

EnhanceR | Enhancing Research
through IT Expertise



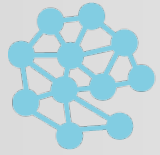
DLCLM

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SRDD 2018 Breakout Session: EnhanceR and DLCLM – Solving Data Challenges for Swiss Researchers

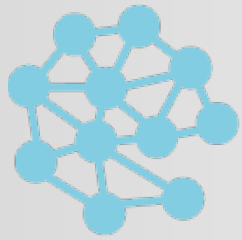
ETH Zurich, 12th June 2018



Breakout Session Programme



- 11:15 – 11:30 **Supporting Researchers with Data Challenges** - Alex Upton (ETHZ)
- 11:30 – 11:45 **DLCM Solution** - Hugues Cazeaux (UniGE)
- 11:45 – 12:00 **Q and A**



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EnhanceR – Research IT Support for Research Data Challenges

Alex Upton ETH Scientific IT Services – EnhanceR Communications Manager



ETH zürich

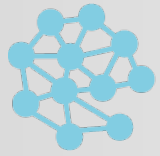


Swiss Institute of
Bioinformatics

Hes·SO
Haute Ecole Spécialisée
de Suisse occidentale

FMI
Friedrich Miescher Institute
for Biomedical Research



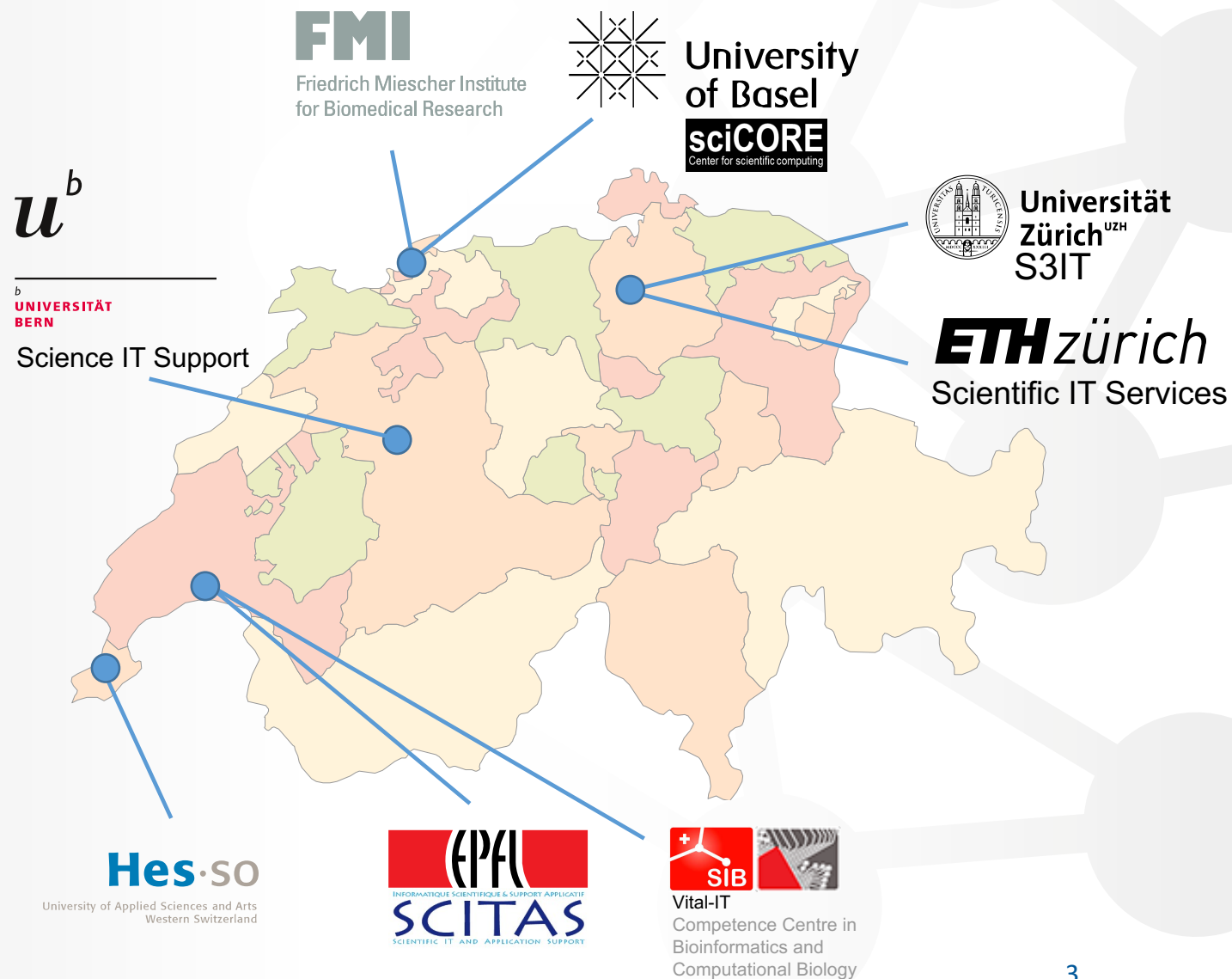


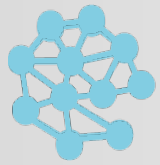
Outline of presentation

- Overview of EnhanceR and what it offers
- Data challenges and EnhanceR solutions
- Getting in touch

What is EnhanceR?

