2024, 26th – 29th June

54th Behavior Genetics Annual Meeting

London, United Kingdom

*Conference Program*

*[Note: \*\* This presentation addresses diversity issues or public science]*

###### **Wednesday, 26th June**

# Registration 2:00pm – 8:00pm

## 14:00 - 17:00 Wednesday, 26th June, 2024

## Venue Bush House, Aldwych entrance

# Executive Committee Meeting

## 15:30 - 17:30 Wednesday, 26th June, 2024

## Venue The Council Room (Strand building)

## Valerie Knopik, Chair

# New Faces Meet & Greet

## 18:00 - 18:30 Wednesday, 26th June, 2024

## Venue Eighth Floor Bush House

# Welcome Reception

## 18:30 - 21:00 Wednesday, 26th June, 2024

## Venue Eighth Floor Bush House

###### **Thursday, 27th June**

# Registration 8:30am - 5:00 pm

## 08:30 - 17:00 Thursday, 27th June, 2024

## Venue Arcade (Bush House)

# Welcome remarks

## 09:00 - 09:15 Thursday, 27th June, 2024

## Venue Auditorium (Bush House)

## Tom McAdams, local host

## Chandra A. Reynolds, program chair

# Plenary 1: Anita Thapar

## 09:15 - 10:15 Thursday, 27th June, 2024

## Venue Auditorium (Bush House)

## Tom McAdams, Chair

**Anita Thapar**, Division of Psychological Medicine and Clinical Neurosciences, School of Medicine, Cardiff University, Cardiff, United Kingdom

**Depression: dissecting heterogeneity**

# Coffee/Tea/Snacks Break (20 minutes)

## 10:15 - 10:35 Thursday, 27th June, 2024

## Venue Arcade (Bush House)

# OS-1A: Education, Achievement, SES

## 10:35 - 11:50 Thursday, 27th June, 2024

## Venue Auditorium (Bush House)

## S. Alexandra Burt, Chair

## 10:35 - 10:50

### OS-1A: Evocative gene-environment correlation and the education PGI/educational attainment association: Genes related to educational attainment, presentation of self, and the perceptions of others \*\*

Jason D Boardman1, Kathleen M Harris2, **Brian K Finch**3

1Sociology, University of Colorado, Boulder, USA. 2Sociology, University of North Carolina, Chapel Hill, USA. 3Sociology, University of Southern California, Los Angeles, USA

## 10:50 - 11:05

### OS-1A: Migration, assortative mating, and educational attainment

Kaylee Moerenhout1, David van den Berg1, Melanie de Wit2, Wouter Peyrot3, **Abdel Abdellaoui**1

1Department of Psychiatry, Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands. 2Department of Clinical, Neuro and Developmental Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 3Department of Psychiatry, Amsterdam UMC, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

## 11:05 - 11:20

### OS-1A: Testing for treatment effect heterogeneity: Educational reform, genetic endowments, and family background \*\*

Rafael Ahlskog1, Jonathan P Beauchamp2, **Aysu Okbay**3, Sven Oskarsson1, Kevin Thom4

1Department of Government, Uppsala University, Uppsala, Sweden. 2Department of Economics, George Mason University, Fairfax, USA. 3Department of Economics, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 4Department of Economics, University of Wisconsin - Milwaukee, Milwaukee, USA

## 11:20 - 11:35

### OS-1A: Impact of internal migrations on the genetic structure in Estonia

**Ivan A. Kuznetsov1**, Mait Metspalu1, Uku Vainik1,2,3, Luca Pagani1,4, Francesco Montinaro1,5, Vasili Pankratov1

1Institute of Genomics, University of Tartu, Tartu, Estonia. 2Institute of Psychology, University of Tartu, Tartu, Estonia. 3Montreal Neurological Institute, McGill University, Montreal, Canada. 4Department of Biology, University of Padova, Padova, Italy. 5Department of Biosciences, Biotechnology and Environment, University of Bari, Bari, Estonia

## **11:**35 - 11:50

### OS-1A: The detection of environmental influences on academic achievement appears to depend on the analytic approach \*\*

**S. Alexandra Burt1,** Patrick O’Keefe2, Wendy Johnson3, Daniel Thaler1, Leslie D. Leve4, Misaki N. Natsuaki5, David Reiss6, Daniel S. Shaw7, Jody M. Ganiban8, Jenae M. Neiderhiser9

