



## OSA2Micro: An Open Science Approach to Microbiology data integration

Landscape, software tools, platforms, and computational workflows

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

Day 1 – Monday July 3 <sup>rd</sup> , 2023	
14:00-14:30	<b>Welcome, Introduction &amp; Expectations</b> 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	<b>The reproducibility crisis in life science</b> 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	<b>European Research infrastructures in the biomedical domain</b> Paolo ROMANO, IRCCS Ospedale Policlinico San Martino, Genoa
16:00-16:30	Coffee break
16:30-18:00	<b>EOSC-Life Roadmap: technologies for data sharing and integration in the European Open Science Cloud</b> Antonio ROSATO, Department of Chemistry, University of Florence and InterUniversity Consortium for Magnetic Resonance of Metalloproteins
18:00-18:30	<b>Discussion on the topics of the day</b> All teachers and participants
Day 2 – Tuesday July 4 <sup>th</sup> , 2023	
09:00-10:30	<b>FAIR principles, FAIRness, and FAIR metrics</b> 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	<b>How to exploit Harvard Dataverse to achieve the FAIR principles (DEMO)</b> Rossana DAMIANO, Department of Computer Science, University of Turin
12:00-13:00	<b>The Dataverse implementation of the SUS-MIRRI.IT platform</b> Antonio D'ACIERNO, National Research Council / Institute of Food Sciences, Avellino

13:00-14:30	Time for free lunch
14:30-15:30	<b>Workflows and the Common Workflow Language (CWL) (REMOTE)</b> Michael CRUSOE, Forschungszentrum Jülich & Freie Universität Berlin
15:30-16:00	Coffee break
16:00-17:00	<b>Workflow Management Systems: Galaxy, Snakemake, Nextflow</b> Paolo ROMANO, IRCCS Ospedale Policlinico San Martino, Genoa
17:00-18:00	<b>Introduction to Software Containers: Docker and Singularity in a Nutshell</b> Luca PIREDDU, CRS4 Center for Advanced Studies, Research and Development in Sardinia
18:00-18:30	<b>Discussion on the topics of the day</b> All teachers and participants
Day 3 – Wednesday July 5 <sup>th</sup> , 2023	
09:00-10:00	<b>RO-Crate and workflow execution provenance</b> Simone LEO, CRS4 Center for Advanced Studies, Research and Development in Sardinia
10:00-11:00	<b>Publishing Your Workflows and Keeping Them Running: the WorkflowHub and LifeMonitor services</b> Luca PIREDDU, CRS4 Center for Advanced Studies, Research and Development in Sardinia
11:00-11:30	Coffee break
11:30-13:00	<b>Microbial data analysis in Galaxy: tools, workflows, training and community for a FAIR, Open, &amp; Sustainable Infrastructure</b> Bérénice BATUT, Freiburg Galaxy team, University of Freiburg
13:00-14:00	Lunch break
14:00-16:00	<b>How to use Galaxy for microbial data analysis? A hands-on demo (DEMO)</b> Bérénice BATUT, Freiburg Galaxy team, University of Freiburg
16:00-16:30	<b>Conclusions</b>