

# **Postgraduate studies in Neuroscience and Brain Health**

## Program overview

## The healthy brain

Neuroanatomy <i>Lecture + practical</i>	Prof. Dr. Mathieu Sprengers Prof. Dr. Anne Sieben
Neurophysiology	Prof. Dr. Mathieu Sprengers
Brain functions	Prof. Dr. Peter de Weerd Prof. Dr. Vincent Van de Ven
Introduction to brain health	Prof. Dr. Paul Boon
Nutrition and the brain <i>Lecture + practical</i>	Prof. Dr. Paul Boon
Sleep and the brain <i>Lecture + practical</i>	Prof. Dr. Karlien Dhondt
Stress and the brain <i>Lecture + practical</i>	Dr. Stefanie De Smet (PhD)
Exercise and the brain <i>Lecture + practical</i>	Prof. Dr. Ruth Van der Looven
Music psychology <i>Lecture + practical</i>	Dr. Marc Vidal Badia (PhD)
Mental health <i>Lecture + practical</i>	Dr. Eva De Jaegere (PhD)

## The diseased brain

Neuroinflammatory disorders	Prof. Dr. Guy Laureys
Dementia <i>Lecture + practical</i>	Dr. Marta Scarioni

Stroke	Prof. Dr. Veerle De Herdt
Epilepsy <i>Lecture + practical</i>	Prof. Dr. Evelien Carrette
Movement disorders	Dr. Alexandra Boogers (PhD)
Disorders of Consciousness	Prof. Dr. Alfred Meurs
Brain tumors	Prof. Dr. Tom Boterberg
<b>Research methods in neuroscience</b>	
EEG/MEG	Prof. Dr. Evelien Carrette
<i>Lecture + practical</i>	Prof. Dr. Robrecht Raedt
(f)MRI	Prof. Dr. Eric Achten Prof. Dr. Christian Vanhove
PET/SPECT	Dr. Donatienne Van Weehaeghe (PhD) Dr. Sara Neyt (PhD)
Neurogenetics	Prof. Dr. Bjorn Menten
Opto- and chemogenetics	Prof. Dr. Robrecht Raedt
Photometry	Prof. Dr. Robrecht Raedt
4Brain lab + infinity core visit	Prof. Dr. Robrecht Raedt
<b>Neuromodulation</b>	
Deep brain stimulation	Prof. Dr. Mathieu Sprengers
Vagus nerve stimulation	Dr. Ann Mertens (PhD)
Non-invasive neurostimulation (TMS, TES, TUS)	Dr. Ann Mertens (PhD)
<b>Neuropharmacology</b>	
Introduction to	Prof. Dr. Lindsey Devisscher

neuropharmacology	
Major classes of drugs in neurology	Prof. Dr. Serge Van Calenbergh
From drug discovery to late stage development	Dr. Rafal Kaminski (PhD)
Radiopharmacology	Prof. Dr. Filip De Vos
<b>Applied neurosciences</b>	
Neuroeconomics and neuromarketing	Prof. Dr. Jan Engelmann
Neurotechnology	Prof. Dr. Emmeric Thange
AI in neuroscience	Prof. Dr. Femke Ongenae
Brain computer interface (BCI)	Prof. Dr. Marc Vanhulle
Basic programming	Prof. Dr. Thomas Tarnaud
Health data in the future	Hans Constandt (MSc.)
Data management	Dr. Philippe Van Rompaey
Data analysis	Prof. Dr. Sofie Van Hoecke
Awareness, advocacy and fundraising	Michael Crean (MA)
Science communication	Tom De Moor (MA)
Clinical trial development and regulatory affairs	Dr. Philippe Van Rompaey
The role of neuroscience in HR	Vanessa Delacourt (MSc.)
Neuroethics and philosophy	Prof. Dr. Farah Focquaert
Valorisation	Dr. Frederik Leys (PhD)
Global brain health	Dr. Peter Dedeken (PhD)