1Psychology, Michigan State University, East Lansing, USA. 2Neurology, Oregon Health & Science University, Portland, USA. 3Psychology, University of Edinburgh, Edinburgh, United Kingdom. 4Education, University of Oregon, Eugene, USA. 5Psychology, University of California, Riverside, Riverside, USA. 6Child Study Center, Yale University, New Haven, USA. 7Psychology, University of Pittsburgh, Pittsburgh, USA. 8Psychology, George Washington University, Washington DC, USA. 9Psychology, The Pennsylvania State University, State College, USA

# OS-1B: Prenatal Exposures, Parental Effects

## 10:35 - 11:50 Thursday, 27th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Kristine Marceau, Chair

## 10:35 - 10:50

### OS-1B: [T] Diurnal Cortisol Functioning and Negative Affectivity as Predictors of Child Depressive Symptoms; A Genetically Informed Adoption Design

**Sohee Lee1**, Kristine Marceau1, Valerie S. Knopik1, Misaki Natsuaki2, Daniel S. Shaw3, Leslie D. Leve4, Jody M. Ganiban5, Jenae M. Neiderhiser6

1Human Development and Family Science, Purdue University, West Lafayette, USA. 2Psychology, University of California, Riverside, Riverside, USA. 3Psychology, University of Pittsburgh, Pittsburgh, USA. 4Prevention Science Institute, University of Oregon, Eugene, USA. 5Psychological and Brain Sciences, George Washington University, D.C., USA. 6Psychology, Pennsylvania State University, Centre County, USA

## 10:50 - 11:05

### OS-1B: Using negative control and sibling designs to test the maternal immune activation hypothesis

**Matthias R Pierce**, Holly Hope, Kathryn M Abel

Centre for Women's Mental Health, University of Manchester, Manchester, United Kingdom

## 11:05 - 11:20

### OS-1B: [T] Parental effects on child ADHD outcomes via DNA methylation at birth – a genetically informed prospective cohort study

**Leonard Frach1**, Jean-Baptiste Pingault1,2

1Department of Clinical, Educational and Health Psychology, University College London, London, United Kingdom. 2Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom

## 11:20 - 11:35

### OS-1B: Does emotional distress in pregnant mothers have a detrimental, causal influence on offspring outcomes? A systematic review of causal inference research.\*\*

**Yasmin I Ahmadzadeh1**, Meredith X Han1,2, Celestine Lockhart1, Evangelos Vassos1, Tom A McAdams1

1Social, Genetic and Developmental Psychiatry Centre, King’s College London, London, United Kingdom. 2Department of Paediatrics, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore

## 11:35 - 11:50

### OS-1B: Maternal health in pregnancy and autism risk – genetic and non-genetic mechanisms

Vahe Khachadourian1, Elias S Arildskov2, Jakob Grove2, Paul F O'Reilly3, Joseph D Buxbaum1, Abraham Reichenberg1, Lisa A Croen4, Diana Schendel5, Sven Sandin6, Stefan N Hansen7, **Magdalena Janecka8**

1Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, USA. 2Department of Biomedicine, Aarhus University, Aarhus, Denmark. 3Department of Genetic and Genomic Sciences, Icahn School of Medicine at Mount Sinai, New York, USA. 4Research Division Kaiser Permanente, Kaiser Permanente Northern California, Oakland, USA. 5National Center for Registry Research, Aarhus University, Aarhus, Denmark. 6Department of Medical Epidemiology and Biostatistics, Karolinska Instituter, Stockholm, Sweden. 7Department of Public Health, Aarhus University, Aarhus, Denmark. 8Child and Adolescent Psychiatry, NYU Grossman School of Medicine, New York, USA

# OS-1C: Epigenetic/Biological Aging I

## 10:35 - 11:50 Thursday, 27th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Patrick Turley, Chair

## 10:35 - 10:50

### OS-1C: How Early Do Socioeconomic Gradients in Biological Aging Emerge? Investigating the Role of Early Life Stressors Using DNAm in Children \*\*

