# LIFE SCIENCE ZURICH
## IMPACT

DATA FOR HEALTH

**MAY 23rd, 2023**
**TECHNOPARK ZURICH**

A LIFE SCIENCE ZURICH BUSINESS NETWORK INITIATIVE
#lszimpact

INNOVATION MADE IN ZURICH

# LSZ IMPACT - DATA FOR HEALTH
## WELCOME TO ZURICH

### CONTACTS

**Congress Management**
General information about the
Conference, Registration and Industry
Exhibition
SHE Meetings by CBS Congress
Management GmbH
info@she-meetings.ch
+41 44 533 37 37

**Life Science Zurich Business Network**
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**Life Science Zurich**
Silvie Cuperus
silvie.cuperus@lifescience.uzh.ch
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**Organizer:**
Life Science Zurich Business Network
More information:
https://lsz-impact2023.b2match.io/

### AIM & MOTIVATION

Life Science Zurich Impact «Data for Health» is a one-day multi-track meeting that provides **a platform for scientists from academia and industry to present their projects to potential collaborators and investors thus stimulating a dialogue between research, healthcare and economy with a focus on translational medicine.**

Big Data and digitalization are rapidly expanding and becoming increasingly important in our healthcare systems. It is therefore crucial that entrepreneurs, researchers, and policy makers have access to high value health-data to fully realize its potential in improving health outcomes for all. Furthermore, cooperation among industry, government, academia, clinics, and other relevant partners is essential for developing integrated health-data ecosystems, improving healthcare delivery, and advancing research, innovation, and policymaking.

Given this, **the aim of the conference is to discuss opportunities and challenges in this field, as well as to show how health data science is improving our knowledge and assisting in the resolution of difficult health problems.**

### FORMAT
The conference will feature **keynote speakers, parallel sessions, an investor track, one-to-one partner meetings and an industry exhibition.** The parallel sessions will cover topics like **connecting patients, clinical processes, data in clinical trials, biomedical «omics», gender specific medicine, and artificial intelligence in medicine.**

# LSZ IMPACT - DATA FOR HEALTH
## WELCOME TO ZURICH



**Matchmaking / 1-to-1 Partneering**
Enterprise Europe Network
Nicolas Lentze
+41 58 469 07 59
nicolas.lentze@innosuisse.ch
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### 1-TO-1-PARTNERING

To promote networking, and to facilitate the formation of new contacts and the initiation of new projects are major goals of Life Science Zurich Impact – **'Data for Health'**. To this end, pre-arranged 20 minutes face-to-face meetings are coordinated by Enterprise Europe Network. Register now for matchmaking at the conference webpage. During the conference, Nicolas Lentze from Enterprise Europe Network will offer on-site support.

A longterm Matchmaking will also be available from 24 May – 1 June 2023. Virtual participants, as well as all other participants have the opportunity to schedule virtual meetings with other participants for a one week period after the event. This allows you to deepen connections. Other than the onsite meetings, the duration of longterm matchmaking meetings can be set by the participants.

# LSZ IMPACT - DATA FOR HEALTH
## MORNING PROGRAM

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| 08:00 – 09:00 | **Registration** |

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| 09:00 – 09:15 | **Welcome & Introduction** |
| | **Danielle Spichiger,** Director Life Sciences, Business & Economic Development, Canton of Zurich; President Life Science Zurich Business Network<br>**Prof. Dr. Sven Hirsch**, Head Biomedical Simulation & ZHAW Digital Health Lab, ZHAW |

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| 09:15 – 09:40 | **Organoids to model human diseases** |
| | **Prof. Dr. Hans Clevers**, Head of pharma Research and Early Development (pRED), Roche |

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| 09:40 – 10:05 | **Highly multiplexed digital pathology for precision oncology** |
| | **Prof. Dr. Bernd Bodenmiller**, Dual professor University of Zurich and ETH Zurich, Director of Department of Quantitative Biomedicine, Co-founder of Navignostics |

