

# Integrative Approaches to Brain Complexity (Hinxton, UK)

## Session 1 MAPPING VISUAL PATHWAYS I

THURSDAY 9/27/2007, 2:00 PM

N. Logothetis

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
1	Logothetis	Electrical microstimulation and fMRI	25
2	Goodhill	Optimal signal processing for axonal chemotaxis	25

## Session 2 MAPPING VISUAL PATHWAYS II

THURSDAY 9/27/2007, 4:00 PM

T. Sejnowski

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
3	Sejnowski	Models of subcellular signaling	25

## KEYNOTE LECTURE

THURSDAY 9/27/2007, 4:00 PM

Semir Zeki, University College London

## Session 3 MOLECULAR MECHANISMS OF DISEASE

FRIDAY 9/28/2007, 9:00 AM

J. Noebels

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
4	Heintz	Molecular phenotyping by BACarray translational profiling	25
	Darnell	No title	25
5	Bird	MeCP2 and RETT syndrome	25

## Session 4 MAPPING OTHER PERCEPTUAL PATHWAYS

FRIDAY 9/28/2007, 11:00 AM

G. Laurent

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
6	Silver	New optical and computational methods for studying neuronal networks	25
7	Laurent	Local circuits for olfactory computation	25

## Session 5 POSTER SESSION

FRIDAY 9/28/2007, 6:00 PM

#	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
8	Ali	Pleiades Promoter Project—Human minipromoters primer design process for region-specific brain expressed genes	
9	Weber	Severe mental retardation with breathing abnormalities (Pitt-Hopkins Syndrome) is caused by haploinsufficiency of the neuronal bHLH transcription factor <i>TCF4</i>	
10	Burger	Genome-wide analysis of aging and learning-related genes in the hippocampal dentate gyrus	
11	Clapcote	Mouse ENU mutants support a role for <i>DISC1</i> in schizophrenia and depression	
12	Darnell	Crosslinking-IP (CLIP) identification of novel pre- and post-synaptic RNA targets of the fragile X mental retardation protein, FMRP	

13	Feldcamp	Prepulse inhibition and brain gene transcription across 6 inbred mouse strains
14	Gilby	Teasing out genetic versus epigenetic contributions in a rat model of seizure susceptibility and comorbid behaviors
15	Gleeson	Using NeuroML and neuroConstruct to build neuronal network models for multiple simulators
16	Iwamoto	Genome analysis of the single neurons in human brain using SNP arrays
17	Jablensky	Neurocognitive endophenotypes and gene network analysis in schizophrenia
18	Kedracka-Krok	Analysis of genomic and proteomic alterations upon administration of imipramine in the hippocampus of rats subjected to chronic mild stress
19	Kerner	Polymorphisms in the AMPA receptor 1 gene (GRIA1) are associated with psychotic symptoms
20	Kirkby	High speed 3D 2-photon random access microscopy for optical functional imaging of neural networks
21	Kubota	Gene expression profile in the brain of animal model for bipolar disorder
22	Lazic	Integrating gene expression, plasticity, and neurogenesis as predictors of performance on behavioral tests
24	Mead	Exploring protein interaction networks for neuregulin, dysbindin, and DISC1 to identify schizophrenia related pathways
25	Nasi	Everything you always wanted to know about...Neurotrophin signaling
26	Schmouth	Pleiades promoter project—Generation of mouse strains containing human BAC constructs to characterize region-specific brain expression pattern
27	Seemann	Non-coding RNAs in the Sino-Danish PigEST resource
28	Sigala	Neural coding for sequential task events in the monkey prefrontal cortex
29	Khaitovich	Gene expression patterns in primate brain development and aging
30	Stottmann	An ENU screen for genes required for mammalian forebrain development
31	Swanson	The Pleiades Promoter Project—A public resource of human minipromoters for region-specific expression in the brain
32	Teichmann	Molecular mechanisms regulating synaptic target selection in a <i>C. elegans</i> motoneuron
33	Tomasi	Connectivity of complex networks—A Monte Carlo-based approach for dynamic causal modeling

**Session 6 NETWORK IMAGING**

SATURDAY 9/29/2007, 9:00 AM

J. Rossier			
<b>#</b>	<b><u>Iname</u></b>	<b><u>Title</u></b>	<b><u>Talk Length</u></b>
	Callicott	No title	25
	Draganski	No title	25
34	Pautler	Molecular imaging strategies in mouse models—The places we'll go, the things we will see	25

**Session 7 MOLECULAR NETWORKS**

SATURDAY 9/29/2007, 11:00 AM

S. Grant

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
35	de Leeuw	Pleiades minipromoter ES cells as tools for region-specific gene therapy delivery in adult brain	25
36	Grant	Unraveling synapse complexity	25

**Session 8 DEVELOPMENTAL DISORDERS**

SATURDAY 9/29/2007, 2:00 PM

N. Heintz

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
37	Loturco	Combinatorial mechanisms and plasticity of neuronal positioning in developing cerebral cortex	25
38	Hatten	Genes involved in CNS cortical histogenesis	25
40	Rossier	Characterization and roles of neocortical interneurons	25

**Session 9 NETWORK SYNCHRONY AND ENSEMBLES**

SATURDAY 9/29/2007, 4:30 PM

S. Grillner

<u>#</u>	<u>Iname</u>	<u>Title</u>	<u>Talk Length</u>
41	Grillner	The intrinsic function of neuronal networks controlling motion—From ion channels to synaptic interaction and behavior	25
42	Landisman	Electrical synapses in thalamic circuitry—Function and modulation	25
43	Wilson	Hippocampal memory formation and reactivation	25