**Beza A Taddess**

Sociology, Princeton University, Princeton, USA

## 10:50 - 11:05

### OS-1C: Measurement, causes, and consequences of genetic selection across birth cohorts in the UKBiobank

**Felix Christian Tropf1**,2, Tobias Wolfram3, Abdel Abdellaoui4

1Centre for Longitudinal Studies, University College London, London, United Kingdom. 2Department of Sociology, Purdue University, West Lafayette, USA. 3Department of Sociology, University of Bielefeld, Bielefeld, Germany. 4UMC, University of Amsterdam, Amsterdam, Netherlands

## 11:05 - 11:20

### OS-1C: [T] Age-Associated Differences in Genetic and Environmental Duality of Epigenetic Aging Across Adolescence and Emerging Adulthood

**Dmitry V. Kuznetsov1**, Yixuan Liu1, Alicia M. Schowe2,3, Darina Czamara2, Jana Instinske4, Elisabeth B. Binder2, Martin Diewald1, Christian Kandler4, Bastian Mönkediek1

1Faculty of Sociology, Bielefeld University, Bielefeld, Germany. 2Dept. Genes and Environment, Max-Planck-Institute of Psychiatry, Munich, Germany. 3Graduate School of Systemic Neuroscience, Ludwig-Maximilian’s Universität, Munich, Germany. 4Dept. of Psychology, University of Bremen, Bremen, Germany

## 11:20 - 11:35

### OS-1C: [T] Lifespan Predictors of Cognitive Aging in the Louisville Twin Study

**Sophie A. Bell1**, Christopher R. Beam2, Sean R. Womack3,4, Evan J. Giangrande5,6, Alyssa C. Kam2, A. Cevelle Barna7, Sarah Deans7, Deborah W. Davis7,8, Deborah Finkel9,10, Eric Turkheimer1

1Department of Psychology, University of Virginia, Charlottesville, USA. 2Department of Psychology, University of Southern California, Los Angeles, USA. 3Department of Psychiatry and Human Behavior, The Warren Alpert Medical School of Brown University, Providence, USA. 4The Initiative on Stress, Trauma, and Resilience, The Miriam Hospital, Providence, USA. 5Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. 6Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, USA. 7Norton Children's Research Institute, affiliated with the University of Louisville School of Medicine, Louisville, USA. 8Department of Pediatrics, University of Louisville School of Medicine, Louisville, USA. 9Center for Economic and Social Research, University of Southern California, Los Angeles, USA. 10Institute for Gerontology, Jönköping University, Jönköping, Sweden

## 11:35 - 11:50

### OS-1C: Education Reduces Dementia Prevalence and Mitigates the Genetic Risk of Dementia

Leandro S Carvalho1, Sneha Nimmagadda2, Kenneth M Langa3, **Patrick Turley1**,2, Silvia H Barcellos1,4

1Center for Economic and Social Research, University of Southern California, Los Angeles, CA, USA. 2Department of Economics, University of Southern California, Los Angeles, CA, USA. 3Division of General Medicine, University of Michigan, Ann Arbor, MI, USA. 4NBER, National Bureau of Economic Research, Cambridge, MA, USA

# LSY-1D: Temperament, Social, and Emotional Behaviors in Early Childhood through Adolescence: Child Development through a Behavior Genetic Lens

## 10:35 - 11:50 Thursday, 27th June, 2024

## Venue Strand (Main Campus) K1.28

## Lisabeth Fisher DiLalla, Chair

## Gordon Harold, Discussant

## 10:35 - 10:50

### LSY-1D: Predicting Effortful Control and Adiposity in Adolescents Using a Stress-Sensitivity Model \*\*

Rebecca E.F. Gordon1, Elizabeth J.S. Bates2,1, Jody M. Ganiban3, Jenae M. Neiderhiser4, Misaki N. Natsuaki5, Daniel S. Shaw6, **Leslie D Leve2**,1

1Counseling Psychology and Human Services, University of Oregon, Eugene, OR, USA. 2Prevention Science Institute, University of Oregon, Eugene, OR, USA. 3Psychology, George Washington University, Washington D.C., USA. 4Psychology, Pennsylvania State University, Philadelphia, PA, USA. 5Psychology, University of California, Riverside, Riverside, CA, USA. 6Psychology, University of Pittsburgh, Pittsburgh, PA, USA

