

# Investigating the neural basis of inhibition, set-shifting and monitoring in obsessive-compulsive disorder (OCD), attention-deficit hyperactivity disorder (ADHD) and healthy volunteers

<b>Submission date</b> 30/07/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 30/07/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 04/10/2017	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Mercedes Arroyo

### Contact details

Behavioural and Clinical Neuroscience Institute  
Department of Psychiatry  
University of Cambridge  
Downing Street  
Cambridge  
United Kingdom  
CB2 3EB

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ma10027@cam.ac.uk

## Additional identifiers

EudraCT/CTIS number

IRAS number

**ClinicalTrials.gov number**

**Secondary identifying numbers**

6443

## **Study information**

### **Scientific Title**

Investigating the neural basis of inhibition, set-shifting and monitoring in obsessive-compulsive disorder (OCD), attention-deficit hyperactivity disorder (ADHD) and healthy volunteers

### **Study objectives**

The purpose of these experiments is to investigate the relationship between dysfunction in different but related executive processes including set-shifting, inhibition and monitoring in obsessive-compulsive disorder (OCD) and attention-deficit hyperactivity disorder (ADHD). Moreover, the study aims to clarify the precise neural substrates of the above executive functions currently conceived of as separate yet related.

To this end, a battery comprising of distinct yet converging tasks examining the three components of executive functions has been designed, specifically targeting set-shifting, response inhibition and performance monitoring. The design will contrast behavioral, blood-oxygen-level-dependent (BOLD) activation and brain structure between the ADHD group and its age and education matched control group and between the OCD group and its age and education matched control group. Each task will be analysed separately. The four groups will also enter into combined analyses to contrast the two patient groups directly.

More details can be found here: <http://public.ukcrn.org.uk/Search/StudyDetail.aspx?StudyID=6443>

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

MREC approved ref: 08/H308/65

### **Study design**

Multicentre non-randomised interventional diagnosis and process of care trial

### **Primary study design**

Interventional

### **Secondary study design**

Non randomised study

### **Study setting(s)**

Hospital

### **Study type(s)**

Diagnostic

## **Participant information sheet**

### **Health condition(s) or problem(s) studied**

Topic: Mental Health Research Network; Subtopic: Attention deficit hyperactivity conduct disorder; Disease: Attention deficit hyperactivity disorder; conduct disorders

### **Interventions**

1. Face to face interview: once, approximately 10 minutes duration
2. Imaging (not radiation): twice, 1 hour each time; each participant will undergo functional magnetic resonance imaging (fMRI)
3. Telephone interview: once, approximately 20 minutes duration

### **Intervention Type**

Mixed

### **Primary outcome measure**

Blood oxygenation level dependent (BOLD) response due to neural activity.

### **Secondary outcome measures**

Reaction times and button choices to the stimuli being presented while in the scanner and questionnaire responses.

### **Overall study start date**

01/04/2008

### **Completion date**

01/04/2012

## **Eligibility**

### **Key inclusion criteria**

Not provided at time of registration

### **Participant type(s)**

Patient

### **Age group**

Not Specified

### **Sex**

Not Specified

### **Target number of participants**

Planned sample size: 120

### **Key exclusion criteria**

Not provided at time of registration

### **Date of first enrolment**

01/04/2008

**Date of final enrolment**

01/04/2012

## **Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**University of Cambridge**

Cambridge

United Kingdom

CB2 3EB

## **Sponsor information**

**Organisation**

Cambridgeshire and Peterborough NHS Foundation Trust (UK)

**Sponsor details**

Cambridge Road

Fulbourn

Cambridge

England

United Kingdom

CB21 5EF

**Sponsor type**

Hospital/treatment centre

**Website**

<http://www.cpft.nhs.uk/>

**ROR**

<https://ror.org/040ch0e11>

## **Funder(s)**

**Funder type**

Charity

**Funder Name**

Wellcome Trust

**Alternative Name(s)****Funding Body Type**

Private sector organisation

**Funding Body Subtype**

International organizations

**Location**

United Kingdom

## **Results and Publications**

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration