



European Social Science Genomics Network 2022

ESSGN Conference Bologna

Wednesday 18 to Friday 20 May

Palazzo Malvezzi

Via Zamboni 22

Alma Mater Studiorum Università di Bologna

MiSoC | ESRC
Research Centre on
Micro-Social Change

UKRI | Economic
and Social
Research Council



European Research Council
Established by the European Commission

Wednesday 18 May

Pre-conference training introduction to epigenetics: DNA methylation (University of Essex)

Aula 3

14.00-15.00 Leo Schalkwyk: 'What is DNA methylation and what can it tell us?'

15.00-15.45 Meena Kumari: 'DNA methylation/social science data sets: introduction to *Understanding Society*'

15.45-16.30 Coffee break

16.30-17.30 Olivia Grant: 'What research using DNA methylation looks like'

Thursday 19 May

9:30-11:00 Coffee break/registration

11.00:12.30 Parallel session I

Aula 4 Chair: **Nicola Barban**

• **Giorgia Menta** (Luxembourg Institute of Socio-Economic Research): 'Depression and early-retirement age: causal evidence from a gene-environment setup'

• **Perline Demange** (Vrije Universiteit Amsterdam): 'Testing the causal effect of educational attainment on mental health using a within-sibling design and Mendelian randomisation'

• **Amanda Hughes** (University of Bristol): 'The causal effects of body mass index (BMI) on childhood symptoms of depression, anxiety disorder, and attention-deficit hyperactivity disorder: a within family Mendelian randomisation study'

Aula 12 Chair: **Pietro Biroli**

• **Andrea Allegrini** (University College London): 'A multi-method approach to uncover the contribution of cognitive and noncognitive skills to academic achievement throughout the school years'

• **Paul Hufe** (University of Bristol): 'Genetic endowments, educational outcomes and the mediating influence of school investments'

• **Titus Galama** (University of Southern California and VU University Amsterdam): 'To what extent do genetic factors explain the education-health gradient?'

12:30-14:00 Lunch/poster session I

• **Alex Mas-Sandoval** (University of Bologna): 'Ancestry-related assortative mating and sex bias driven by social stratification in admixing American populations'

• **Alexander McQuoid** (United States Naval Academy): 'Andrew's Syndrome: the impact of height on earnings'

• **Anna Fürtjes** (King's College London): 'General dimensions of human brain morphometry inferred from genome-wide association data'

• **Daniel Graeber** (DIW Berlin): 'Intergenerational health mobility in Germany'

• **Kieran Lyon** (University of York): 'How genetics can improve interventions for child cognitive development'

• **Kirsty Wilding** (University of York): 'Using DNA to predict educational success: a meta-analysis'

• **Tilbe Atav** (Erasmus University Rotterdam): 'Genes and heritability in intergenerational inequality'

14.00:15.30 Parallel session II

Aula 4 Chair: **Fleur Meddens**

• **Hyeokmoon Kweon** (Vrije Universiteit Amsterdam): 'Large-scale genome-wide study of income highlights heterogeneous pleiotropy across the genome'

• **Robbee Wedow** (Broad Institute of MIT and Harvard, and Harvard Department of Sociology): 'Patterns of item nonresponse behavior to survey questionnaires are systematic and have a genetic basis'

• **Aysu Okbay** (Vrije Universiteit Amsterdam): 'Polygenic prediction of educational attainment within and between families from genome-wide association analyses in three million individuals'

Aula 12 Chair: **Stephanie von Hinke**

• **Viola Hilbert** (DIW Berlin): 'Inequality of opportunity in wealth – measurement from Germany'

• **Rita Dias Pererira** (Erasmus University Rotterdam): 'Genetic advantage and equality of opportunity in education: two definitions and an empirical application'

• **Amanda Hughes** (University of Bristol): 'Testosterone and socioeconomic position: mendelian randomisation in 306,248 men and women in UK Biobank'

15:30-16:00 Coffee break

16.00:17.30 Parallel Session III

Aula 4 Chair: **Rita Dias Pererira**

• **Gabriella Conti** (University College London): 'Genes, parental education, and inequalities in human capital: evidence from two British cohorts'

• **Leandro Carvalho** (University of Southern California): 'Genetics, economic choices, and socioeconomic status'

• **Eleanor Sanderson** (University of Bristol): 'Identifying the marginal effects of specific educational decisions through genetic instrumental variables'

Aula 12 Chair: **Felix Tropf**

• **Sebastian Daza** (University of Wisconsin-Madison and CSIC): 'Distinguishing between interaction and dispersion effects in GxE analysis'

• **Alberto Palloni** (University of Wisconsin-Madison and CSIC): 'Gene-environment interactions and the case of BMI and obesity: how much do they matter?' *Online*

• **Alexandros Giannelis** (University of Minnesota): 'Identifying a genetic factor of quantitative ability'

17:30-19:00 Keynote: Melinda Mills Sala Armi

20:00-22:00 Dinner at Cantina Bentivoglio, Via Mascarella 4/B

Friday 20 May

9.30:11.00 Parallel Session IV

Sala Armi Chair: **Hans van Kippersluis**

- **Dilnoza Muslimova** (Erasmus University Rotterdam): 'The power of the pill: evidence from gene-environment interactions in the UK Biobank'
- **Tobias Wolfram** (University of Bielefeld): 'Man-machine-gene: predicting life courses based on teacher assessments, short essays and the whole genome'
- **Ruth Eva Jørgensen** (University of Oslo): 'The genetics of partnership dissolution'