## 10:50 - 11:05

### LSY-1D: Examining Links between Temperament and Emotion Expression in Middle Childhood: A Twin Analysis

**Lisabeth F DiLalla1**, Riley L Marshall2

1Family & Community Medicine, Southern Illinois University School of Medicine, Carbondale, USA. 2Psychological and Behavioral Sciences, Southern Illinois University, Carbondale, USA

## 11:05 - 11:20

### LSY-1D: Genetic and Environmental Influences on Children’s Temperament Dimensions and Types

**Kathryn Lemery-Chalfant**, Alexys S Murillo, Sierra Clifford

Psychology, Arizona State University, Tempe, USA

## 11:20 - 11:35

### LSY-1D: The Longitudinal Associations Between Adolescent Self-esteem and Parental Warmth: A Twin Study in Early Adolescence \*\*

**Ariel Knafo-Noam**, **Dana Katsoty**

Psychology, Hebrew University of Jerusalem, Jerusalem, Israel

## 11:35 - 11:50

### LSY-1D: Discussant

**Gordon Harold**

Education, University of Cambridge, Cambridge, United Kingdom

# Lunch/MENTORING ROUNDTABLES (1 hour, 10 minutes)

## 11:50 - 13:00 Thursday, 27th June, 2024

## Eighth Floor Bush House

# Plenary 2: Dobzhansky Award Memorial Presentation for Professor Peter McGuffin

## 13:00 - 14:00 Thursday, 27th June, 2024

## Venue Auditorium (Bush House)

## Robert Plomin, Chair

Dobzhansky Award Memorial Presentation for Professor Peter McGuffin given by Professor Anita Thapar, with a15-minute concert by the Heath String Quartet performing the world premiere of a quartet composed by Professor McGuffin.

# LSY-2D: Genetically Informed Investigations of the Developmental Origins of Health and Disease

## 14:05 - 15:20 Thursday, 27th June, 2024

## Venue Strand (Main Campus) K1.28

## Olivia C. Robertson, Chair

## Jenae Neiderhiser, Discussant

## 14:05 - 14:20

### LSY-2D: [T] Epigenetic Aging in Siblings Differentially Exposed to Prenatal Maternal Smoking

**Nikolina Nonkovic**1, Kristine Marceau1, Chris Beam2, Amanda Ramos3, John E. McGeary4, Rohan H.C. Palmer5, Andrew C. Heath6, Valerie S. Knopik1

1Human Development and Family Science, Purdue University, West Lafayette, USA. 2Psychology, University of Southern California, Los Angeles, USA. 3Human Development and Family Studies, Utah State University, Logan, USA. 4Department of Psychiatry & Human Behavior, Brown University, Pawtucket, USA. 5Behavioral Genetics of Addiction Laboratory Department of Psychology, Emory College of Arts, Atlanta, USA. 6Psychiatry, Washington University School of Medicine in St. Louis, St.Louis, USA

## 14:20 - 14:35

### LSY-2D: [T] A Propensity Score Approach to Examining the Effects of Prenatal Substance Exposure on Development

**Ami S Ikeda**1, Carla Aleman1, Lejun Liu1, Manjushri Karthikeyan1, H.M. Sean Lee1, Valerie S. Knopik2, Rohan H.C. Palmer1

1Psychology, Emory University, Atlanta, USA. 2Human Development and Family Science, Purdue University, West Lafayette, USA

## 14:35 - 14:50

### LSY-2D: [T] Prenatal Programming and Within Family Trajectories of Internalizing Symptoms, Obesity Risk, and Relative Pubertal Timing: A Discordant Sibling Design

**Olivia C. Robertson**1,2, Kristine Marceau3, Kameron J. Moding3, Valerie S. Knopik3, Dan Foti4

1Human Development and Family Science, Purdue University, West Lafyette, USA. 2Department of Epidemiology & Biostatistics, Indiana University, Bloomington, USA. 3Human Development and Family Science, Purdue University, West Lafayette, USA. 5Department of Psychological Sciences, Purdue University, West Lafayette, USA

## 14:50 - 15:05

### LSY-2D: Within-Pair Associations between Early Weight Catch-Up Growth and Body Mass Index in Adolescence: Findings from the Louisville Twin Study

Sean R Womack**1**,2,3, Christopher R Beam4, Evan J Giangrande5,6,7, Sophie A Bell8, Deborah W Davis9,10, Deborah Finkel11,12, **Eric Turkheimer8**