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| 10:05 – 10:30 | **Digitalization and AI in Orthopedics - towards Surgical Data Science at the Balgrist University Hospital & in the Operating Room X (OR-X)** |
| | **Prof. Dr. Philipp Fürnstahl**, Professor in Orthopedic Computer Science, Balgrist University Hospital Zurich<br>**Dr. Sebastiano Caprara**, Head of Digital Medicine Unit, Balgrist University Hospital Zurich |

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| 10:30 – 11:00 | **Coffee Break** |

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| 11:00 – 12:30 | **Parallel Sessions** (Details on the next page) |
| | Health – Omics (Cobol, 2nd floor) |
| | Leveraging Clinical Data (Auditorium) |
| | Investor Track Powered by ZHAW – Session 1 (Fortran, 2nd floor) |

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| 12:30 – 14:00 | **Lunch Break** |

# LSZ IMPACT - DATA FOR HEALTH
## PARALLEL SESSIONS - MORNING PROGRAM

| | | **Parallel Sessions** | |
|---|---|---|---|
| **11:00 - 12:30** | | **Health - Omics** | |
| | Chair | **Prof. Dr. Paola Picotti,** Deputy head of Institute for Molecular Systems Biology, ETH | |
| | | **Prof. Ralph Schlapbach,** Functional Genomics Center Zurich, ETH/UZH | Functional Genomics Center Zurich (FGCZ): 20 years at the forefront of multi-omics for basic and applied research support |
| | | **Dr. Marco Meola,** Institute of Medical Microbiology, UZH | Microbial sequencing at the Institute of Medical Microbiology: a one-stop shop |
| | | **Dr. Kristina Beeler,** Biognosys AG | A proteomics solution provider accelerating drug discovery and enabling precision medicine globally |
| | | **Dr. Natalie de Souza,** Institute of Molecular Systems Biology, ETHZ | Global in situ analysis of the structural proteome in individuals with Parkinson's disease to identify a new class of biomarker |
| | | **Dr. Frank Staubli,** Nebion AG | Unchaining the full potential of public single-cell RNA-Seq data |
| | | **Ellen Aarts,** Institute of Molecular Systems Biology, ETHZ | Protein network-based study of ciliopathy-associated genes and phenotype-related mechanisms |
| **11:00 - 12:30** | | **Leveraging Clinical Data** | |
| | Chair | **Dr. Silvie Cuperus,** Head of Life Science Zurich, University of Zurich and ETH | |
| | | **Dr. Peter Kaeuper,** Icoflex Sàrl | Hospital Patients' Nutritional Data for Health |
| | | **Prof. Dr. Heike Bischoff-Ferrari,** Dept. of Aging Medicine and Aging Research, USZ/UZH | USZ Precision-Age |
| | | **Dr. Samuel Wehrli,** Institute of Computational Life Sciences, ZHAW | Wearable-based solutions for the hospital of the future |
| | | **Prof. Dr. Claudia Witt,** Institute for Complementary and Integrative Medicine, UZH | Digital Health Zurich - A practice lab for patient-centred clinical innovation |
| | | **Anja Bischof,** Lehrstuhl für Management im Gesundheitswesen, HSG | How to care about the patient? - The importance of gender differences in patient-reported outcome measures |
| | | **Davide Paparo,** School of Engineering, ZHAW | DermatoTherma - Gathering electronic skin characteristics of underrepresented groups during thermotherapy treatment. |
| **11:00 - 12:30** | | **Investor Track Powered by ZHAW – Session 1** | |
| | Chair | **Dr. Chris Russ,** Dozent, Researcher & Startup Coach, ZHAW Digital Health Lab | Information on the presenting companies is available on the Website |

# LSZ IMPACT - DATA FOR HEALTH
## AFTERNOON PROGRAM

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| | **Parallel Sessions (Details on the next page)** |
| 14:00 – 15:30 | **Health Data Platforms (Auditorium)** |
| 14:00 – 15:30 | **Intelligent Health Solutions (Cobol, 2nd floor)** |
| 14:00 – 15:30 | **Investor Track Powered by ZHAW – Session 2 (Fortran, 2nd floor)** |

