Neuroradiology & Functional Neuroanatomy:
Correlating Anatomical, Brain Imaging and Clinical Studies

Organized by Prof Naidich, Prof Yeo and Prof Yousry

Monday 16 April – Thursday 19 April 2018

Lecture Theatre, 33 Queen Square, London

PROGRAMME

Anatomical localisation of function is a fundamental principle in the neurosciences. This four day course will correlate gross anatomy with neuroimaging and functional MRI to illustrate normal neurological function, the alterations that attend disease, and the bases for the clinical features seen in patients.

Monday 16 April 2018

09.00 – 09.05	Welcome address and Overview	*Prof T. Yousry*
09.05 – 09.50	Surface anatomy of the brain on MRI	*Prof T. Naidich*
09.50 – 10.30	Imaging the developing brain	*Prof P. Griffiths*

Coffee/Tea Break

11.00 – 11.45	Pre- and postnatal development of the white matter	*Prof P. Griffiths*
11.45 – 12.30	Functional anatomy of the cerebellum	*Prof C. Yeo*

Lunch

13.30 – 15.00	"Hands on" Anatomy Laboratory	
	Anatomic demonstration: 30minutes, then specimen reviews & dissections *Prof M. Braun, Prof T. Naidich, Prof C. Yeo, Prof T. Yousry*	

Coffee/Tea Break

15.45– 16.30	Cytoarchitectonic organization of the cerebral cortex	*Prof K. Amunts*
16.30 – 17.15	Transmitter and receptor distributions in the cerebral cortex	*Prof K. Zilles*

17.30 **Welcome Reception**

Foyer, 33 Queen Square

Tuesday 17 April 2018

09.00 – 09.45	Phylogenetic evolution of the brain in humanoids	*Prof M. Braun*
09.45 – 10.30	Methods of Identification of the central sulcus	*Prof T. Yousry*

Coffee/Tea Break

11.00 – 11.45	Myeloarchitecture of the cerebral cortex and MRI	*Prof K. Zilles*
11.45 – 12.30	Association pathways	*Dr M. Catani*
12.30 – 13.15	Motor Cortex and Descending Motor Pathways	*Prof R. Lemon*

Lunch

14.15 – 15.30	"Hands on" anatomy laboratory Anatomic demonstration: 30 minutes, then specimen reviews & dissections *Prof M. Braun, Prof T. Naidich, Prof C. Yeo, Prof T. Yousry*	
16.15 – 17.00	MR of the basal ganglia	*Prof T. Naidich*
17.00– 17.45	Basal ganglia: connectivity, chemical architecture and function	*Prof S. Davies*

Wednesday 18 April 2018

09.00 – 10.30	"Hands on" PACS workstations: Identification of brain structures *Dr H. Chandrashekar, Prof T. Naidich, Dr S. Shah, Prof T. Yousry, Dr M. White*	

Coffee/Tea Break

11.00 – 11.30	Anatomy of the Nucleus basalis of Meynert and the pedunculopontine region: The cholinergic system and Alzheimer's disease	*Prof K. Zilles*
11.30– 12.00	MR imaging anatomy of the basal forebrain	*Prof T. Naidich*
12.00– 12.45	The cholinergic system in the basal ganglia and PD	*Prof K. Zilles*

Lunch

13.45 – 14.30	Insights into the anatomy and function of VR-spaces	*Prof R. Weller*
14.30 – 15.15	Toward a better understanding of Hydrocephalus	*Prof T. Naidich*

Coffee/Tea Break

15.45 – 16.30	Protein homeostasis as critical in neurodegenerative disease: genetic evidence	*Prof J. Hardy*
16.30 – 17.00	Deep brain stimulation of the cholinergic nuclei- PPN & NBM	*Dr T. Foltynie*
17.00 – 17.30	Clinical and imaging features of Huntington's disease	*Dr Rachael Scahill*