1Psychiatry and Human Behavior, The Warren Alpert Medical School of Brown University, Providence, USA. 2Initiative on Stress, Trauma, and Resilience, The Miriam Hospital, Providence, USA. 3Bradley/Hasbro Children’s Research Center, E.P. Bradley Hospital, Providence, USA. 4Department of Psychology, University of Southern California, Los Angeles, USA. 5Analytic & Translational Genetics Unit, Massachusetts General Hospital, Boston, USA. 6Psychiatric & Neurodevelopmental Genetics Unit, Massachusetts General Hospital, Boston, Boston, USA. 7Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Boston, USA. 8Department of Psychology, University of Virginia, Charlottesville, USA. 9Department of Pediatrics, University of Louisville School of Medicine, Louisville, USA. 10Norton Children's Research Institute, University of Louisville School of Medicine, Louisville, USA. 11Center for Economic and Social Research, University of Southern California, Los Angeles, USA. 12Institute for Gerontology, Jönköping University, Jönköping, Sweden

## 15:05 - 15:20

### LSY-2D: Discussant

**Jenae Neiderhiser**

Psychology, Penn State University, University Park, USA. Human Development and Family Studies, Penn State University, University Park, USA

# Lightning-2A: Neurodevelopmental traits

## 14:10 - 15:20 Thursday, 27th June, 2024

## Venue Auditorium (Bush House)

## Kelli Lehto, Chair

## 14:10 - 14:20

### LT-2A: Early developmental and psychiatric manifestations of rare copy number variants in children and adolescents: A population-based investigation

**Charlotte A Dennison**1,2, Joanna Martin1,2, Lucy Riglin1,2, Amy Shakeshaft1,2, Victoria Powell1,2, George Kirov2, Michael J Owen2, Michael C O'Donovan2, Anita Thapar1,2

1Wolfson Centre for Young People's Mental Health, Cardiff University, Cardiff, United Kingdom. 2Centre for Neuropsychiatric Genetics and Genomics, Cardiff University, Cardiff, United Kingdom

## 14:20 - 14:30

### LT-2A: Investigating the relationship between sleep phenotypes and neurodevelopmental conditions in the Norwegian Mother, Father, and Child Cohort Study (MoBa)

**Elizabeth C Corfield**1,2, Laurie J Hannigan1,2,3, Ted Reichborn-Kjennerud2,4, Helga Ask2,5, Alexandra Havdahl2,1,5

1Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 2PsychGen Center for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 3Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, United Kingdom. 4Institute of Clinical Medicine, University of Oslo, Oslo, Norway. 5PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway

## 14:30 - 14:40

### LT-2A: Genome-wide association study of age at onset of walking

**Angelica Ronald**1, Anna Gui2, Anja Hollowell3, Morgan Morgan1, Tomoki Arichi4, Laurie Hannigan5, Frank Dudbridge6, Mark H Johnson7, Stephan Sanders8, Alexandra Havdahl5

1Department of Psychology, University of Surrey, Guildford, United Kingdom. 2Department of Psychology, University of Essex, Colchester, United Kingdom. 3Department of Psychology, Birkbeck, London, United Kingdom. 4School of Biomedical Engineering and Imaging Sciences, King's College London, London, United Kingdom. 5Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 6Department of Population Health Sciences, University of Leicester, Leicester, United Kingdom. 7Department of Psychology, University of Cambridge, Cambridge, United Kingdom. 8Department of Paediatrics, University of Oxford, Oxford, United Kingdom

## 14:40 - 14:50

### LT-2A: Dissecting the contribution of common variants to risk of rare neurodevelopmental conditions

Qin Qin Huang1, Emilie M Wigdor2,1, Patrick Campbell3,1, Daniel S Malawsky1, Kaitlin E Samocha4, Kartik Chundru1,5, Varun Warrier6, Alexander Strudwick Young7, Matthew E Hurles1, **Hilary C Martin**1

1Human Genetics Programme, Wellcome Sanger Institute, Hinxton, United Kingdom. 2Department of Paediatrics, University of Oxford, Oxford, United Kingdom. 3Department of Genetics, King's College London, London, United Kingdom. 4Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. 5The Medical School, University of Exeter, Exeter, United Kingdom. 6Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom. 7Anderson School of Management, University of California Los Angeles, Los Angeles, United Kingdom

