



Human Brain Project Newsletter

July 2018

Dear Sir or Madam,

Please find below a short overview on recent research and project news from the Human Brain Project (HBP) in July 2018, as well as upcoming HBP events.

Best Wishes, HBP editorial office

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Research News

Interview with HBPs Mavi Sanchez-Vives on the study of conciousness



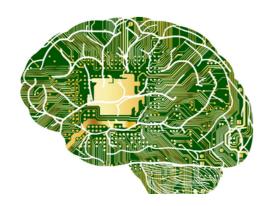
The first major international conference of HBP, held recently in Barcelona, focused on challenges and advances in understanding consciousness. In this interview, local organiser of the conference Mavi Sánchez Vives (SP3) talks about recent developments in the field and the role of consciousness research in HBP. More

The Virtual Brain neuroinformatics platform joins HBP



Charité - Universitätsmedizin Berlin and the Berlin Institute of Health (BIH) are pleased to announce that 'The Virtual Brain' neuroinformatics platform has joined the Human Brain Project. 'The Virtual Brain' is an open-source simulation platform that allows to combine experimental brain data from a wide range of sources for basic science as well as clinical use, e.g. by producing personalized brain models of patients. More

Progress in brain simulation on neuromorphic computers



HBP researchers in Manchester and Jülich have compared the accuracy, speed and energy efficiency of the neuromorphic system SpiNNaker with that of the supercomputing software NEST during a large-scale brain simulation. The findings take SpiNNaker one step closer to simulating brain neural networks in real-time. More

EC Digital Single Market Vice President blogs about HBP



Andrus Ansip, European
Commission Vice-President for the
Digital Single Market, has highlighted
HBPs progress in an article for the
EC blog portal titled "Mapping the
brain: computer science teams up
with neuroscience in frontier EU
research". More

Challenges to Human Dignity from Interventions in the Brain



HBP Scientific Director Katrin
Amunts spoke at the tenth
anniversary meeting of the German
Ethics Councel about ethical
questions arising from brain science,
including considerations about work
inHBP. The meeting took place
under the theme "Human Dignity in
Our Hands – Challenges from New
Technologies" in Berlin. More

Join us for the HBP Open Day 2018 in Maastricht!

Maastricht University is honoured to organise this year's HBP Open Day – Enhancing our understanding of the brain, free and open to the public. The Open Day will offer a platform for some of the most prominent researchers in the neuroscience community to engage with the public. At a dedicated HBP Science Market, visitors can learn about HBP from different virtual and physical exhibits, such as exploring the brain in virtual and augmented reality or interacting with smart robots. **Registrations are open now - find more information at:**https://www.hbpopendaysummit-2018.org/openday/programme

Project News



Announcement of the HBP Infrastructure Voucher Programme

As part of its SGA2 activities (2018-2020) the Human Brain Project has developed an Infrastructure Voucher Programme that will enable non-HBP researchers to secure HBP engineering solutions for their challenging scientific problems. The programme, which will get underway in August 2018, has been developed to open the HBP's platform infrastructure to meet the needs of the user community in a new dynamic way. It is open to all non-HBP researchers worldwide, with target groups from academic and medical research (including hospitals), and industry and pharma (SMEs and companies). For more information see here Contact: info@opencalls.humanbrainproject.eu



HBP hosts International Brain Initiative

Representatives of the International Brain Initiative (IBI) met on July 5, in Geneva, to further cooperation between the world's major brain research projects. The meeting was hosted by HBP with facilitation from The Kavli Foundation and EPFL. More



New Call for Scientific Chairs of Education workshops

HBP Education is looking for Scientific Chairs for the 2019 Education Workshops. HBP Education Workshops are short teaching formats of two to three days of length. The chairs can come from within or outside of the HBP. For 2019, any date in May, June and July can be claimed for a workshop. More



