

# **Proposal for a 2 year research (PhD) fellowship to the ALICIA KOPLOWITZ FUNDACION.**

**Prof. Paul Ramchandani and Dr Jane Iles, Centre for Mental Health, Imperial College London.**

## Institutional Setting

The research fellow will be based at Imperial College London as part of a large multi-disciplinary team conducting an early intervention randomised controlled trial to prevent behavioural problems. Imperial College is one of the world's leading research institutions, and the team in the Centre for Mental Health have a long track record of providing successful fellowship opportunities for Koplowitz Clinical Fellows.

## Background

Behavioural problems are common and important. They affect 5-10% of children, and those with established problems are at risk of significantly worse outcomes across the life course. These risks include psychiatric disorder, antisocial behaviour and criminality, drug and alcohol misuse, educational failure and physical ill health. A key risk factor for the development of behavioural problems is the quality of the parental care that children receive; low levels of sensitive parenting and greater use of harsh discipline have been causally linked to the development of behavioural problems. Importantly, parenting is amenable to change and intervening early in children's lives has the potential to be both clinically and cost effective.

The purpose of the Healthy Start Happy Start trial is to evaluate a brief, early parenting intervention (Video-Feedback Intervention to Promote Positive Parenting; ViPP), which aims to prevent behavioural problems in 12-36 month old at-risk children. ViPP is a home-based intervention which is designed to improve parents' ability to identify and respond to their children's signals and negative behaviour. ViPP has already been shown to be effective in previous research in other contexts. The study will recruit and randomise 300 families (over 150 have already been recruited, with the remainder to be recruited by August 2017). The study is fully funded by the National Institute for Health Research (NIHR).

### 1. The fellowship research proposal

As well as gaining valuable experience as part of the team delivering a large-scale randomised controlled trial, the fellow will work specifically on 3 related analyses using data collected as part of the trial, leading to 3 proposed publications. The scope of these can be subject to modification in discussion with the successful candidate and the Alicia Koplowitz Fundacion, but we propose a body of work focussed on parent-child interactions, their links with parent and child psychopathology and their potential role as the key pathway by which the intervention may have its effect. This will involve the fellow receiving training in detailed assessments of parent-child interaction, clinical trial design and statistical analysis. The three proposed hypotheses, leading to publication are;

- i. parental symptoms of depression and anxiety are associated with less sensitive and more critical parent-child interactions, and reduced change in parent-child interactions over time.
- ii. less sensitive parent-child interactions predict later increases in child behavioural problems, even accounting for baseline levels of behavioural problems.
- iii. the ViPP intervention will have an impact on parenting; increasing sensitive parenting behaviour and reducing critical behaviour across time.

Together these three studies will form the basis of 3 papers as set out in the requirements for a PhD (at a Spanish University).

## 2. Supervision.

The Fellow will be jointly supervised by Dr Jane Iles and Prof Paul Ramchandani. The primary supervisor is likely to be Dr Iles. Both Drs Iles and Ramchandani hold research PhD's and have published in excess of 5 papers in the past 5 years. Dr Iles is a qualified clinical psychologist, and Prof. Ramchandani is a qualified child and adolescent psychiatrist.

## 3. Training programme.

A significant proportion of the training will be undertaken in house by the research group. This will include training in clinical trials methodology, basic statistical analysis, and the coding of parent-child interactions. We would hope to offer training in the clinical intervention (ViPP) at some point during the fellowship (subject to our course running and it being suitable for the appointed fellow).

In addition we have recommended and costed for the following training courses:

- Statistical training - SPSS and STATA courses at Imperial College
- Clinical Trial course at Imperial College
- In depth Epidemiology training - London School of Hygiene\* (3 weeks)
- Systematic Reviews & Meta-analysis course - London School of Hygiene\* (1 week)
- Graduate school training (there may be an opportunity to access a selection of one-day research and personal development training courses offered to Imperial College PhD students).

We have also included attendance at at least 2 UK national and 2 international conferences each year, at which we would encourage the fellow to present findings of their research.

\* The London School of Hygiene and Tropical Medicine is a world leading training institution, offering the highest level training in research methods.

## 4. Honorary Clinical Contract.

We can arrange an honorary clinical contract with CNWL NHS Trust, and can offer some clinical work related to research projects running in the unit. Additional clinical sessions would be subject to us being able to arrange appropriate clinical supervision.