## 14:50 - 15:00

### LT-2A: Genetics of environmental sensitivity to psychiatric and neurodevelopmental phenotypes: evidence from GWAS of monozygotic twins

**Elham Assary**1,2, Jonathan Coleman2, Gibran Hemani3, The Within Family Consortium4, Jaakko Kapiro5, Thalia C Eley2, Neil M Davies3,6,7,8, Patricia B Munroe9, Robert Keers1

1School of Biological and Psychological Sciences, QueenMary University of London, London, United Kingdom. 2Social, Genetic, Developmental Psychology Research Centre, King's College London, London, United Kingdom. 3Medical Research Council Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 4The Within Family Consortium, ., ., United Kingdom. 5Institute for Molecular Medicine FIMM, University of Helsinki, Helsinki, Finland. 6K.G. Jebsen Center for Genetic Epidemiology, Department of Public Health and Nursing, Norwegian University of Science and Technology, Trondheim, Norway. 7Division of Psychiatry, University College London, London, United Kingdom. 8Department of Statistical Sciences, University College London, London, United Kingdom. 9William Harvey Research Institute, QueenMary University of London, London, United Kingdom

## 15:00 - 15:10

### LT-2A: Expanded GWAS of >60,000 individuals with Attention-Deficit/Hyperactivity Disorder identifies >50 significant loci and enables profiling of differential effects across traits and within families \*\*

**Raymond K Walters**1,2, Ditte Demontis3,4, Georgios Athanasiadis5, G Bragi Walters6,7, Tetyana Zayats1,2,8, Daniel Howrigan1,2, Stephen Faraone9, Kári Stefánsson6,7, Thomas Werge4,10, Anders Børglum3,4, Benjamin M Neale1,2, Barbara Franke11,12,13

1Analytic and Translational Genetics Unit, Department of Medicine, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA. 2Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, MA, USA. 3Department of Biomedicine - Human Genetics, Aarhus University, Aarhus, Denmark. 4The Lundbeck Foundation Initiative for Integrative Psychiatric Research, iPSYCH, Aarhus, Denmark. 5Evolutionary Biology, Ecology and Environmental Sciences, Universitat de Barcelona, Barcelona, Spain. 6Population Genomics, deCODE Genetics/Amgen, Reykjavik, Iceland. 7Faculty of Medicine, University of Iceland, Reykjavik, Iceland. 8PROMENTA, Department of Psychology, University of Oslo, Oslo, Norway. 9Departments of Psychiatry and of Neuroscience and Physiology, SUNY Upstate Medical University, Syracuse, NY, USA. 10Mental Health Centre Sct. Hans, Capital Region of Denmark, Institute of Biological Psychiatry, Copenhagen University Hospital, Copenhagen, Denmark. 11Department of Human Genetics, Radboud University Medical Center, Nijmegen, Netherlands. 12Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands. 13Department of Psychiatry, Radboud University Medical Center, Nijmegen, Netherlands

## 15:10 - 15:20

### LT-2A: Genome-wide association meta-analysis of attention-deficit/hyperactivity disorder symptoms and symptom domains in adults

Elis Haan1,2, Laura E. Hegemann3,4, Natàlia Pujol Gualdo1, Katri Pärna1, Siim Kurvits1, Alexandra Havdahl3, Elizabeth C. Corfield3,4, Triin Laisk1, Kadri Kõiv1, Helga Ask3,5, **Kelli Lehto1**

1Estonian Genome Centre, Institute of Genomics, University of Tartu, Tartu, Estonia. 2Psychiatric Hospital, Viljandi Hospital, Viljandi, Estonia. 3PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 5PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway

# Lightning-2B: Cognition/Executive Functions

## 14:10 - 15:20 Thursday, 27th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Daniel E. Gustavson, Chair

## 14:10 - 14:20

### LT-2B: [T] The genomics of specific cognitive abilities independent of general cognitive ability: GWAS-by-Subtraction

**Francesca Procopio**1, Engin Keser1, Margherita Malanchini2,1, Kaili Rimfeld3,1, Andrea Allegrini4, Robert Plomin1

1Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom. 2School of Biological and Chemical Sciences, Queen Mary University of London, London, United Kingdom. 3Department of Psychology, Royal Holloway, University of London, Egham, United Kingdom. 4Department of Clinical, Educational and Health Psychology, Division of Psychology and Language Sciences, University College London, London, United Kingdom