- Federation of Research IT groups across Switzerland with different areas of expertise
- Offers consulting and technical services to researchers
- Increases provider capacities and capabilities
- Works closely with other national projects and networks e.g. DLCM, SPHN, imaging community





What can EnhanceR offer researchers?



CONSULTANCY



TRAINING



CODE DEVELOPMENT



PORTING & MIGRATION



TOOLS & SERVICES



TESTING & BENCHMARKING

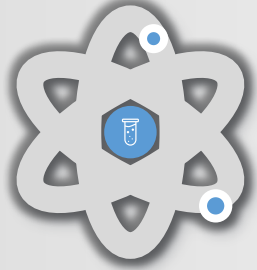


DATA ANALYSIS



PROPOSAL DEVELOPMENT

What can EnhanceR offer IT departments?



MEET SPECIAL REQUESTS



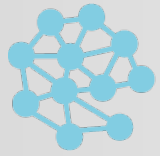
INCREASE PROVIDER CAPACITY AND CAPABILITY



DEVELOPMENT OF FUNDING PROPOSALS

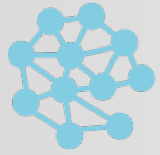


GUIDANCE WITH CREATION OF RESEARCH IT UNIT



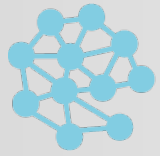
Data challenges in modern research

- Data management
- Reproducibility
- Working with sensitive data










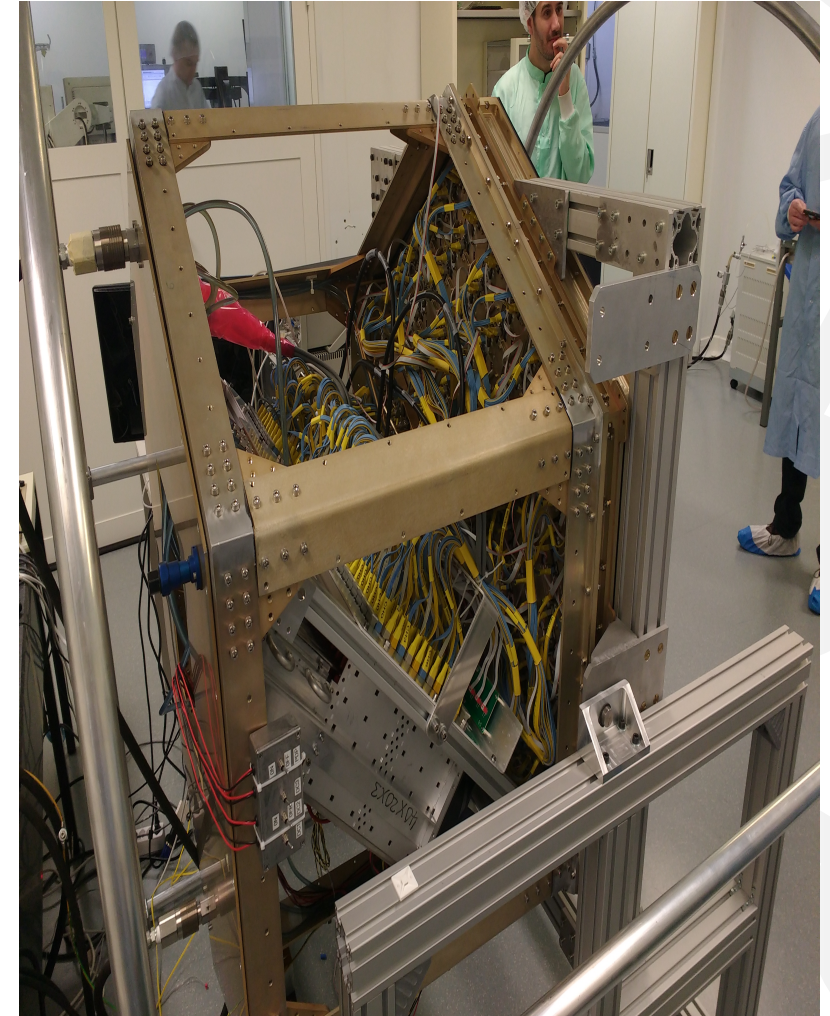
Data challenges in modern research

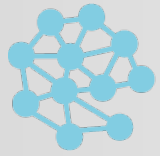
- **Data management**
- **Reproducibility**
- **Working with sensitive data**



Data management SST-1M camera

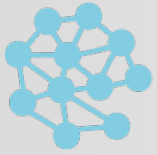
- **Customer:** Department of Nuclear and Particle Physics, UniGe
- **Services:**       
- **Problem:** Logging & tracing of 1000s of components, measurements & calibration protocols of CTA SST 1-M telescope camera
- **Solution:** Map use case to the openBIS data management platform structure and provide training to users