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| 15:30 – 16:00 | **Coffee Break** |

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| 16:00 - 16:25 | **Gender Medicine: The Long and Rocky Road to Equality** |
| | **Prof. Dr. Dr. Cathérine Gebhard**: Professor and Interventional Cardiologist at the University Hospital Bern, Director of the Center for Preventive Cardiology and Women's Health |

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| 16:25 - 16:50 | **Who benefits from the patient data? Opportunities and risks of digitization from the perspective of those affected** |
| | **Susanne Gedamke:** Managing Director Swiss Patient Organization |

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| 16:50 - 17:30 | **Panel Discussion: An integrated-health data ecosystem: What does is take?** |
| | **Dr. Katrin Crameri:** Director Swiss Personalized Health Network (SPHN), SIB Swiss Institute of Bioinformatics<br>**Nassima Wyss-Mehira:** Head of Digital Transformation and Steering Directorate, Vice Director, Member of the Senior management, BAG-Federal Office of Public Health<br>**Prof. Dr. Christian R. Baumann:** Medical Co-Director, USZ/UZH<br>**Astrid Kiermaier:** Global Head Insights Data & Experimental Analytics (IDEA) & Enhanced Data & Insights Sharing (EDIS), Roche<br>**Prof. Dr. Barbara Biedermann:** Physician, Swiss Health Data Space Association and COBEDIAS Institute |
| | **Moderation: Mathis Brauchbar:** advocacy ag |

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| 17:30 - 18:00 | **Outlook and Closing Remarks** |
| | **Prof. Dr. Claudia Witt:** Co-Director Digital Society Initiative, UZH<br>**Dr. Silvio Bonaccio:** Head of ETH Transfer, ETHZ<br>**Prof. Dr. Sven Hirsch:** Head Biomedical Simulation & ZHAW Digital Health Lab, ZHAW |

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| 18:00 - 19:00 | **Apéro Riche** |

# LSZ IMPACT - DATA FOR HEALTH
## PARALLEL SESSIONS - AFTERNOON PROGRAM

| | **Parallel Session** | |
|---|---|---|
| 14:00 – 15:30 | **Health Data Platforms** | |
| Chair | Michael J. Flynn, Program Lead Digital Ecosystems, Roche Information Solutions | |
| | Vinko Tosevski, Psephisma Health | Psephisma Health and the equitable access to the cutting edge Real World Data for research at every scale |
| | Philip Van Hövell, Rewoso AG | DESTINY – A holistic solution to optimize patient visits in clinical settings and make HCPs' life easier |
| | Dr. Adrian Martinez de la Torre, Methods | Methodds: closing the gap between data science and medicine |
| | Dr. Katrin Crameri, SIB Swiss Institute of Bioinformatics | The contribution of the Swiss Personalized Health Network (SPHN) to a scalable and sustainable health data ecosystem |
| | Prof. Dr. Ernst Hafen, Verein Gesundheitsdatenraum Schweiz | A moonshot initiative for a human-centered digital transformation of the health care system – No more whitepapers, lets walk the talk: Come join us a salutonauts! |
| | Dr. Franziska Bächler, Verein Gesundheitsdatenraum Schweiz | Secondary use of health data in the next iteration of drug development |
| | Prof. Dr. Michael Krauthammer, Dept. of Quantitative Biomedicine, UZH | The LOOP Zurich BioMedical Informatics Platform: Development of a Multi-Hospital Clinical Data Store and AI Environment in Zurich |

