



UCL Centre for Developmental Cognitive Neuroscience

e-Newsletter December 2011

Welcome to the second newsletter of the Centre for Developmental Cognitive Neuroscience (CDCN). We hope you will find it useful. If you would like to contribute to this monthly newsletter, for example by providing information about events, research projects or any other news about developmental cognitive neuroscience, please contact cdcن@ucl.ac.uk

Recent Events

CDCN Autumn Workshop October 2011 Workshop

UCL's Centre for Developmental Cognitive Neuroscience recently held its Autumn Workshop on the theme 'The Emerging Social Brain' presented by five leaders in the field.

This exciting workshop was jointly organised by Michelle de Haan, Steering Committee member of the CDCN, and Mark Johnson Director of the **Centre for Brain and Cognitive Development, Birkbeck** and brought together five distinguished professors in the field of developmental neuroscience to give talks on the topic of emerging social skills during infancy. **Professor Murray**, who is based at the School of Psychology and Clinical Language Sciences at Reading University, has done extensive work on the effects of postnatal depression (PND) on children's emotional, cognitive and social development. She spoke about the need to cater for the different developmental profiles that are brought on by distinct types of PND. Our second speaker, **Professor Fearon**, is one of the heads of the Anna Freud Centre-UCL Developmental Neuroscience Unit, which maintains a working collaboration with the Child Study centre at Yale University. He is currently involved in a study that has recruited 361 adopted children at birth and will follow them up for a number of years with the aim of understanding gene-environment correlations during that time. Our third speaker, **Professor Moore**, is based at the University of East London and is the current Director of the Institute of Research for Child Development. He informed the audience about two ongoing studies examining the effects of low socio-economic status (SES) on social development. Our fourth speaker, **Professor Mark Johnson**, is the current Director of the CBCD and has worked extensively over the past two decades on the mechanisms driving typical and atypical development. In his talk, he spoke about the BASIS study, a study where baby siblings of older children with a diagnosis of autistic spectrum disorder (ASD) are investigated for early signs of autism. Our final speaker, **Professor Csibra**, heads the department of Cognitive Science in the Central European University based in Budapest. Together with Professor Gyorgy Gergely he founded the Cognitive Development Centre, which addresses questions related to the ontogenesis of human cognitive capacities. His current talk focused on the nature of the development of referential communication and its implications for the birth of language abilities.

The workshop was well attended with the breakdown as follows:

| | |
|------------------------|----|
| Undergraduate students | 74 |
| Masters students | 37 |
| PhD students | 62 |
| RA/Research Associates | 31 |

| | |
|-------------------|----|
| Lecturers/Readers | 9 |
| Professors | 7 |
| Clinicians | 7 |
| Other (mostly HE) | 18 |

For information about CDCN workshops please go to <http://www.ucl.ac.uk/cdcn/events/workshops>

Autumn/Winter CDCN Seminars

14th September 2011

Dr Iroise Dumontheil, Post-Doctoral Research Fellow, UCL Institute of Cognitive Neuroscience
'Development of executive functions: behaviour neuroimaging and genetics'

12th October 2011

Professor Narinder Kapur, Consultant Neuropsychologist & Honorary Professor of Neuropsychology, University of Southampton
'Memory aids in memory rehabilitation'

9th November 2011

Dr Jess Nithianantharajah, Research Associate, Genes to Cognition Programme, Wellcome Trust Sanger Institute, University of Cambridge
'Dissecting the Molecular Basis of Cognition'

14th December 2011

Anna Simmonds, Computational, Cognitive & Clinical Neuroimaging Laboratory and MRC Clinical Sciences Centre, Imperial College London
'Motor-sensory learning of foreign speech'

Forthcoming Events

CDCN Workshops 2011/2012

Each academic year CDCN organises three workshops, one in each term, featuring leading research on the latest topics in developmental cognitive neuroscience.

Dates for your diary:

Spring Workshop, March 2012

'From memory impairment to amnesia: The rise and fall of memory across the lifespan'

This workshop will examine memory across the life-span – i.e. the development of the cognitive memory circuit and its subsequent decline during aging in health and disease. Data from rodents, non-human and human primates will be presented.

Summer Workshop, June 2012

'The epilepsies: Animal models and their relevance to childhood and adult epileptic syndromes'

Epilepsy is the most common chronic disabling neurological condition in the *UK*. It affects about 1 person in every 200. Cognition function is often compromised, with deficits reported in attention, memory and language in both children and adult patients with epilepsy. This workshop will review recent evidence on brain correlates of epileptic syndromes, and causes of cognitive impairment. It will also highlight the impact of medical and surgical interventions on cognitive outcome. Animal models will also be considered to address the issue of plasticity and re-organisation.

Further details of the 2012 workshops will be available closer to the time. Check the CDCN website for updates.

CDCN 2012 Seminars – all welcome!

