



Human Brain Project Newsletter

March 2019

Dear Sir or Madam,

Please find below a short overview of news from the Human Brain Project (HBP) in February and March 2019, as well as an overview of upcoming HBP events.

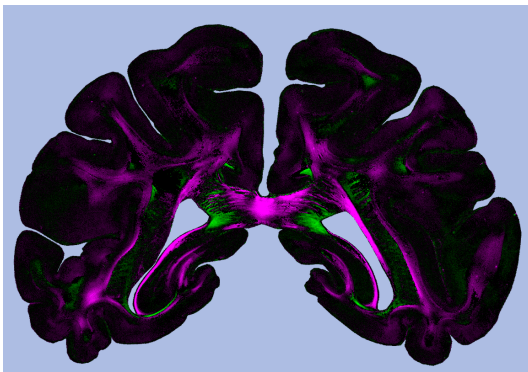
Best Wishes,
HBP Public Relations

Table of Contents

[Research News](#)
[Project News](#)
[Events and Dates](#)

Research News

New imaging technique provides structural information about brain tissue



A new method called Diattenuation Imaging reveals image contrasts between different tissue types of the brain and allows distinguishing regions with many thin nerve fibres from regions with few thick nerve fibres. The technique can be used to learn more about the brain's nerve fibre architecture and tissue composition, and to identify pathological changes. [More](#)

International Brain Initiatives bring together a global perspective on neuroethics



The journal NEURON has dedicated an extended feature to neuroethics, bringing together publications from the seven component brain initiatives which together form the International Brain Initiative. Included are papers reflecting on the work of the HBP and the Australian, Canadian, Chinese, Korean, Japanese and United States national brain research initiatives. [More](#)

HBP publishes opinion on Dual Use of Neuroscience and Neurotechnology

Opinion on 'Responsible Dual Use'

Political, Security, Intelligence and Military Research of Concern in Neuroscience and Neurotechnology



“Dual Use” describes the potential for scientific knowledge and emerging technologies, developed within a civilian context, to be used in other settings, including the military domain. With current and newly emerging insights and technologies arising from brain science, Dual Use concerns are becoming increasingly relevant in this area. HBP experts have now provided analysis and recommendations to help researchers and policy makers address this emerging ethical issue. [More](#)

New neuronal model with potential to tackle spinocerebellar ataxias disease



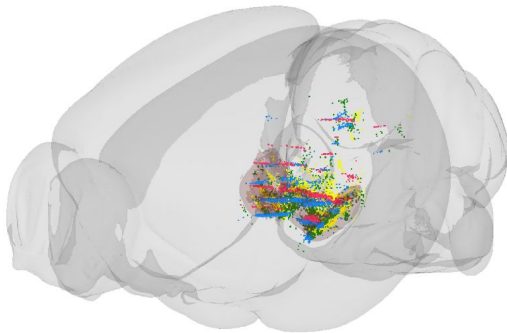
Within the partnering environment of the Human Brain Project researchers of the Politechnic University of Milan have developed a simplified neuronal model with potential to tackle spinocerebellar ataxias disease. [More](#)

Science Node: How the brain rewires



The neural network of the brain is not hardwired. Even in the mature brain, new connections between neurons are formed and existing ones are deleted - a phenomenon that is crucial for learning, memory and rehabilitation after injury. An HBP team in Germany has developed an algorithm to simulate this "structural plasticity" of the brain at an unprecedented scale. Read more about it at sciencenode.org.

New transgenic mouse brain atlas



Researchers from the University of Oslo and The Baylor College of Medicine in Houston present a novel online brain atlas of transgenic mouse lines that are used to generate mouse models of brain disease. The atlas is publicly shared via the research infrastructure established by the Human Brain Project. [More](#)

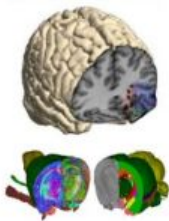
In Focus: HBP Curation support for neuroscience data



Curation support



curation-support@humanbrainproject.eu



The **HBP Data Curation team** is here to assist you all the way to ensure that your data is **Findable, Accessible, Interoperable and Reusable**.

Help us realise the promise of Open Data. Play FAIR with your data by contacting us: curation-support@humanbrainproject.eu

More information: <https://www.humanbrainproject.eu/en/explore-the-brain/share-data/>

Help us realize the promise of Open Data!