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| 14:00 – 15:30 | **Intelligent Health Solutions** | |
| Chair | PD Dr. Suzana Atanasoski, Head Strategic Projects UMZH, Office Vice President Medicine Zurich UZH | |
| | Jonas Meirer, CSEM S.A, Swiss Centre of Microelectronics and Microtechnology | AI-Enabled Personalized Medicine: Overcoming the Limitations of Biomedical and Omics Data through Wearable and Biosensor Technologies |
| | Dr. Jens Boss, Prof. Keller's research group, USZ | ICU Cockpit: A Vertically Integrated Data Platform for Medical AI Development and Validation in Clinics |
| | Christian Dorfer, Department of Medical Oncology and Haematology Clinic, USZ | Interpreting laboratory results with machine learning |
| | Dr. Georg Spinner, Institute of Computational Life Sciences, ZHAW | AI for IA – Artificial Intelligence for Intracranial Aneurysms |
| | Timo Geiser, Leg&airy® Orthopedic Wonders | Mobilising Disabled Children with Smart Orthotics |
| | Christian Thomay, Research Studios Austria Forschungsgesellschaft mbH | Using Holistic Multi-Sensor Patient Modeling to Improve Robotics-Supported Physical Therapy |
| | Dr. Christian Federau, ai medical | Presenting Jazz - the cutting-edge intelligent automation software |

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| 14:00 – 15:30 | **Investor Track Powered by ZHAW – Session 2** | |
| Chair | Dr. Chris Russ, Dozent, Researcher & Startup Coach, ZHAW Digital Health Lab | Information on the presenting companies is available on the Website |

# LSZ IMPACT
## KEYNOTE SPEAKERS



**Prof. Dr. Hans Clevers** is a Dutch molecular geneticist, cell biologist and stem cell researcher. He is currently the Head of pharma Research and Early Development (pRED), and a member of the Corporate Executive Committee of F. Hoffmann-La Roche based in Basel, Switzerland. Previously, Prof. Clevers headed a research group at the Hubrecht Institute for Developmental Biology and Stem Cell Research and at the Princess Máxima Center for Pediatric Oncology and Oncode where he has remained as an advisor and guest scientist or visiting researcher. He is also a Professor in Molecular Genetics at the University of Utrecht and has published over 740, highly cited, peer-reviewed papers.
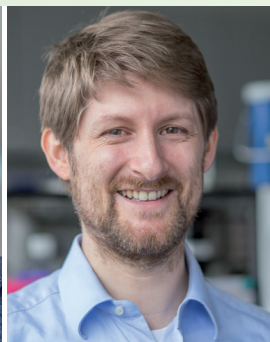
**Prof. Dr. Bernd Bodenmiller** is a quantitative biologist who develops novel experimental and computational approaches for the quantitative analysis of tumor ecosystems for precision medicine applications. He obtained his PhD in the group of Ruedi Aebersold at ETH Zürich. For his postdoctoral training, he joined the laboratory of Garry P. Nolan at Stanford University. In 2013 he became a SNF/ERC assistant professor at the University of Zürich and in 2019 he was tenured. In 2020 he was appointed as Dual Professor for Quantitative Biomedicine at the UZH and at ETH Zurich. Prof. Bodenmiller is currently director of the Department of Quantitative Biomedicine (DQBM) at the University of Zurich, director technologies at the Comprehensive Cancer Center Zurich and co-founder of Navignostics.

**Prof. Dr. Philipp Fürnstahl** is a computer scientist by training who received his PhD in the field of computerassisted surgery from ETH Zurich. Since 2012, Prof. Fürnstahl has headed the "Computer-Aided Surgery Lab" at Balgrist University Hospital. In 2018 he received the venia legendi in orthopedic research from the University of Zurich, followed by the appointment as Professor for "Research in Orthopedic Computer Science" in February 2020. Prof. Fürnstahl has more than 150 publications in the field of computer-assisted surgery. He is inventor of several medical devices that are successfully applied in patient treatment. Prof. Fürnstahl is a founding member and the General Manager of the OR-X.

