

SP12 Overview

SP12

Ethics and Society is part of the Human Brain Project's research core. Through research and ethics management, SP12 promotes Responsible Research and Innovation (RRI) practices within the HBP to help shape the direction of the HBP in ethically sound ways.

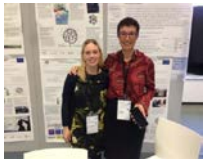
SP12 focuses on foresight, neuroethics, philosophy, public engagement, and researcher awareness. By carrying out research to identify and address conceptual, social, ethical, legal and cultural implications and challenges raised by HBP research.

Activities:

- Creating connections across the HBP to work on **community-building** for HBP infrastructures.
- Carrying out systematic **foresight exercises** to identify and evaluate the potential impact of the new knowledge and technologies produced by the HBP
- Analysing conceptual underpinnings and implications of HBP research, to identify and articulate philosophical, ethical (notably neuroethical), issues raised by such research.
- Embedding **frameworks** in the HBP through works on Standard Operating Procedures (SOPs), data policy manual, data governance working group, compliance and ethics rapporteurs programs.
- Organising **public engagement** and citizen dialogues across Europe (online and face-to-face), including meetings, online consultations and Stakeholder Forums.
- **Collaborations** with SP6 on the concept
- of simulation, SPs 3 and 4 on the topic of consciousness, SP1, 2 on cultural impact on brain architecture and neuronal epigenesis, and SP2, SP3 and SP8 on stakeholder engagement in clinical practise



- Development of **Briefing Reports on Dual Use**, contributing to the forthcoming Opinion Report on Dual Use:
 - **Evers K, Farisco M, Giordano J, Salles A** (2017) *Dual Use in Neuroscientific and Neurotechnological Research. A Report on Background, Developments and Recommendations for Ethical Address, Assessment and Guidance of Human Brain Project Activities*. HBP Neuroethics and Philosophy (SP-12) CRB-Uppsala University Report.
 - **Christine, A., Datta, D., Mahfoud, T., and Rose N** (2017) *Dual Use in Neuroscience and Neurotechnology, A Scoping Report*. HBP Foresight Lab (SP12), King's College London, pp 1-27.
 - **Riisgaard. K., & Bitsch L.** (2017) *Back ground report Dual Use*. HBP Public Engagement and Dialogue (SP12) [Fonden Teknologirådet](#)
 - **Stahl., B & Rainey, S.** (2017) *Dual Use Background Reports*. HBP Ethics Management (SP12) De Mont University
- Completion of **Opinion on Data Protection and Privacy** and implementations of **Action Plan**, derived from the Opinion on Data Protection and Privacy. Rose N, Salles A, Domingo-Ferrer J, Spranger T. Stahl B (editor).
- Development of **Standard Operating Procedures (SOPs)** for ethics compliance (e.g. research integrity), and establishment of collaboration with **SCOPE** for monitoring compliance of partnering projects
- Management of the **Data Governance Working Group (DGWG)** and **Data Policy Manual**
- Coordination and management of the **Ethics rapporteur program** and Point of Registration (**PORE**)



P12 SGA1 Publication Highlights

SP12

- Aicardi, C., Reinsborough, M., & Rose, N. (2017). The integrated Ethics and Society Program of the Human Brain Project: Reflecting on an ongoing experience. Special Issue: Neurotechnology and Society. Towards Responsible Innovation. *Journal of Responsible Innovation*. 1-25 <http://dx.doi.org/10.1080/23299460.2017.1331101>
- Changeux, J.P. & Christopoulos, A. (2016). Allosteric Modulation as a Unifying Mechanism for Receptor Function and Regulation. *Cell*. 25(166):1084-102
- Changeux, J.P. (2017). Climbing Brain Levels of Organisation from Genes to Consciousness. *Trends in Cognitive Science*. 21(3): 168-181.
- Evers K & Changeux JP (2017) Proactive epigenesis and ethical innovation: A neuronal hypothesis for the genesis of ethical rules. Response by the authors. Evers K, Changeux JP. *EMBO Rep*.
- Evers K. (2017) The contribution of neuroethics to international brain research initiatives. *Nature Reviews Neuroscience*; 18:1-2.
- Evers K., Changeux JP. (2016) Proactive epigenesis and ethical innovation: A neuronal hypothesis for the genesis of ethical rules. *EMBO Reports* 17 (10): 1361-1364
- Farisco M & Evers K (Eds.) (2016) Neurotechnology and direct brain communication. New insights and responsibilities concerning speechless but communicative subjects, Routledge. Taylor&Francis Group. London and New York
- Koukoulis F, Rooy M, Tziotis D, Sailor KA, O'Neill HC, Levenga J, Witte M, Nilges M, Changeux JP, Hoeffler CA, Stitzel JA, Gutkin BS, DiGregorio DA, Maskos U. (2017). Nicotine reverses hypofrontality in animal models of addiction and schizophrenia. *Nature Medicine*. 23(3): 347-354
- Rose, N. (2016) Reading the Human Brain: How the Mind Became Legible, *Body & Society*, Online First, 1-38: DOI: 10.1177/1357034X15623363
- Rose, N., D. Fitzgerald & I. Singh (2016). Revitalizing sociology: urban life and mental illness between history and the present. *British Journal of Sociology*, 67(1), 138-160.
- Salles A. (2017) Neuronal Epigenesis and Ethics. DOI 10.15252/embr.201744697| Published online 25.07.2017 *EMBO reports*.



SP12 Engagement Highlights

SP12

SP12 endeavours to engage with researchers across the HBP and public audiences through webinars, workshops, 'brown bag lunches', and other channels of engagement.

Engagement Activities:

- HBP-wide survey on implementation and gaps in terms of Opinion recommendations; SP5, SP8, SP11, SP12, DGWG
- Pilot Citizen online survey in Denmark: on robotics and supercomputing
- Citizens newsletter: Use of personal data in research projects and on use of personal data to the HBP.



Highlight SGA1 Events:

- Webinar on IC co-organised, including internal and external stakeholders, to provide feedback and validation of SOP
- Webinar on Informed Consent in the HBP, co-organised by 12.1.2 and 12.3.2, 20 registered participants. Held: 2017/02/06
- Aicardi, C and Mahfoud, T. The complex and conflicted ethics of collaboration. Invited plenary keynote dialogue. *1st HBP Student Conference: Transdisciplinary Research Binding Neuroscience, Brain Medicine and Computer Science*. Vienna, 8-10 February 2017.
- Rose, N. Masterclass on neurosciences, biopsychiatry and resilience, University of New South Wales, Sydney, 2 March 2017
- SP12, EAB and Ethics Rapporteurs joint workshop with the scope to provide input for the Dual Use Opinion
- Co-organizing HBP's first science conference Workshop on Consciousness with SP03, SP04, CDP03.
- Participated the HBP Open Day at the 2016 Summit in Florence
- Supported SP11 in the November 28-29, 2016 STOA exhibition at the European Parliament Brussels - advising on reaching high-level policy-makers