## 14:20 - 14:30

### LT-2B: GenomicSEM Modelling of Diverse Executive Function GWAS Improves Gene Discovery

**Lucas C Perry**, Nicolas Chevalier, Michelle Luciano

School of Philosophy, Psychology and Language Sciences, University of Edinburgh, Edinburgh, United Kingdom

## 14:30 - 14:40

### LT-2B: Phenotype imputation increases the power of rare genetic association studies of fluid intelligence in UK Biobank \*\*

**Wei Huang**1, David van den Berg2, Petr Danecek1, Daniel S Malawsky1, Dirk J.A Smit2, Karin Verweij2, Sarah J Lindsay1, Abdel Abdellaoui2, Matthew E Hurles1, Hilary C Martin1

1Department of Human Genetics, Wellcome Sanger Institute, Cambridge, United Kingdom. 2Department of Psychiatry, Amsterdam University Medical Center, Amsterdam, Netherlands

## 14:40 - 14:50

### LT-2B: The use of an alternative bifactor scoring approach to assess the heritability of childhood executive functioning \*\*

**Gianna Rea-Sandin**1, Mary C. Davis2, Kathryn Lemery-Chalfant2

1Department of Psychology, University of Minnesota, Minneapolis, USA. 2Department of Psychology, Arizona State University, Tempe, USA

## 14:50 - 15:00

### LT-2B: [T] Effect of APOE ε4 Status on Cognitive Ability Trajectories in the Louisville Twin Study

**Alyssa C Kam**1, Christopher R Beam1, Eric N Turkheimer2, Deborah Finkel3,4, Evan J Giangrande5,6, Emily E Andrews2, Sophie A Bell2, Kristin Higdon7, Cevelle Barna7, Sarah Deans7, Ariel King7, Kendra Sikes7, Lesa Ryan7, Deborah W Davis7,8

1Department of Psychology, University of Southern California, Los Angeles, USA. 2Department of Psychology, University of Virginia, Charlottesville, USA. 3Center for Economic and Social Research, University of Southern California, Los Angeles, USA. 4Institute for Gerontology, Jönköping University, Jönköping, Sweden. 5Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. 6Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, USA. 7Norton Children’s Research Institute, University of Louisville School of Medicine, Louisville, USA. 8Department of Pediatrics, University of Louisville School of Medicine, Louisville, USA

## 15:00 - 15:10

### LT-2B: Strong Stability of Cognitive Ability from Infancy Through Adulthood

**Daniel E. Gustavson1**, Giulia A. Borriello2, Robin P. Corley1, Sally-Ann Rhea1, Sally J. Wadsworth1, Naomi P. Friedman1,3, Chandra A. Reynolds1,3

1Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 2Department of Learning Science, Kent State University, Kent, USA. 3Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA

## 15:10 - 15:20

### LT-2B: Polygenic Scores for Intelligence and Educational Attainment Predict Cognitive Measures Between Infancy and Adulthood

**Giulia A Borriello1**, Daniel E Gustavson2,3, Robin P. Corley2, Sally-Ann Rhea2, Sally J. Wadsworth2, Naomi P. Friedman2,3, Chandra A. Reynolds2,3

1Learning Sciences, Kent State University, Kent, USA. 2Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 3Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA

# Lightning-2C: Epigenetic/Biological Aging II

## 14:10 - 15:20 Thursday, 27th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Deborah Finkel, Chair

## 14:10 - 14:20

### LT-2C: [T] Distinguishing Genetic Predictors of Dementia and Cognitive Decline

**Margaret L Clapp Sullivan**1,2, Javier de la Fuente1,2, Elliot M Tucker-Drob1,2

1Department of Psychology, University of Texas at Austin, Austin, USA. 2Population Research Center, University of Texas at Austin, Austin, USA

## 14:20 - 14:30

### LT-2C: Evidence of horizontal and vertical pleiotropy between substance use and indices of aging

**Jared V. Balbona**1, Emma C. Johnson1, Paul Jeffries1, Ryan Bogdan2, Arpana Agrawal1

1Psychiatry, Washington University School of Medicine, St. Louis, USA. 2Psychological & Brain Sciences, Washington University in Saint Louis, St. Louis, USA