If you are ready to publish your data, and want to maximize the impact of your research by making it available to the broader scientific community you need to know what the HBP Data Curation team can do for you! The recently launched HBP Curation Support Service offers data and metadata management services, along-side a long-term data storage solution. HBP Curation Support Service can ensure your published data is FAIR - Findable, Accessible, Interoperable and Re-usable. Be FAIR with your data and contact us at: curation-support@humanbrainproject.eu



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Dance Your Ph.D.' contest
Winner Biology category and Audience Favorite:

Olivia Gosseries, "Measuring consciousness after severe brain injury using brain stimulation"



Olivia Gosseries (U Liege) participated in Science Magazine's contest "Dance Your Ph.D." and won in the categories *Biology* and *Audience Favorite*. Within HBP the scientist contributes to the research area Systems and Cognitive

Neuroscience. For more about the contest, see [here](#) For more on HBP's research into consciousness, see [here](#)

Project News

EBRA Call for Clusters launched



The EBRA consortium has launched a Call for Clusters aimed to promote co-operation and exchange between brain research projects and networks. The European Brain Research Area project EBRA was created as a catalysing platform for brain research stakeholders to streamline and better co-ordinate brain research across Europe while fostering global initiatives. The Human Brain Project is a member of the consortium. [More](#)

HBP Launches High Potential Mentoring Project On International Women's Day



The HBP has launched a High Potential Mentoring Programme for Early Career Stage Scientists and Managers of Science, developed by the Gender Advisory Committee. The programme will support both women and men with the aim of improving the gender balance in all disciplines contributing to the success of the HBP. [More](#)

Publication on Gender Bias in Neuroscience



Neuro-Opinion | [Free Access](#)

Gender bias in (neuro)science: facts, consequences and solutions

Jessica Schrouff, Doris Pischke, Sarah Genon, Gregory Fryns, Ana Luísa Pinho, Ellana Vassena, Antonietta G. Liuzzi, Fabio S. Ferreira

First published: 27 February 2019 | <https://doi.org/10.1111/ejn.14397>

HBP neuroscientists Sarah Genon and Ana Luísa Pinho are among the authors of a new article reviewing evidence on gender bias in their field and proposing solutions on various levels. In support of the findings, the paper has been signed by a number of leading neuroscientists, among them HBP Scientific Director Katrin Amunts. [More](#)

HBP at Brain Research and Tech Conference in Brussels



HBP research was presented by leading scientists from the project at the conference “Brain Research & Tech: How can Horizon Europe improve human brain health and performance?”, which took place in March at the premises of the Committee of the Regions in Brussels. [More](#)

International Brain Initiative met in Shanghai



At the International Brain Initiative coordination meeting in Shanghai, China, representatives from seven National Brain Initiatives gathered to discuss brain research, collaborative science, and data sharing. The HBP was represented by Infrastructure Operations Director Prof. Jan Bjaalie. [More](#)

Events and Dates

April and beyond

Biostart! Innovation & entrepreneurship launchlab

Universidad Politécnica de Madrid, Spain

May 22, 2019 – May 24, 2019

This 3-day hands-on workshop gives participants the opportunity to access valuable training, expertise in different areas, feedback and networking opportunities, in order to support them in bringing their research results in the fields of neuroscience, computing and brain-related medicine to market. Application deadline: *15 April 2019*

Spiking neural networks: Applications to computing, algorithmics, and robotics

Technical University of Munich, Germany

June 27, 2019 – June 28, 2019

This joint workshop between HBP and the EU-funded initiatives in robotics, TETRAMAX1 and TERRINet2, is a great opportunity for neuroscientists and HBP to reach out and engage with the robotics and research infrastructure communities.

Application deadline: *20 May 2019*

Neurobiology for non-specialists: Studying the brain

Medical University Innsbruck, Austria

July 1, 2019 – July 3, 2019

This workshop especially addresses early-career researchers who are not familiar with the field of neuroscience and/or neurobiology. It covers a wide range of topics from basic neurobiology over cells biology, electrophysiology to big data handling. Application deadline: *27 May 2019*

New horizons in brain medicine: From research to clinics

Medical University Innsbruck, Austria

July 3, 2019 – July 5, 2019

The aim of this interactive workshop is to introduce and deepen the understanding of brain medicine for non-specialists with the most recent advances in research of neurodevelopmental, neurodegenerative and neuropsychiatric disorders.

Application deadline: *29 May 2019*

High Performance Computing for neuroscience: Hands-on introduction to supercomputing usage, tools and applications

Forschungszentrum Jülich, Germany

July 9, 2019 – July 11, 2019

This HBP Education Workshop will set the grounds for the students to get started with high-performance computing (HPC)-based research and thus lays the foundation for them to advance the state of the art in their fields. Application deadline: *3 June 2019*

Neuroscience, robotics, AI and medical informatics: New insights with diversity & ethics

Graz University of Technology, Austria

26-27 September 2019

In this 2-day workshop, scientists from different fields like neuroscience, robotics, AI and medical informatics will provide you with insights on how they consider variables such as sex, gender, age etc.

Application deadline: *19 August 2019*

NEST Conference 2019

June 24, 2019 – June 25, 2019

Norwegian University of Life Sciences (NMBU), Ås, Norway

Registration for the NEST Conference 2019 is now open!

For more information about registration and the preliminary program, please visit:

<http://www.nest-initiative.org/conference>. Abstract submission deadline: *April 15*



Find further events at: <https://www.humanbrainproject.eu/en/follow-hbp/events/>
