

2026 - Current

- Author of a topic proposal for a five-day working retreat where WASH-sector participants publish datasets while learning Git/GitHub, Quarto and safe use of AI agents; bridges academia (ETH), the WASH community and Swiss government.

fairenough - tidy data into documented R packages

Author

2025 - Current

- Converts tidy data into R packages with documentation websites and AI-assisted descriptions.

jmpwashdata - WHO/UNICEF JMP data

Author

2024 - Current

- R package providing tidy access to WHO/UNICEF Joint Monitoring Programme WASH data.

Data Science for openwashdata (ds4owd)

Course Creator & Instructor

2023 - Current

- Designed and taught two free online cohorts on literate programming with Quarto and R; hundreds of participants across many countries.
- Focus on data management, reproducibility and publishing open data.

washr - R package for publishing openwashdata resources

Author

2023 - Current

- An R package that makes publishing openwashdata data resources easier.

openwashdata community

Founder & Community Lead

2022 - Current

- Built and lead a global open-data community for the WASH sector; 90+ open datasets published as documented R data packages.
- Created the {washr} and {fairenough} R packages that turn tidy data into FAIR, documented data packages.
- See openwashdata.org

rstatsZH - open course materials & infrastructure

Creator & Maintainer

2021 - Current

- Built and maintain the open, reusable course materials, website templates and Git-based infrastructure behind the rstatsZH training programme (course delivery is under Teaching).

Teaching

- **2024 - 2026** rstatsZH - Data Science mit R (redeveloped, k009-k012). Statistical Office of the Canton of Zurich, Zurich, CH
- **2022 - 2026** CVEN 5837/5873/5999 - Data Analytics for Development (4 iterations). University of Colorado Boulder, Boulder, USA (online)
- **2025-09 - 2025-12** Data Science for openwashdata (ds4owd), Cohort 2. openwashdata / ETH Zurich
- **2022 - 2025** Research Beyond the Lab - Open Science and Research Methods (3 iterations). ETH Zurich, Zurich, CH
- **2024-04** Quarto - Authoring and Publishing for Collaborative Scientific Writing. ETH Zurich - Global Health Engineering
- **2023-10 - 2024-02** Data Science for openwashdata (ds4owd), Cohort 1. openwashdata / ETH Zurich
- **2023-10** Open Science Tools for Collaborative Scientific Writing. ETH Zurich - Global Health Engineering, Zurich, CH
- **2021 - 2023** rstatsZH - Data Science mit R (k001-k008). Statistical Office of the Canton of Zurich, Zurich, CH
- **2017** Lecturer - Faecal Sludge Management. Mittelhessen University of Applied Sciences (THM), Giessen, DE
- **2016** Lecturer - Sanitation MOOC. Massive Open Online Course: Planning & Design of Sanitation Systems and Technologies
- **2013 - 2016** Lecturer - Faecal Sludge Management. NADEL (ETH Zurich) & EPF Lausanne, Switzerland

Workshops

- **2026-06** Quarto for Collaborative Scientific Writing - RDM Summer School. ETH Zurich, Zurich, CH
- **2026-07** Git for Scientists. ETH Zurich - Global Health Engineering, Zurich, CH
- **2025-05** Git for Scientists. CIS, ETH Zurich, Zurich, CH
- **2024-06** Quarto for Collaborative Scientific Writing - RDM Summer School. ETH Zurich, Zurich, CH
- **2024-11** FAIR Data Publishing. UKZN WASH Centre, UKZN, South Africa
- **2023-11** Data Stewardship - SST Educational Workshop. Swiss Toxicology Society (SST), Basel
- **2023-10** Reference Management with Zotero. Hubris to Hope (HS23)

- **2023-06** open by default - a data management strategy. ETH Research Data Management Summer School, Zurich, CH
- **2023-02** Data Stewardship Network Kick-off. ETH Zurich, Zurich, CH

Talks

- **2026-05** Hello, I am a Data Steward - ReproducibiliTea Journal Club. University of Zurich
- **2025-09** Publishing Open Metadata for ORD Projects of the ETH Domain. Swiss Open Academic Data (SOAD) Day
- **2025-06** Hello, I am a Data Steward - Career Talk. Research Software Engineering and Data Stewardship Career Panel
- **2025-05** Computational Reproducibility Seminar. Swiss Reproducibility Network (SwissRN)
- **2025-05** Plan for tomorrow today - D-USYS Transdisciplinary Lab Brown Bag. ETH Zurich D-USYS TdLab
- **2025-05** Open Research Data Program of the ETH Board - open metadata dataset. ETH ORD Programme
- **2024-11** Plan for tomorrow today - a model for data stewardship. ETH Library 17:15 Kolloquium
- **2024-10** Swiss Research Data Day (SRDD). SRDD
- **2024-09** Data Stewardship at Global Health Engineering. ETH Zurich
- **2024-06** Plan for tomorrow today - why you need a data steward. Swiss Reproducibility Conference (SwissRN)
- **2016** UNC Water and Health Conference. UNC, Chapel Hill, USA
- **2016** Sandec Research Seminar. Eawag / Sandec, Duebendorf, CH
- **2015** UNC Water and Health Conference. UNC, Chapel Hill, USA
- **2015** Stockholm World Water Week. SIWI, Stockholm, SE
- **2015** 4th AfricaSan Conference. AfricaSan, Dakar, SN
- **2015** 3rd Faecal Sludge Management Conference. FSM3, Hanoi, VN
- **2014** 37th WEDC International Conference. WEDC, Hanoi, VN
- **2014** Stockholm World Water Week. SIWI, Stockholm, SE
- **2013** 36th WEDC International Conference. WEDC, Nakuru, KE
- **2012** 2nd Faecal Sludge Management Conference. FSM2, Durban, ZA
- **2012** Water Institute of Southern Africa (WISA) Conference. WISA, Cape Town, ZA

Blog & Writing

- **2026-07** Who wrote this? Scientific integrity at ETH Zurich in the age of AI. GHE Blog
- **2024-03** Plan for tomorrow today: why you need a data steward. GHE Blog (with E. Tilley)
- **2024-02** Motivation for Team Award. GHE Blog
- **2024-02** Attention, Prof: You need a data steward for your team. GHE Blog

Publications

Light absorbing carbonaceous aerosols: Concentrations and sources in an under-monitored region

Ecotoxicology and Environmental Safety

2025

- Co-author. Peer-reviewed journal article.