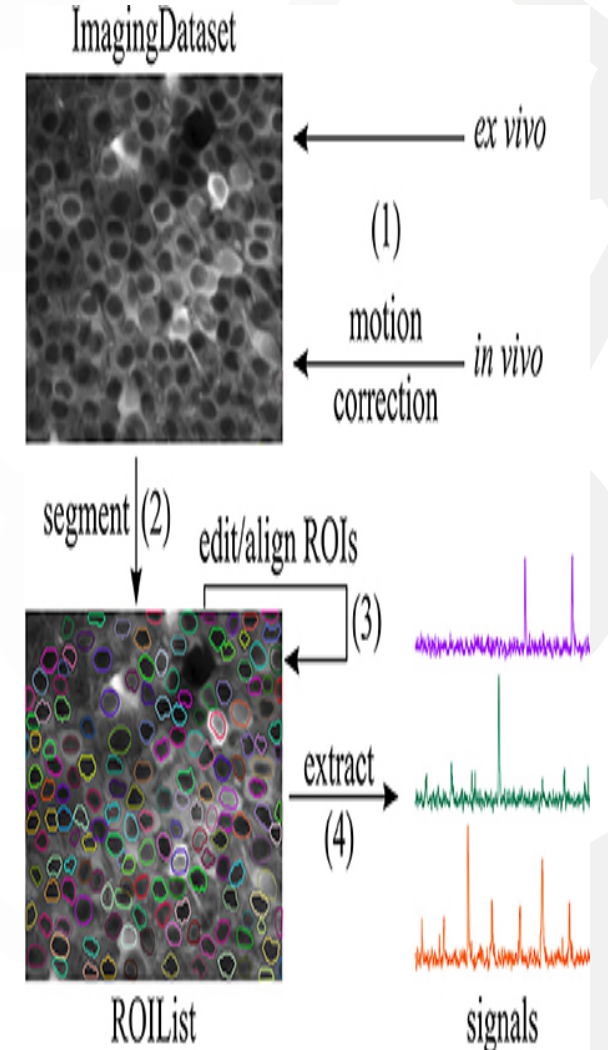
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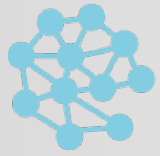
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Two-photon calcium imaging workflow

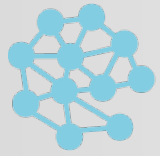
- **Customer:** Sensory Perception Group, UniBe
- **Services:**    
- **Problem:** No data processing workflow for new microscope; 'in-house' Matlab scripts but limited licence availability at UniBe
- **Solution:** Setup and evaluation of Python, including SIMA package, as analysis workflow for imaging data in the group










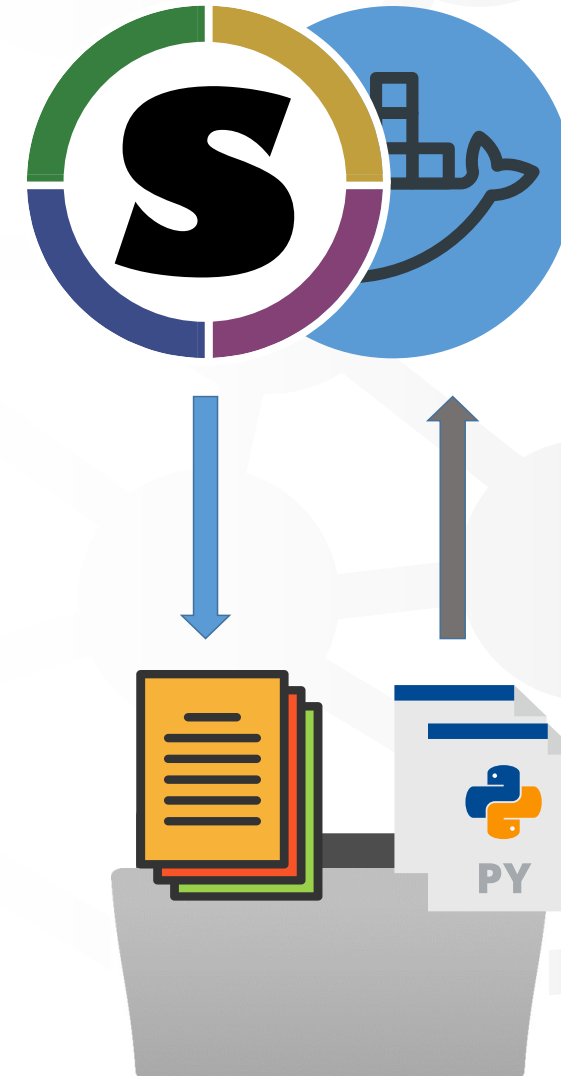
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Pipeline Interoperability

- **Customer:** SPHN
- **Services:**     
- **Problem:** Projects with sensitive data require analysis pipelines that run on different Swiss HPC clusters - code has to move to the data
- **Solution:** Tested technology stack to run the same workflow in different HPC clusters and guidelines for using container technologies



Contact Us



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