

## **End of Year 1 report for The Foundation for Professionals in Services to Adolescents (FPSA)**

I would like to take this opportunity to thank FPSA for their generous contribution towards my first year on the MSc/Post-graduate Diploma in Clinical Paediatric Neuropsychology at UCL.

The course is a professional training programme designed to train clinicians in various aspects of science underpinning clinical paediatric neuropsychology practice and is currently the only paediatric programme in the United Kingdom that is accredited by the British Psychological Society (BPS). It forms the academic components of the BPS professional Qualification in Clinical Paediatric Neuropsychology (QiCN-paediatric).

The course is structured in 8 x 1 week study blocks which I have undertaken on a part time (2 year, 4 modules per year) basis. Full details are provided on the UCL website <http://www.ucl.ac.uk/neuropsych>. The course is assessed by examination and coursework including essays and commentaries on scientific papers.

### Year 1 Course Content

#### **Module 1: Introduction to developmental cognitive neuroscience**

Developmental cognitive neuroscience provides the scientific knowledge underpinning contemporary paediatric neuropsychology practice. This module introduced the historical, theoretical and methodological foundations of developmental cognitive neuroscience. In order to study the complex multifaceted development of human cognition and its neural underpinnings it is essential that scientists in traditionally distinct fields integrate their methodologies. Students were introduced to the fundamental principles behind a range of methodologies with examples of leading-edge research and its potential clinical implications.

#### **Module 2: Professional Issues for paediatric neuropsychologists**

This module described issues associated with the practice of paediatric neuropsychology within different professional contexts, such as specialist neuroscience centres, child and adolescent mental health teams, educational systems, research programmes and medico-legal work. The roles and overlaps with multidisciplinary colleagues were described and ethical issues and potential dilemmas relevant to neuropsychological practice are considered.

#### **Module 3: Development of sensory, motor and cognitive neural systems**

This module presented the normal and potentially abnormal development of neural systems subserving sensory, motor and cognitive functions. The normal neuroanatomical development of each system and the integration between systems was described. Competing processes involved in restoration after early injury or abnormal compensation were considered. Topics such as plasticity and reorganisation of function, crowding effects, sleeper effects and altered trajectories of learning were discussed.

**Module 4 :** This module described how cognitive outcome is shaped by aetiological factors and the underlying neuropathology in a range of

developmental and acquired brain disorders. The complexity of studying developing brain function in the presence of pathology was illustrated by clinical case studies and syndrome profiles. Neuropsychological outcome following neurosurgical treatment was considered. Developmental disorders used to illustrate brain-behaviour relationships included neurological disorders such as epilepsy, stroke, sickle cell disease, and traumatic brain injury, neurodevelopmental syndromes such as autistic spectrum disorders, ADHD and dyslexia.

### Clinical Utility

Working within Tier 4 CAMHS, the knowledge and skills I have acquired through undertaking the MSc/Post-graduate Diploma in Clinical Paediatric Neuropsychology enables me to make assessments, interventions and recommendations for young people presenting with the most complex and often co-morbid difficulties. The literature on attachment, attention, anxiety, social cognition, eating disorders or physical health issues such as diabetes, highlights how our understanding of the relationships between neurology and child & adolescent development has changed dramatically due to a rapidly evolving knowledge base.

My coursework has focused on the neuropsychology of eating disorders and executive functioning in adolescence; the literature reviews and learning have directly informed clinical practice within the inpatient service.

The 2<sup>nd</sup> year of the MSc/Post-graduate Diploma in Clinical Paediatric Neuropsychology includes:

- Module 5: The specialised assessment of infants and children at risk of developmental delay who may require early neurodevelopmental assessment.
- Module 6: The underpinning principles of neuropsychological assessment in children and adolescents and the many variables involved in the administration, interpretation and reporting of neuropsychological assessments.
- Module 7: Builds on the module 'Introduction to Developmental Cognitive Neuroscience' and develops a more in-depth understanding of some of the methods and approaches used within developmental cognitive neuroscience with their clinical implications.
- Module 8: Considers the significance of developing clinical formulations for case-work that are informed by scientific findings presented in the remainder of the course.

I am very much looking forward to building on my existing knowledge and skills and grateful for the continued support of the FPSA that enables me to do so.

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