Report on the HBP Curriculum Workshop in Berlin In early July the HBP Education Programme organised the first of four face-to-face workshops of the 2nd HBP Curriculum Workshop Series in Berlin, Germany. The workshops were held just before the FENS Forum, with courses on brain medicine for non-specialists, neurobiology for non-specialists, ICT for non-specialists

and entrepreneurship in neuroscience. More

Events and Dates

August and beyond

<u>HBP School - The HBP Human Brain Atlas: Neuroscientific basis, tools and applications</u>

3-7 September 2018

Düsseldorf/Jülich, Germany; Maastricht, Netherlands

This HBP School will teach neuroanatomy and cognitive function of the human brain, including hands-on dissection courses, and give an overview about selected methodologies used in the HBP to investigate the structural and functional organisation of the human brain. *Late application is still possible!*

HBP School "Barcelona Cognition, Brain and Technology Summer School"

Barcelona, Spain 3-14 September 2018

The BCBT School promotes a shared systems-level understanding of the functional architecture of the brain and its possible emulation in artificial systems. It addresses the investigation of learning and memory, brain function and behaviour. *Application deadline extended: 31 July 2018!*

HBP School "The Brain Simulation Platform of the Human Brain Project"

Mondello (Palermo), Italy

17-21 September 2018

This School will introduce participants to the HBP Brain Simulation Platform, with the main aim to train users on how to exploit the possibilities offered by the Platform to implement cellular level computational models, to use High Performance Analytics and Computing Platform systems to configure and run a simulation, and to visualise/analyse the results. Application before 31 July: 400 €, from 1 August - 10 September: 450 €, Application after 10 September: 500 €

Eighth SpiNNaker Workshop

University of Manchester

Sept. 11, 2018 - Sept. 14, 2018

The workshop will focus on simulation of spiking neural networks using PyNN 0.9 on the

SpiNNaker platform. Attendees should have some experience with Python. For the new neuron models and learning rules topics, some background in C is recommended.

HBP at Life Sciences Baltics 2018

Vilnius, Lithuania

September 26-27 2018

Life Sciences Baltics 2018 will gather more than 1,500 world-class biotechnology, pharmaceutical and medical devices experts. HBP has secured a booth and 5 exhibitors' badges are available for HBP partners who would like to showcase HBP achievements and connect with potential industry partners. The badges allow full access to the event, the Welcome Reception and the Gala Dinner networking evenings. HBP partners should communicate their interest in participation to SP managers.

Latest program: https://lsb2018.com/program/ Contact: t.kokan@icloud.com

Save the Date: HBP Jülich Colloquium

The Colloquium takes place October 4, 2018 at Forschungszentrum Juelich. Highlighted content includes:

- Fenix infrastructure
- Neuronal networks
- · Brain-inspired cognitive architectures
- Contributions of Jülich's Supercomputing and Modeling for HBP
- Commercialization prospects of neuromorphic computing
- Federation propects for the medical informatics platform
- Machine Learning panel discussion, with an emphasis on Deep Learning Website and registration details will follow in the next HBP Newsletter.

HBP Open Day 2018

Enhancing our understanding of the brain

15 October 2018, MECC, Maastricht, Netherlands

The HBP Open Day is an annual outreach event for the Human Brain Project to present its work to scientists, the media, the public and other stakeholders. The Open Day includes presentations by esteemed experts coming from a range of disciplines related to the HBP's work, such as the famous Dutch brain researcher Prof Dick Swaab. The event will also host the HBP Science Market, an exhibition of cutting-edge technology and scientific results developed within the HBP. Visitors will get the opportunity to directly interact with robots, learn about brain simulation and explore collaboration opportunities with experts from the project. Participation is free, registration is required.

For more information: https://www.hbpopendaysummit-2018.org/en

Contact: helpdesk@klinkhamergroup.com

Dual Use and Responsible Research: Ethical Challenges

Karolinska Institutet Stockholm, Sweden

Nov. 15, 2018 - Nov. 17, 2018

This workshop aims to provide participants with insights on ethical aspects of dual-use research in neuroscience and Responsible Research and Innovation (RRI).

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