



Childhood and Adolescence
Psychopathology:
unravelling the complex etiology
by a large Interdisciplinary
Collaboration in Europe

Del. 7.3 Training. Statistical Genetics – twin studies

Work Package: WP 7
Lead partner: King's College London, KCL
Author(s): Kaili Rimfeld and Louise Webster (King's College London)
Submission date: 08.02.2018
Version number: 0.1 **Status:** Final

Grant Agreement N°: 721567
Project Acronym: CAPICE
Project Title: Childhood and Adolescence Psychopathology: unravelling the complex etiology by a large Interdisciplinary Collaboration in Europe
Call identifier: H2020-MSCA-ITN-2016
Funding scheme: MSCA-ITN-ETN - European Training Networks
Topic: MSCA-ITN-2016 - Innovative Training Networks
Start date of the project: February 1st, 2017
Duration: 48 months

Dissemination Level	
PU: Public	✓
PP: Restricted to other programme participants (including the Commission)	
RE: Restricted to a group specified by the consortium (including the Commission)	
CO: Confidential, only for members of the consortium (including the Commission)	

Disclaimer:

This document has been produced in the context of the CAPICE Project. The CAPICE project is part of the European Community's Horizon 2020 Program (Marie Skłodowska-Curie Actions - Innovative Training Networks) for research and development and is as such funded by the European Commission. All information in this document is provided "as is" and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability. For the avoidance of all doubts, the European Commission has no liability with respect to this document, which is merely representing the authors' view.

Table of Contents

1.	Brief description of the course	5
2.	List of participants	7
3.	List of lecturers	8
4.	Workshop schedule	9
5.	Annex I	10

Definitions and acronyms

DM	Dissemination Manager
DOW	Description of Work
ESR	Early Stage Researcher
MT	Management Team
PC	Project Coordinator
SC	Scientific Coordinator

1. Brief description of the course

The first workshop for ESRs was held at the Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London from the 22nd of January till the 24th of January. The goal of the workshop was to provide an overview of the field of behavioural genetics, covering both quantitative and molecular research. All ESRs were sent a copy of Behavioural Genetics book (Knopik, Neiderhiser, DeFries, Plomin, 2018) to read independently before attending the workshop. The aim of the training was to cover the history of behavioural genetics, the methods used and the main findings in relation to developmental psychopathology. The course also covered the new cutting edge methods used in the field of psychiatric genetics and discussed where the field is heading. The course was taught by some of the leaders in the field of psychiatric genetics (see list of lecturers).



During the workshop ESRs had the opportunity to meet Sir Professor Michael Rutter, who was the first professor of child psychiatry in the UK and is often described as the ‘father of child psychology’. Sir Professor Michael Rutter was interviewed by Professor Robert Plomin, covering his career, his main research findings as well as his views about the field right now.



Professor Christel Middeldorp and Professor Meike Bartels from the VU presented an overview of the CAPICE project and answered questions of the ESRs, e.g., regarding the training plans. In addition, the students presented their projects in a two minute pitch (that will also be used for the website).



2. List of participants

Beneficiary	ESR
VU University	Wonu Akingbuwa
VU University	Eshim Shahid
King's College	Andrea Allegrini
University of Gothenburg	Sabrina Doering
University of Bristol	Elis Haan
University of Bristol	Laura Schellhas
Erasmus University	Elizabeth Diemer
Karolinska Institutet	Ashley Thompson
University Twente	Kratika Agarwal
University of Cagliari	Hema Sekhar Reddy Rajula
Imperial College	Ville Karhunen
Janssen	Marica Leone

3. List of lecturers

Lecturer name	Affiliation and position
Professor Francesca Happé	Professor of Cognitive Neuroscience and Director of the Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Professor Robert Plomin	Professor of Behavioural Genetics, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr. Kaili Rimfeld	Postdoctoral Research Associate, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Laurie Hannighan	PhD student, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr. Tom McAdams	Sir Henry Dale Research Fellow, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Professor Thalia Eley	Professor of Developmental Behavioural Genetics and Director of Edit Lab, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Professor Christel Middeldrop	Professor of Child and Youth Psychiatry, Vrije Universiteit Amsterdam, The Netherlands
Professor Meike Bartels	Professor in Genetics and Wellbeing, Vrije Universiteit Amsterdam, The Netherlands
Professor Louise Arsénault	Professor of Developmental Psychology, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Professor Cathryn Lewis	Professor of Statistical Genetics and Director of Statistical Genetics Unit, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr. Paul O'Reilly	Reader in Statistical Genetics, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr. Joni Coleman	Postdoctoral Research Associate, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr Gerome Breen	Reader in Neuropsychiatric and Translational Genetics, Social, Genetic and Developmental Psychiatry Centre at the Institute of Psychiatry, Psychology and Neuroscience, King's College London

4. Workshop schedule

CAPICE workshop on genetics and developmental psychopathology 22-24 January 2018 SGDP Centre Institute of Psychiatry, Psychology and Neuroscience King's College London		
Monday 22 January		
9:30 – 10:00	<i>Coffee – get together</i>	
10:00– 10:15	<i>Welcome and general introduction</i>	Kaili Rimfeld
10:15 – 10:30	<i>Welcome to the SGDP</i>	Franky Happe
10:30 – 11:30	<i>History of behavioural genetics (BG) and top 10 findings</i>	Robert Plomin
11:30 – 12:15	<i>Interview with Professor Sir Michael Rutter</i>	Robert Plomin
12:15 – 14:00	<i>Lunch at 'Theo's</i>	
14:00 – 15:00	<i>Twin methods: Basics of adoption and twin designs / univariate and bivariate models</i>	Kaili Rimfeld
15:00 – 16:00	<i>Twin methods: Multivariate models</i>	Laurie Hannigan
16:00 – 16:15	<i>coffee</i>	
16:15 – 17:15	<i>Twin methods: Co – TEDS</i>	Tom McAdams
17:15 – 19:00	<i>Drinks reception at SGDP</i>	
Tuesday 23 January		
8:00 – 9:00	<i>Coffee</i>	
9:00 – 10:00	<i>Gene environment correlation and interaction in the development and treatment of anxiety and depression</i>	Thalia Eley
10:00 – 11:00	<i>The role of genetic and other familial factors in psychiatric symptoms across the lifespan</i>	Christel Middeldorp
11:00- 11:30	<i>Coffee</i>	
11:30 – 12:30	<i>The developmental interplay between genes and environment</i>	Louise Arseneault
12:30 – 13:30	<i>Lunch at the SGDP</i>	
13:30 – 14:45	<i>Introduce CAPICE project</i>	Christel Middeldorp and Meike Bartels
14:45 – 15:15	<i>2-min student project descriptions</i>	
15:15 – 15:30	<i>Q&A</i>	
15:45 – 17:30	<i>Lab tour + brain bank tour</i>	
18:30 – late	<i>Dinner at The Shard (London Bridge)</i>	
Wednesday 24 January		
9:00 – 9:15	<i>Coffee</i>	
9:15 – 10:15	<i>Finding genes</i>	Cathryn Lewis
10:15 – 10:30	<i>Coffee</i>	
10:30 – 11:30	<i>Polygenic scores – hype or hope?</i>	Paul O'Reilly
11:30 – 12:30	<i>Polygenic scores – methods</i>	Joni Coleman
12:30 – 14:00	<i>Pub lunch at 'Phoenix'</i>	
14:00 – 15:00	<i>Future of polygenic scores</i>	Gerome Breen
15:00 – 16:00	<i>Q&A</i>	

5. Annex I

Certificate of the workshop