Estimating Safely Managed Sanitation in Urban Areas; Lessons Learned From a Global Implementation of Excreta-Flow Diagrams

Frontiers in Environmental Science

2020

- Peer-reviewed journal article on SDG 6.2 monitoring.

Towards an off-grid fecal sludge treatment unit: demonstrating energy positive thermal treatment

Gates Open Research

2019

- Peer-reviewed journal article.

Methods to reliably estimate faecal sludge quantities and qualities for the design of treatment technologies and management solutions

Journal of Environmental Management

2018

- Peer-reviewed journal article.

GIS Analysis and Optimisation of Faecal Sludge Logistics at City-Wide Scale in Kampala, Uganda

Sustainability

2017

- Peer-reviewed journal article.

FAQ: Faecal sludge quantification and characterization - field trial of methodology in Kampala, Uganda

Sandec News

2014

- Journal article.

Conference Papers

Remote Sensing, Mobile Applications and Open Data Science Tools for Better Monitoring of Sanitation Systems

HIC 2018, 13th International Conference on Hydroinformatics

2018

- Conference paper.

Market driven approach for faecal sludge treatment products

40th WEDC International Conference

2017

- Co-author. Conference paper.

FAQ: Faecal Sludge Quantification and Characterization - field trial of methodology in Hanoi, Vietnam

37th WEDC International Conference

2014

- Conference paper.

Technical Reports

SFD Promotion Initiative - Final Reports (7 cities)

Sustainable Sanitation Alliance / Eawag-Sandec

2015 - 2016

- Lead / co-author of Shit Flow Diagram (SFD) reports for Bignona (SN), Hanoi & Danang (VN), Kampala (UG), Dar es Salaam (TZ), Khulna (BD), Nonthaburi (TH).

RRR-Project: From Research to Implementation, Component 1 - Waste Supply and Availability

Eawag-Sandec

2014

- Technical report on resource recovery and reuse.

Grants & Funding

openwashdata - establishing Data Stewards and increasing FAIRness

ETH Board ORD Program (Explore, 2nd call)

2024 - Current

- Wrote the proposal and manage the project (Prof. Elizabeth Tilley, PI). Places funded data stewards in partner organisations (UKZN, South Africa; BASEflow, Malawi) and delivers a 12-module data stewardship training programme.

washcollab - Enhancing Global WASH Data Accessibility through Collaborative Initiatives

ETH Board ORD Program (Contribute)

2024 - Current

- Wrote the proposal and manage the project (Prof. Elizabeth Tilley, PI). A partnership between WASHWeb and openwash-data maintaining open-source tools for authoritative WASH data (WHO/UNICEF JMP, World Bank, UN-Water GLAAS, OECD).

FAIRqual - FAIR Data Practices for Qualitative Research in Transdisciplinarity

ETH Board ORD Program (Explore, Measure 1)

2024 - 2025

- Co-wrote the proposal and contributed to the project (team across TdLab and Global Health Engineering, ETH Zurich). Develops tools and standards for sharing hard-to-anonymise qualitative research data following FAIR principles.

openwashdata - Open WASH data by building Open Science Competencies and Community

ETH Board ORD Program (Explore, 1st call)

2023 - 2024

- Wrote the proposal and managed the project (Prof. Elizabeth Tilley, PI). Built the infrastructure, community and FAIR data publishing workflow for open WASH data; 18 months.

openjmp - Open JMP: unlocking the potential of global indicator data

ETH Board ORD Program (Contribute)

2023 - 2024

- Wrote the proposal and managed the project (Prof. Elizabeth Tilley, PI). In partnership with the WHO/UNICEF Joint Monitoring Programme, turns decades of WASH coverage data into documented open R packages; 15 months.

Awards

National Prize for Open Research Data 2024

Swiss Academies of Arts and Sciences

2024

- Awarded to openwashdata, the global open-data community for the WASH sector (project led by Prof. Elizabeth Tilley, Global Health Engineering, ETH Zurich).
- Recognition for advancing FAIR and Open Research Data practices in the water, sanitation and hygiene sector.
- Watch the prize video: youtu.be/590qPtQNCD0

Professional Roles

Local Node Leader, Swiss Reproducibility Network (SwissRN)

ETH Zurich - Global Health Engineering

2025 - Current

- Local Node Leader for ETH Zurich in SwissRN, promoting reproducible and open research practices across the institution.

Member, Data Stewardship Network (DSN)

ETH Zurich

2023 - Current

- Data steward for the Global Health Engineering group in ETH Zurich's Data Stewardship Network, an ETH Library / swissuniversities ORD initiative embedding Open Research Data practices across research groups.

References

Dr. Christian Zurbrugg

Duebendorf, CH

Eawag / Sandec

N/A

- Member of the Directorate & Group Leader Solid Waste Management.

Prof. C. A. Buckley

Durban, ZA

PRG, University of KwaZulu-Natal

N/A

- Co-Head, Pollution Research Group.

Dr. Kate Medlicott

Geneva, CH

World Health Organization

N/A

- Team Leader, Sanitation.