



EBRAINS Research Infrastructure Symposium: addressing grand challenges in brain research

on July 8 - 8:30-17:30

EBRAINS Research Infrastructure symposium: addressing grand challenges in brain research

FENS satellite meeting – program

8:30 – 9:00	Get-together: Coffee and mingling	
09:00 – 09:05	Welcome to the Satellite & structure of the meeting	Philippe Vernier Joliot Institute for Life Science, Saclay, France
09:05 – 09:20	An introduction to EBRAINS and challenges ahead.	Pawel Swieboda EBRAINS AISBL, Brussels, Belgium

SESSION Need for integrating multiscale, multilevel data in a new data infrastructure with tools allowing researchers to use these data

Chair: Viktor Jirsa, Institut de Neurosciences des Systèmes, Marseille, France

09:20 - 09:40	Grand challenges in neuroscience	Catherine Talon-Baudry ENS, Paris, France (to be confirmed)
09:40 - 10:00	Grand challenges in basic neuroscience, need for integration.	Rosa Cossart Institut de NeuroBiologie de la Méditerranée, Marseille, France
10:00 - 10:20	Panel discussion: Solutions offered through neuroinformatics and EBRAINS	

10:20 – 11:00

Coffee & EBRAINS Demos (classrooms)

SESSION The solutions implemented in EBRAINS

Chair : Steven Vermeulen, EBRAINS AISBL, Brussels, Belgium

11:00 - 11:20	EBRAINS outline - SHARE & FIND data - examples	Jan Bjaalie Institute of Basic medical science, Univ. Oslo, Norway
11:20 - 11:40	USE data – TOOLS - examples	Trygve B. Leergaard Neural Systems Lab., Division of Anatomy, Dept of Molecular Medicine, Institute of Basic Medical Sciences. Univ. Oslo, Norway
11:40 - 12:00	Models and simulation	Edigio d'Angelo Brain Connectivity Center (IRCCS C. Mondino, Pavia) - Dept of Brain and Behavioral Sciences, Univ. Pavia, Italy
12:00 – 12:15	Questions / Discussion	

12:15 – 14:00

LUNCH & EBRAINS Demos (classrooms)

SESSION Success stories from experimentalists, clinicians, modelers: neuroscience research examples empowered by EBRAINS (published research with use of EBRAINS services)

Chair: Bryan Strange, Lab. for Clinical Neuroscience, Centre for Biomedical Technology, Universidad Politécnica de Madrid, Spain

14:00 - 14:15	Use case 1: Basic research in animal models (share and use data)	Ingveld Bjerke Dept of anatomy, Univ. Oslo, Norway
14:15 - 14:30	Use case 2: Basic research in human subjects (share and use data)	Petra Ritter (Charité, Universitätsmedizin Berlin, Germany)
14:30 - 15:00	Use case 3: (i) Modelling and simulation (from data to models to new hypotheses) (ii) Multiscale dynamical characterization of cortical brain states: integrating experimental and computational research from EBRAINS	Mavi Sanchez-Vives Clinic Barcelona, Barcelona, Spain Alain Destexhe NeuroSPI, Univ. Paris Saclay, France

15:00 - 15:15

Use case 4: Clinical research (from data to customized treatment)

Victor Jirsa

Institut de Neurosciences des Systèmes, Marseille, France

15:15 – 15h45

Coffee & EBRAINS Demos (classrooms)

SESSION Perspectives and how to move forward

Chair: Umberto Olcese, Cognitive and Systems Neuroscience Group, Swammerdam Institute for Life Sciences. University of Amsterdam, Amsterdam. The Netherlands

15:45 - 16:05

The funders: better investments, need for FAIR sharing

Elena Hoffert

French Ministry of higher Education and Research, Paris, France

16:05 - 16:45

The publishers: requirements for full sharing of data, code, tools

Nature Scientific Data
Frontiers

16:45 – 17:45

ROUND TABLE

Chair: Philippe Vernier

Frédéric Joliot Institute for Life Science, CEA and EBRAINS-France

Jan Bjaalie (Univ. Oslo, Norway and EBRAINS); **Steven Vermeulen** (EBRAINS AISBL, Belgium); **France Nivellet** (EBRAINS AISBL, Belgium), **Petra Ritter** (Charité, Universitätsmedizin Berlin, Germany)

EBRAINS demos (Hands on Q & A) – in the coffee / lunch breaks (classrooms)

- EBRAINS outreach - **Caroline Ernoult, EBRAINS AISBL and Tina Kokan, HBP**
- SC1 – Oslo curation team + atlasing / tools - **Trygve B. Leergaard, Univ of Oslo**
- SC2 – Human, rodent (monkey) atlasing - **Trygve B. Leergaard, Univ of Oslo**
- Hands on Demo / teaser: simulation mouse, macaque, Human TVB running on EBRAINS - **Jennifer Goldman, Alain Destexhe and Zélie Tournoud, NeuroPSI**
- Hands on Demo / teaser: something on neurons and microcircuits in the cerebellum - **Egidio d'Angelo, Univ of Pavia**
- Hands on Demo / teaser: Databases and data processing - **Andrew Davison, NeuroPSI**
- HLST – Hans Ekkehard Plesser (to be confirmed)

<https://forum.fens.org/event/ebrains-research-infrastructure-symposium-addressing-grand-challenges-in-brain-research-0830-1730/>

Program Committee

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