Imaging Genetics of Human Brain Laterality

1-day workshop, 30 January 2018, Max Planck Institute for Psycholinguistics

Draft Program:

8.40 Welcome, coffee

- 9.00 Introduction by Clyde Francks (MPI Nijmegen)
- 9.10 Session1: Laterality in the organization of brain and mind
 - 9.10 Dorothy Bishop (Oxford) 'Individual variation in language laterality: Finding a meaningful phenotype'
 - 9:40 Manuel Carreiras (San Sebastian)
 - 10:10 Nathalie Tzourio-Mazoyer (Bordeaux)

10:40 Break

10:55-12:25 Session 2: Developmental and evolutionary origins of brain laterality

- 10.55 Myriam Roussigne (Toulouse)
- 11.25 Guy Vingerhoets (Ghent) & Merel Postema (Nijmegen)
- 11.55 Carolien de Kovel (Nijmegen)

12.25 Lunch

13:10 Session 3: Insights from atypical brain laterality

13.10 Bernard Mazoyer (Bordeaux) & Amaia Carrion Castillo (Nijmegen)

13.40 Lise van der Haeghen (Ghent Belgium)

14.10 Marc Joliot (Bordeaux) 'Asymmetries in the resting-state intrinsic connectivity organization'

14.40 Break

14.55 Session 4: New aspects of population variation in brain laterality

14.55 Sebastian Ocklenburg (Bochum) *Neurogenetics of the corpus callosum: Using advanced white matter imaging techniques to understand the genetics of interhemispheric interaction*

- 15.25 Fabrice Crivello (Bordeaux)
- 15.55 Xiangzhen Kong (Nijmegen)

16:10 Coffee and discussion

To what extent can the following questions already be answered by the field, and what steps will be required to make further progress:

- What are the core mechanisms that give rise to brain laterality?
- Which factors create variation in brain laterality?
- What does laterality tell us about the relationships between genes, brains, cognition and behaviour, for example with respect to language?
- To what degree are altered brain lateralities associated with cognitive performance or disorders?
 - What is evolutionarily ancient and what is new about human brain laterality?

17:10 End

18:00 Restaurant