OSA2Micro: An Open Science Approach to Microbiology data integration

Landscape, software tools, platforms, and computational workflows devised by the EOSC-Life project

July 3-5, 2023, Molecular Biotechnology Center (MBC), Via Nizza 52, Turin, Italy

Day 1 – Monday July 3rd, 2023	
11:30-13:00	**Meeting of project partners (restricted)**
13:00-14:00	Time for free lunch
14:00-14:30	**Welcome, Introduction & Expectations** Cristina VARESE, Department of Life Sciences and Systems Biology, University of Turin Marco BECCUTI, Department of Computer Science, University of Turin
14:30-15:30	**The reproducibility crisis in life science** Marco BECCUTI, Department of Computer Science, University of Turin Raffaele A. CALOGERO, Department of Molecular Biotechnology and Health Sciences, University of Turin
15:30-16:00	**European Research infrastructures in the biomedical domain** Paolo ROMANO, IRCCS Ospedale Policlinico San Martino, Genoa
16:00-16:30	Coffee break
16:30-18:00	**EOSC-Life Roadmap: technologies for data sharing and integration in the European Open Science Cloud** Antonio ROSATO, Department of Chemistry, University of Florence and InterUniversity Consortium for Magnetic Resonance of Metalloproteins
18:00-18:30	**Public discussion on the topics of the day** All presenters and participants
18:30-19:30	**Meeting of project partners (restricted)**
Day 2 – Tuesday July 4th, 2023	
09:00-10:30	**FAIR principles, FAIRness, and FAIR metrics** Antonio ROSATO, Department of Chemistry, University of Florence and InterUniversity Consortium for Magnetic Resonance of Metalloproteins
10:30-11:00	Coffee break

11:00-12:00	**How to exploit Harvard Dataverse to achieve the FAIR principles (DEMO)** Rossana DAMIANO, Department of Computer Science, University of Turin
12:00-13:00	**The Dataverse implementation of the SUS-MIRRI.IT platform** Marco Beccuti and Sandro Gepiro Contaldo, Department of Computer Science, University of Turin
13:00-14:30	Time for free lunch
14:30-15:30	**Workflow Management Systems: Galaxy, Snakemake, Nextflow** Paolo ROMANO, IRCCS Ospedale Policlinico San Martino, Genoa
15:30-16:00	Coffee break
16:00-17:00	**Workflows and the Common Workflow Language (CWL)** Iacopo Colonnelli, Department of Computer Science, University of Turin
17:00-18:00	**Introduction to Software Containers: Docker and Singularity in a Nutshell** Luca PIREDDU, CRS4 Center for Advanced Studies, Research and Development in Sardinia
18:00-18:30	**Public discussion on the topics of the day** All presenters and participants
18:30-19:30	**Meeting of project partners (restricted)**
Day 3 – Wednesday July 5th, 2023	
09:00-10:00	**RO-Crate and workflow execution provenance** Simone LEO, CRS4 Center for Advanced Studies, Research and Development in Sardinia
10:00-11:00	**Publishing Your Workflows and Keeping Them Running: the WorkflowHub** **and LifeMonitor services** Luca PIREDDU, CRS4 Center for Advanced Studies, Research and Development in Sardinia
11:00-11:30	Coffee break
11:30-13:00	**Microbial data analysis in Galaxy: tools, workflows, training and community for a FAIR,** **Open, & Sustainable Infrastructure** Paul ZIEREP, Freiburg Galaxy team, University of Freiburg
13:00-14:00	Lunch break
14:00-16:00	**How to use Galaxy for microbial data analysis? A hands-on demo (DEMO)** Paul ZIEREP, Freiburg Galaxy team, University of Freiburg
16:00-16:30	**Public conclusions** All presenters and participants
16:30-17:45	**Meeting of project partners (restricted)**