## Imperial College

London

Child and Adolescent Eating Disorders Research – at the Centre for Psychiatry, Brain Sciences Division, Imperial College London

PhD studentship: Understanding the relationship between development of reflective function and eating disorders in young people.

Stipend: £18,000

We invite applications for an Imperial College funded PhD studentship on an exciting interdisciplinary project to investigate the development of reflective function in young people and its relationship to eating disorders.

Reflective function refers to the essential human capacity to understand behaviour in light of underlying mental states and intentions. Reflective function (and its conceptual neighbour, mentalizing) has been shown to be an important correlate of a variety of mental disorders, including eating disorders. Reflective function is impaired in the context of abuse and trauma and also in individuals with neurodevelopmental disorders, most notably autism spectrum disorder. Puberty is a key time for the development of reflective function, which is under the influence of a range of pubertal hormones, most notably oestrogen and oxytocin. Starvation interrupts these developmental processes, switching off the hormones that facilitate social learning. It can therefore be difficult to know whether poor reflective function is a predisposing factor or consequence of the eating disorder. Reflective function significantly correlates with measures of empathy, mindfulness and perspective-taking and with parental reflective function, which refers to parent's capacity to hold the child's mental states in mind.

Current treatments for eating disorders remain insufficient for some young people: in those whose disorder persists the eating disorder has a poor prognosis and high mortality. For most young people, intervention for their eating disorder will be a family-based treatment. Yet the key mechanisms of this well-established therapy remain a matter of academic debate. In particular, it is unclear how the structural and strategic aims of therapy (e.g. relocation of control and responsibility, reduction of blame) impact family process, in particular supporting the development of both young people's and parental reflective function and emotional communication.

The PhD project will contribute to the investigation of neurocognitive and neurobiological mechanisms involved in the development of reflective function, including for example building on current understanding of how eating disorders impact social and emotional processing to explore response to treatment. The PhD project will be using experimental neuroscience paradigms with clinical and non-clinical populations. The work will be part of a wider research program aiming to explore modifiable developmental antecedents to eating disorder risk and their implications for treatment and prevention.

The successful applicant will sit within the Centre for Psychiatry, Department of Brain Sciences of Imperial College, and will be supervised by Dr Dasha Nicholls. The Centre for Psychiatry provides a unique, multidisciplinary environment in which to carry out experimental medicine and clinical research in an area, which is currently a priority interest in mental health research and mental health services improvement. The successful applicant will benefit from collaborating with researchers within the Centre for Psychiatry, and UK/international collaborators.

More information on research here: http://www.imperial.ac.uk/people/d.nicholls

Applicants must have/or expect to gain a first class or upper second class honours degree or Overseas equivalent in a relevant subject area (psychology, neurosciences, medicine) preferably with experience in experimental psychology / cognitive neuroscience research and working with mental health clinical

populations. A Master's Degree is preferable but not essential we look for highly motivated applicants with excellent interpersonal, written and oral communication skills and enthusiasm for exposure to a diversity of scientific projects.

Applicants are requested to send a full CV (including the names and email addresses of at least two academic referees), and personal statement (detailing why you are interested in the research project). Suitable candidates will be then asked to complete an electronic application form at Imperial College London in order for their qualifications to be addressed by College Registry.

A tax-free stipend and home UK/EU fees for 3 years will be awarded. Overseas students should be able to demonstrate adequate financial support to cover the difference between the home/EU fee and the overseas fee. Applicants are also required to meet Imperial College's English language requirements. Please see the following link: <a href="http://www3.imperial.ac.uk/registry/admissions/pgenglish">http://www3.imperial.ac.uk/registry/admissions/pgenglish</a>

Please submit your application to Dasha Nicholls (d.nicholls@imperial.ac.uk).

Closing Date: 30<sup>th</sup> July Interviews: August (date TBC) to start Sept/Oct