Adriano Rutz

Pharmaceutical Scientist

Status: Postdoctoral Researcher, ETH Zürich Field: Metabolomics, Mass Spectrometry, Natural Products Languages: French (C2), English (C1), German (C1), Italian (C1) website: https://adafede.github.io phone: +41 76 521 45 40 - email: adriano.rutz@ik.me address: Langgrütstrasse, 25, 8047 Zürich, Switzerland

Bio

Adriano Rutz is a postdoctoral researcher at ETH Zürich, where he develops computational and analytical methods for metabolomics. With a background in pharmaceutical sciences and phytochemistry, he combines mass spectrometry, cheminformatics, and open science to explore the chemical diversity of life. Following industry experience at Tradall SA (Bacardi Group), he completed his PhD at the University of Geneva. At ETH Zürich, he creates scalable, open-source tools for molecular annotation and metabolite discovery. He is a core contributor to the LOTUS initiative, a global, FAIR, community-driven knowledge base for natural products. His research fosters interdisciplinary collaboration across data science, chemistry, and biology, driving innovation in metabolomics and beyond.

Professional Experience

Postdoctoral Researcher, ETH Zürich, Zürich (2022 - present)

Computational metabolomics at the Institute of Molecular Systems Biology.

Research and Teaching Assistant, UNIGE, Geneva (2017 - 2022)

Development of LC-HRMS/MS based approaches for comprehensive composition assessment of complex plant extracts. In depth annotation using Spectral Networking.

Plant metabolomics.

Teaching activities with Bachelor and Master students.

Maintenance and optimization of analytical instruments (LC).

Junior Research Chemist, Tradall SA, Meyrin (2016 - 2017)

Working in analytical research and Research and Development laboratories following ISO norms.

New products development, analytical and sensory characterization.

In depth analysis of impact compounds, compounds evolution understanding.

Maintenance and optimization of analytical instruments (GC).

Assistant Pharmacist, Pharmacie de la Terrassière, Geneva (2015 - 2016)

Internship in the frame of Master's degree.

Education

PhD in Pharmaceutical Sciences, UNIGE (2017 - 2022)

Thesis entitled Integrative Analytical and Computational Strategies for Qualitative and Semi-quantitative Plant Metabolome Characterization

B.Sc. and M.Sc. in Pharmaceutical Sciences, UNIGE (2011 - 2016)

Mention excellent for Master's thesis GC chiral separation of main enantiomeric compounds as a tool of Quality Control of some botanicals and related specific final product

Awards

- Swiss National ORD Prize (2023): Awarded for the LOTUS initiative. See more at https://akademien-schweiz.ch/en/medien/press-releases/2023/adriano-rutz-gewinnt-ersten-schweizer-ord-preis/.
- **Dr Willmar-Schwabe-Young-Talent-Prize (2023)**: Awarded for the LOTUS initiative. See more at https://ga-online.org/dr-willmar-schwabe-young-talent-prize-2023-for-adriano-rutz/.

Sports

Artistic gymnastics trainer, Ecole de Gymnastique Artistique Genève (2009 - 2022)

Artistic gymnastics trainer, with kids from 5 to 12 years

Federal recognition "Moniteur Jeunesse+Sport" (re-assessed each 2 years)

Artistic gymnastics judge, Schweizerischer Turnverband (2009 - present)

Federal recognition "National judge N3" (re-assessed each 2 years)

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