Aula 12 Chair: **Elisabetta De Cao**

- **Sven Oskarsson** (Uppsala University): 'Polygenic indices for health and psychological traits predict political participation'
- **Emil Sorensen** (Vrije Universiteit Amsterdam): 'The long-term effects of early-life pollution exposure: evidence from the London smog'
- **Nicolai Vitt** (University of Bristol): 'Early life exposure to measles and later-life outcomes: evidence from the introduction of a vaccine'

11:00-11:30 Coffee break

11.30:13.00 Parallel Session V

Sala Armi Chair: **Titus Galama**

- **Rosa Cheesman** (University of Oslo): 'How genes, schools, and residential areas shape achievement: a population-wide gene-environment interaction study'
- **Andries Marees** (Vrije Universiteit Amsterdam): 'Sources of inequality at birth: the interplay between genes and parental socioeconomic status'
- **Silvia Barcellos** (University of Southern California): 'The effect of education on the relationship between genetics, early-life disadvantages, and later-life SES'

Aula 12 Chair: **Perline Demange**

- **Cecilia Potente** (University of Zurich): 'Socio-economic inequalities characterise molecular risk for aging in young adulthood'
- **Gaia Ghirardi** (European University Institute): 'Is the effect of genes on education moderated by family's socioeconomic background?'
- **Kim Stienstra** (Utrecht University): 'The nature-nurture of academic achievement at the intersection between gender, family background, and school context'

13:00-14:30 Lunch/poster session II

- **Evelina Akimova** (University of Oxford): 'The genetics of occupational status: implications for the genetic architecture of socioeconomic status'
- **Kaili Rimfeld** (Royal Holloway University of London): 'Examining the associations between educational experiences and mental health from childhood to adolescence'
- **Michelle Spano** (University of Bristol): 'Exploring shared genetic associations between risk behaviours and educational attainment'
- **Neil Davies** (University of Bristol): 'Using Mendelian randomisation to adjust for covariates in observational and experimental studies'

- **Rafael Ahlskog** (Uppsala University): 'Class, genes and rationality: A GxE Approach to political ideology'

- **Henrik Dobewall** (Finnish Institute for Health and Welfare): 'Genetic risk for mental health disorders – the moderating role of parental resources'

- **Olivia Grant** (University of Essex): 'Characterising sex differences of autosomal DNA methylation in whole blood using the Illumina EPIC array'

14:30:16.00 Parallel Session VI

Aula 4 Chair: **Niels Rietveld**

- **Eric A. W. Slob** (Erasmus University Rotterdam and University of Cambridge): 'The identification of mediating factors between genotypes and phenotypes using genome-based restricted maximum likelihood estimation'
- **Sjoerd van Alten** (Vrije Universiteit Amsterdam): 'The effects of demographic-based selection bias on GWAS results in the UK Biobank'
- **Eleanor Sanderson** (University of Bristol): 'Estimation of causal effects of a time-varying exposure at multiple time points through multivariable Mendelian randomisation'

Aula 12 Chair: **Rosa Cheesman**

- **Sam Trejo** (Princeton University): 'What makes us unequal? Understanding disagreement regarding genes and social inequality'

- **Neil Davies** (University of Bristol): 'How to use genetic instruments to adjust for confounders in observational and IV estimation'

- **Abdel Abdellaoui** (University of Amsterdam): 'Socio-economic status: a social construct with genetic consequences'

17:00-18:30 Keynote: Adam Rutherford

Stabat Mater Archiginnasio, Piazza Galvani 1

18:30-21:00 Drinks

Nubar, Via de' musei 6



MiSoC | ESRC
Research Centre on
Micro-Social Change

The ESRC Research Centre on Micro-Social Change (MiSoC) is an international multi-disciplinary research centre based at the Institute for Social and Economic Research at the University of Essex. Our research teams include experts from the Universities of Essex, Bristol, Warwick, Bologna and the University of Technology Sydney.

MiSoC is one of the UK's longest-running and much respected social science investments – and is now in its 32nd year.

The current research agenda explores demographic changes, including new family structures, changing gender roles, an ageing population and growing diversity from migration. We are investigating how individuals and families are responding to the challenge of the world's need for a creative, adaptable labour force - with higher levels of education and a greater reliance on social skills

Working across disciplines, including public health, our research exploits recent developments linking genetics and social science. MiSoC's programme of methodological work will also bring new advances from machine learning into the fore and expand our range of causal inference tools.

Our evidence aims to benefit a wide range of organisations involved in policy debates, design and practice in a range of domains to inform key policy choices, such as the balance between intervening late or early in children's lives, the role of family and wider society in an individual's development, the choice between universal or targeted support or safety nets for the vulnerable, and the relative roles of values, expectations and preferences versus structure in determining how we act.

Find out about our research, events, job opportunities and more at www.iser.essex.ac.uk/misoc and follow us on Twitter @MiSoC_Essex



GENPOP is a research project funded by the European Research Council based at the University of Bologna.

Our research leverages the use of demographics, genealogical, and micro-census data to understand the long-term development of demographic trends and the evolution of social inequalities.

Find out more about our research at www.genpop.org and follow us on Twitter @ERCgenpop