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**Dr. Sebastiano Caprara** received his PhD degree at the ETH Zurich with focus on machine learning and predictive models providing solutions for preoperative planning of spinal fusion surgery. He is currently leading the Health Data Repository – HDR – project at the Balgrist University Hospital and establishing the Digital Medicine Unit. The main focus of his work is to develop a digital platform at the Balgrist University Hospital that can be modularly integrated in the flow of medical and research data within a hospital IT environment, focusing on structured clinical data and research cohorts. He is part of the digital Switzerland initiative representing Balgrist in the Digital Health Committee

**Prof. Dr. Dr. Catherine Gebhard** is a Professor and Interventional Cardiologist at the University Hospital Bern. She obtained her MD and PhD degrees at the Universities of Tübingen and Montreal and underwent clinical training in interventional cardiology and cardiac imaging at the University Hospital Zurich, the Montreal Heart Institute and the Imperial College London. In 2016 she was awarded with the Professorship of the Swiss National Science Foundation for her research on sex and gender differences in cardiovascular disease. From 2018 to 2022 she was the founding director of the continuing education program in Sex- and Genderspecific Medicine and was the founding president of the 'Commission for Sex and Gender in Medicine' at the University of Zurich.

**Susanne Gedamke** studied communication and psychology and has been working in healthcare for over twelve years. After getting to know the different perspectives of the big lobbies in healthcare, she decided three years ago to represent one of the biggest organization of healthcare users - the Swiss Patients Organization. Susanne is also active in the start-up world and has her own personal training studio in Zurich.

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## GOOD TO KNOW

**Meeting venue**
Technopark Zürich is located
at the heart of Zurich West
Technoparkstrasse 1, 8005 Zürich
www.technopark.ch

**Limited parking space** is available
at extra cost on site. Further
parking space is available in
walking distance:
• Parkhaus Pfingstweid
  (Welti-Furrer-Areal,
• Pfingstweidstr. 1, 8005 Zürich)
  Parkhaus P-West
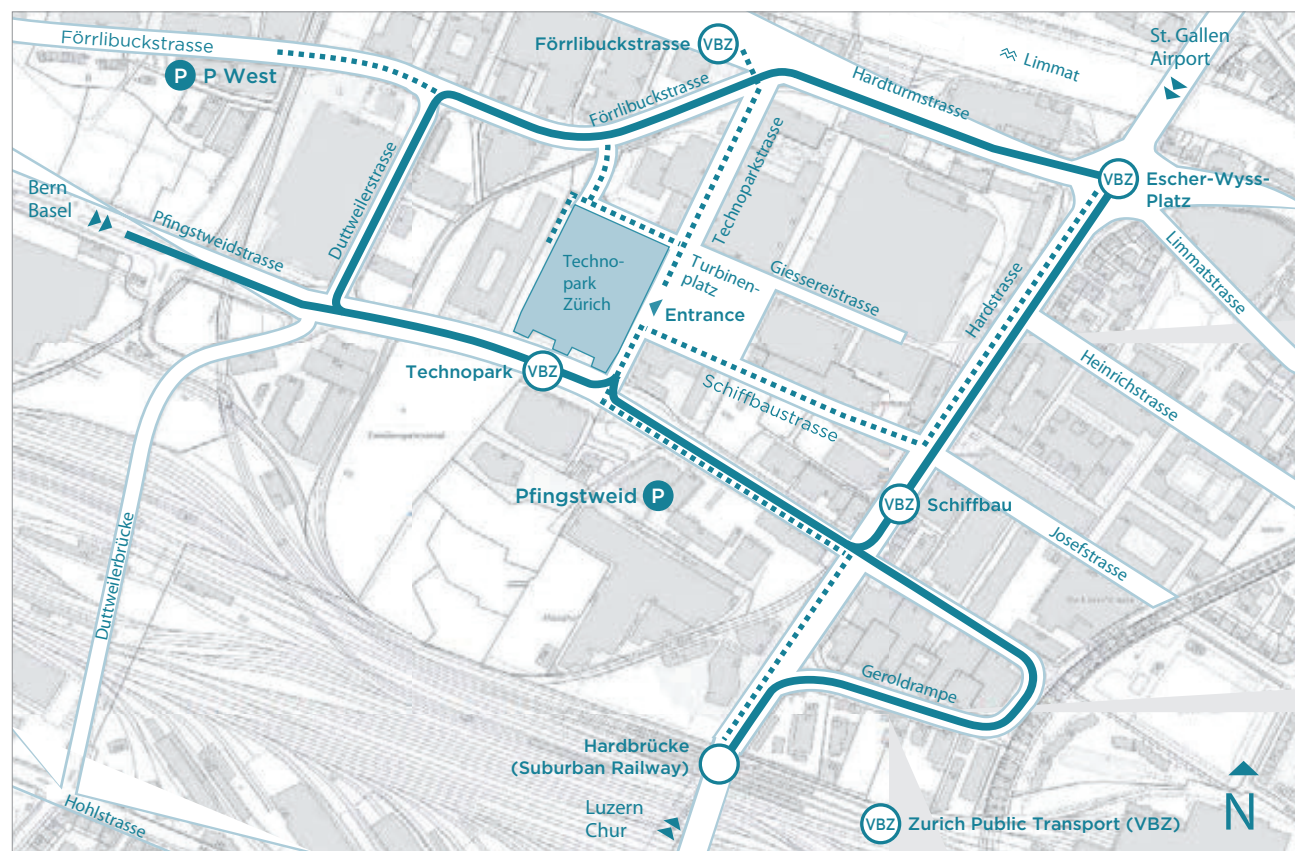  (Förrlibuckstr. 151, 8005 Zürich)