17.30 **Farewell Reception**

Foyer, 33 Queen Square

Thursday 19 April 2018

09.00 – 10.30	"Hands on" PACS workstations: Identification of brain structures *Dr H. Chandrashekar, Prof T. Naidich, Dr S. Shah, Prof T. Yousry, Dr M. White*	

Coffee/Tea Break

11.00 – 11.45	Cyto- and chemoarchitectonics of the entorhinal cortex	*Prof K. Zilles*
11.45 – 12.30	Gross anatomy of the hippocampal formation	*Prof T. Naidich*

Lunch

13.15 – 14.00	The adolescent brain	*Prof S. Blakemore*
14.00 – 14.45	Embryology, anatomy and phylogeny of the anterior, hippocampal and great commissures	*Prof T. Naidich*
14.45 – 15.30	Functional anatomy of the corpus callosum	*Prof T. Yousry*

End of Course – closing remarks from The Organisers: Prof Yousry, Prof Yeo, Prof Naidich

15.30 **Goodbye Drinks**

Foyer, 33 Queen Square

Prof K Amunts
Institute of Neuroscience and Medicine
INM-1, Research Centre Juelich
Germany. 52425
k.amunts@fz-juelich.de

Dr Thomas Foltynie
Box 146, NHNN
Queen Square
London WC1N 3BG
t.foltynie@ucl.ac.uk

Dr S Shah
Lysholm Department of Neuroradiology
The National Hospital for Neurology & Neurosurgery
London WC1N 3BG
sachit.shah@nhs.net

Prof S Blakemore
Institute of Cognitive Neuroscience
University College London
London. WC1N 3AR
s.blakemore@ucl.ac.uk

Prof John Hardy
Department of Molecular Neuroscience
Queen Square House
Queen Square, London,
WC1N 3BG
j.hardy@ucl.ac.uk

Prof R Weller
University of Southampton
School of Medicine
University Rd,
Southampton SO17 1BJ
row@soton.ac.uk

Prof M Braun
Neuroradiology Department
University Hospital
Nancy 54000
France
marc.braun@univ-lorraine.fr

Dr C Hoskote
Lysholm Department of Neuroradiology
The National Hospital for Neurology & Neurosurgery
Queen Square
London WC1N 3BG
hoskote.chandrashekar@nhs.net

Dr M White
Medical Physics and Biomedical Engineering, UCLH NHS Foundation Trust
London
mark.white@ucl.ac.uk

Dr M Catani
Department of Forensic & Neurodevelopmental Sciences
Institute of Psychiatry PO50
King's College London
De Crespigny Park
London SE5 8AF
marco.1.catani@kcl.ac.uk

Prof R Lemon
Sobell Department of Motor Neuroscience and Movement Disorders
UCL Institute of Neurology
Queen Square House, London
r.lemon@ucl.ac.uk

Prof C Yeo
Department of Neuroscience, Physiology and Pharmacology
University College London
London WC1E 6BT
c.yeo@ucl.ac.uk

Prof S Davies
Department of Cell and Developmental Biology
University College London
Gower Street
London WC1 6BT
s.w.davies@ucl.ac.uk

Prof T Naidich
Mount Sinai School of Medicine
One Gustave Levy Place
New York 10029-6574
thomas.naidich@mountsinai.org

Prof T Yousry
Department of Brain Repair & Rehabilitation
UCL Institute of Neurology
Queen Square
London WC1N 3BG
t.yousry@ucl.ac.uk

Prof P Griffiths
Academic Unit of Radiology
University of Sheffield
Royal Hallamshire Hospital
Sheffield S10 2JF
p.griffiths@sheffield.ac.uk

Dr Rachael Scahill
Neurodegenerative Diseases
Institute of Neurology
Faculty of Brain Sciences
London
r.scahill@ucl.ac.uk

Prof K Zilles
Institute of Neuroscience and Medicine
Research Centre Juelich
GERMANY 52425
k.zilles@fz-juelich.de