YOUNG RESEARCHERS EVENT
EBRAINS FOR NEXT-GENERATION BRAIN MEDICINE
26–27 May 2021
Scientific Programme
SCIENTIFIC PROGRAMME

Brain diseases represent a considerable social and economic burden: 6 in 10 disorders with the highest DALYs (Disease-Adjusted Life Years), a health metric that calculates as the sum of years of life lost and years lived with a disability, are related to the brain. To develop new diagnostics and therapies, it is necessary to get deeper insights into brain organisation. The Human Brain Project unites researchers and scientists from multiple fields to decode the relationship between brain structure and function, and its role in disease, with the help of highly advanced ICT tools. Therefore, the HBP is developing EBRAINS, a digital research infrastructure and open source platform that allows scientists to seamlessly collaborate, to analyze data of healthy subjects and patients, to explore them in the Human Brain Atlas, and to share data and tools. This allows accelerated advancements in the fields of brain research and brain-related medicine.

Scientific Chair:
Katrin Amunts | HBP Scientific Research Director & Chief Science Officer, EBRAINS

Programme Committee:
Katrin Amunts | Forschungszentrum Jülich, Germany
Christine Bauquis | EBRAINS, Belgium
Alice Geminiani | University of Pavia, Italy
Judith Kathrein | Medical University Innsbruck, Austria
Jean-François Mangin | CEA, France
Nicolas C. Petersen | Danish Board of Technology, Denmark
Maja Amedjkouh Puchades | University of Oslo, Norway
Ingrid Reiten | University of Oslo, Norway
Aušra Saudargienė | Lithuanian University of Health Sciences, Lithuania
Julia Trattnig | convelop, Austria
Julia Quintero | Medical University Innsbruck, Austria

Further information:
www.humanbrainproject.eu/education/YRE21

Contact:
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Partner:

Organisers:
WEDNESDAY 26 MAY 2021

11:00 – 11:40  **WELCOME & INTRODUCTION**
Welcome & Introduction to HBP & EBRAINS
Katrin Amunts | Forschungszentrum Jülich
Welcome by the Lithuanian University of Health Sciences
Rimantas Benetis & Arimantas Tamašauskas | Lithuanian University of Health Sciences

11:40 – 11:50  **Coffee Break**

11:50 – 13:10  **PLENARY SESSION I: NEUROIMAGING IN HEALTH & DISEASE**
Interindividual variability of brain phenotypes – towards population neuroimaging & brain models
Svenja Caspers | Forschungszentrum Jülich
The Virtual Brain Cloud: Integrating multi-scale data through computational modeling
Petra Ritter | Charité University Medicine Berlin

13:10 – 13:50  **Community Lunch**

13:50 – 14:30  **ROUND TABLE: EBRAINS for next-generation brain medicine**
Borana Dollomaja | Aix-Marseille University
Marja-Leena Linne | Tampere University
Andrius Radžiūnas | Lithuanian University of Life Sciences
Philippe Ryvlin | Centre hospitalier universitaire vaudois
Arleen Salles | Uppsala University
Moderator: Viktor Jirsa | Aix-Marseille University

14:30 – 14:40  **Coffee Break**

14:40 – 15:20  **YOUNG RESEARCHERS PRESENTATION I:**
Digital phenotyping in neuro-oncology
Adomas Bunevičius | Lithuanian University of Life Sciences

15:20 – 15:40  **Coffee Break**

15:40 – 17:00  **PARALLEL WORKSHOPS:**

- Aligning research and innovation with societal needs: ethics & dual use
  Inga Ulnicane & George Ogoh | De Montfort University
  Manuel Guerrero | Uppsala University

- Deep characterisation of brain-phenotype relations using the EBRAINS multilevel atlas
  Svenja Caspers & Christiane Jockwitz | Forschungszentrum Jülich

- The Virtual Brain Cloud
  Petra Ritter & team | Charité University Medicine Berlin
THURSDAY 27 MAY 2021

11:00 – 12:00  
PLENARY SESSION II: BRAIN ATLASES  
A new generation of integrated brain atlas and its potential for clinical research  
Jean-François Mangin | CEA  
Functional tractography  
Olivier David | INSERM

12:00 – 12:20  
Coffee Break

12:20 – 13:00  
YOUNG RESEARCHERS PRESENTATION II:  
Brain states and their cognitive features: experimental data and data-constrained simulations  
Chiara De Luca | INFN, Sapienza University  
The role of low- and high-level features for visual saliency prediction  
Alexander Kroner | Maastricht University

13:00 – 13:50  
Community Lunch

13:50 – 14:50  
Networking session: Science Bazaar

14:50 – 15:10  
Coffee Break

15:10 – 16:30  
PARALLEL WORKSHOPS:  
- EBRAINS data sharing and use of multilevel human brain atlases  
  Maja Amedjkouh Puchades | University of Oslo  
  Timo Dickscheid | Forschungszentrum Jülich

- Using EBRAINS for your scientific use case  
  Sandra Diaz Pier | Forschungszentrum Jülich

- The Medical Informatics Platform – MIP, a privacy-aware and GDPR-compliant platform for federated data analysis of medical data. A Hands-on Session.  
  Philippe Ryvlin, Birgit Schaffhauser, Erica Borcel | CHUV

- Career chat: How to develop your brainy career  
  Julia Trattnig | convelop  
  Svenja Caspers | Forschungszentrum Jülich  
  Benjamin Weyers | University of Trier

16:30 – 16:40  
Coffee Break

16:40 – 17:00  
Closing remarks by HBP & EBRAINS  
Katrin Amunts | Forschungszentrum Jülich
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humanbrainproject.eu/education