11th January 2012 @ 4.30pm

Dr Daniela Montaldi, Senior Lecturer in Cognitive Neuroscience, University of Manchester

"Exploring novelty, familiarity and recollection modulations of the medial temporal lobe structures: an fMRI analysis"

Read more about Dr Montaldi [here.....](#)

Venue: Room H, Wolfson Centre, UCL Institute of Child Health

15th February 2012 @ 4.30pm

Professor Brian Butterworth, Institute of Cognitive Neuroscience, UCL

"Dyscalculia: Brains, Genes and Intervention"

Read more about Professor Butterworth [here.....](#)

Venue: Leolin Price Lecture Theatre, UCL Institute of Child Health

14th March 2012 @ 4.30pm

SPEAKER TO BE CONFIRMED

Venue: Levinsky Room, UCL Institute of Child Health

11th April 2012 @ 4.30pm

Professor Tony Charman, Centre for Research in Autism and Education (CRAE), Department of Psychology and Human Development, Institute of Education
“Establishing the cognitive phenotype of ASD”

Read more about Professor Charman [here.....](#)

Venue: Levinsky Room, UCL Institute of Child Health

9th May 2012 @ 4.30pm

Dr Mairead MacSweeney, Honorary Lecturer, Wellcome Trust Fellow, Institute of Cognitive Neuroscience
“TITLE TBC”

Read more about Dr MacSweeney [here.....](#)

Venue: Levinsky Room, UCL Institute of Child Health

13th June 2012 @ 4.30pm

Dr Courtenay Norbury, Reader in Developmental Neuropsychology , Royal Holloway
“Eye say: using eye tracking methods to explore language processing in atypical development”

Read more about Dr Norbury [here.....](#)

Venue: Levinsky Room, UCL Institute of Child Health

11th July 2012 @ 4.30pm

Dr Victoria Southgate, Wellcome Trust Research Career Development Fellow, Centre for Brain and Cognitive Development, School of Psychology, Birkbeck
“TITLE TBC”

Read more about Dr Southgate [here](#)

Venue: Leolin Price Lecture Theatre, UCL Institute of Child Health

Events and conferences on the theme of Developmental Cognitive Neuroscience

International Symposia

3rd UK Paediatric Neuropsychology Symposium: Early Brain-Behaviour Relationships & Prognostic Indicators

Dates: 23- 27 April 2012



This symposium will provide a contemporary account of research findings investigating early brain-behaviour relationships and prognostic indicators relevant to clinical practice. Experimental, clinical and epidemiological techniques designed to assess the development of cognitive, emotional and social behaviour will be described. A host of leading international speakers will participate in this symposium in order to consider contemporary knowledge of the effects of genetics and the environment on neurocognitive development and prognostic indicators that can inform medical and psycho-social interventions. For more details see [here.....](#)

Programme Directors: Dr Peter Rankin and Dr Michelle de Haan

Baby Brains Around the World Project: An International On-Line Conference

Dates: Website Open Between 23 April - 4 June 2012

As well as standard registration to attend the symposium in person it is now possible to register for ON-LINE ONLY access to the conference. The on-line Baby Brains project aims to widen communication & networking opportunities as far as possible for academics and practitioners across the globe interested in early human cognition and its developmental pathways.

Lectures will be filmed and broadcast on the secure conference website by UCL Media Services.

For more details see [here.....](#)

News

Collaboration between art and UCL neuroscience

24 November 2011

Inspired by Tate Liverpool's current exhibition, Alice in Wonderland, an art-science collaborative made up of scientists, led by UCL Institute of Child Health Dr Michelle de Haan (CDCN), curators, game designers and filmmakers, have just launched Wondermind, a series of pioneering interactive science games, videos and an online blog to help children learn about the science of the developing human brain. [Read more](#)

Wondermind will reach new audiences not normally engaged with biomedical science by delivering a highly interactive and immersive website for children aged 8-12 and their parents, carers and teachers, which will introduce them to key neuroscience concepts in child development. They will learn about the science of brain development, inspired by works from the Tate collection and an exploration of the world presented by Lewis Carroll.

The website stimulates interest, excitement and debate about biomedical science through three main areas:

1. A series of **mini-games**, which uses art and 'Alice in Wonderland' themes to introduce our areas of scientific focus in a friendly and engaging way. The mini-games are designed so that players acquire some basic information about the science of brain development through their play.
2. A set of **interactive videos** that link with the mini-games, but delve deeper into the science, with interviews with leading scientists and researchers. The interactive nature of the video gives the feeling of having a conversation with the expert.
3. The **website** itself holds all the content together and allows users to navigate and find information to support the scientific themes explored in the mini games and videos, linking out to further information where relevant and necessary.

There are polls and areas of the site that allow both children and adults to feed back on issues raised by the content, to encourage new ways of thinking about biomedical science. There are lesson plans for Art and Science curricula at KS2 to support the use of Wondermind in the classroom.

For more information about CDCN or any of the information in this newsletter visit www.ucl.ac.uk/cdcn or email cdc@ucl.ac.uk