**Internet access**
SSID: TP.WiFi
PW: Nd845IaG

**Conference webpage:**
https://lsz-impact2023.b2match.io/

**Social media**
#lszimpact

# LSZ IMPACT - DATA FOR HEALTH
## ORGANIZERS, PARTNERS, SPONSORS
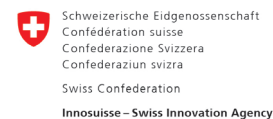


## ORGANIZERS

The Life Science Zurich Business Network is an independant, non-profit association comprising players from universities, industry, economic development, business clusters and technology transfer. It represents the life sciences cluster in the Zurich area and supports and stimulates networking and collaboration between industry, academia, and the public sector in the Zurich area and companies an organisations abroad.

*life science* zurich
**business network**

**Canton of Zurich**
**Department for Economic Affairs**
**Office for Economy and Labour**

**BIO-TECHNOPARK®**
SCHLIEREN-ZÜRICH

## CONFERENCE PARTNERS

**University of Zurich**UZH

**ETH**zürich

**Stadt Zürich**
Stadtentwicklung

**zh aw**

## SUPPORTED BY

Schweizerische Eidgenossenschaft
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## SILVER SPONSORS

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**SIB**
Swiss Institute of
Bioinformatics

**USZ** Universitäts
Spital Zürich

Wyss Zurich
Translating
Science into Life

# LSZ IMPACT - DATA FOR HEALTH
## EXHIBITORS



## EXHIBITORS

We are pleased to welcome the following exhibitors at Zurich Life Science Conference 2023. All Coffee breaks as well as the Lunch and the Apéro riche will be served in the exhibition area.

**balgristcampus**

**BE·i** BioEntrepreneurship & Innovation **program**

**FJ**

**TPC** Tumor Profiler Center Switzerland
ETH zürich | Universitätsspital Basel | Universität Zürich

**healthtechpark**

**HORGEN LABS INNOVATION CAMPUS**

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Swiss Confederation
**Innosuisse – Swiss Innovation Agency**

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**rewos** Real World Solutions

**Roche**

**SIB** Swiss Institute of Bioinformatics

**University of Zurich** UZH
UZH Innovation Hub

**USZ** Universitäts Spital Zürich

**Wyss Zurich** Translating Science into Life

**zhaw** **Digital Health Lab**