## 14:30 - 14:40

### LT-2C: Moving beyond the frailty index as a single aggregate measure: genomic analyses reveal clinically relevant subclusters across frailty indicators

**Isabelle F Foote**1, Jonny P Flint2,3,4, John D Fisk5, Tobias K Karakach6, Andrew Rutenberg7, Nicholas G Martin8, Michelle K Lupton8, Simon R Cox2, Michelle Luciano3, Kenneth Rockwood5, Andrew D Grotzinger1,9

1Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 2Lothian Birth Cohorts, University of Edinburgh, Edinburgh, United Kingdom. 3Department of Psychology, University of Edinburgh, Edinburgh, United Kingdom. 4Advanced Care Research Centre School of Engineering, University of Edinburgh, Edinburgh, United Kingdom. 5Division of Geriatric Medicine, Dalhousie University, Halifax, Canada. 6Department of Pharmacology, Dalhousie University, Halifax, Canada. 7Department of Physics and Atmospheric Science, Dalhousie University, Halifax, Canada. 8Department of Mental Health and Neuroscience, QIMR Berghofer Medical Research Institute, Brisbane, Australia. 9Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA

## 14:40 - 14:50

### LT-2C: Genetic and environmental influences on brain age measures at age 29 and their associations with early life cognition

**Naomi P Friedman**1,2, Andrew E Reineberg3, Daniel E Gustavson1,2, Sally J Wadsworth1, Chandra A Reynolds1,2

1Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 2Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 3Department of Radiology, University of Pittsburgh School of Medicine, Pittsburgh, USA

## 14:50 - 15:00

### LT-2C: Heritability of plasma biomarkers for Alzheimer’s Disease: a Nuclear Twin Family Design

**Rebecca Z Rousset**1, Anouk den Braber2,3, David H Wilson4, Charlotte E Teunissen1, Eco JC de Geus2

1Department of Clinical Chemistry, Amsterdam UMC, Vrije Universiteit, Amsterdam, Netherlands. 2Department of Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 3Department of Neurology, Amsterdam UMC, Vrije Universiteit, Amsterdam, Netherlands. 4Quanterix Corp, Quanterix Corp, Billerica, USA

## 15:00 - 15:10

### LT-2C: [T] A Twin Study of Early-Life Temperament and Accelerated Biological Aging in Midlife

**Eric N. Penichet**1, Christopher R. Beam1, Sophie A. Bell2, Eric Turkheimer2, Ebrahim Zandi3, Deborah Finkel4,5, Cevelle Barna6, Ariel King6, Kendra L Sikes6, Sarah Deans6, Lesa Ryan6, Deborah W. Davis6,7

1Department of Psychology, University of Southern California, Los Angeles, USA. 2Department of Psychology, University of Virginia, Charlottesville, USA. 3Department of Molecular Microbiology and Immunology, Keck School of Medicine, University of Southern California, Los Angeles, USA. 4enter for Economic and Social Research, University of Southern California, Los Angeles, USA. 5Institute for Gerontology, Jönköping University, Jönköping, Sweden. 6Norton Children’s Research Institute affiliated with the University of Louisville School of Medicine, University of Louisville School of Medicine, Louisville, USA. 7Department of Pediatrics, University of Louisville School of Medicine, Louisville, USA

## 15:10 - 15:20

### LT-2C: [T] Negative Life Events and Epigenetic Ageing: a Study in the Netherlands Twin Register \*\*

**Bodine M.A. Gonggrijp**1,2, Steve G.A. van de Weijer1, Catrien C.J.H. Bijleveld1,3, Dorret I. Boomsma2,4, Jenny van Dongen2,4

1Netherlands institute for the Study of Crime and Law Enforcement, NSCR, Amsterdam, Netherlands. 2Department of Biological Psychology, Vrije Universiteit Amsterdam (VU), Amsterdam, Netherlands. 3Department of Criminal Law and Criminology, Vrije Universiteit Amsterdam (VU), Amsterdam, Netherlands. 4Amsterdam Public Health Research Institute, Vrije Universiteit Amsterdam (VU), Amsterdam, Netherlands

# Coffee/Tea/Snacks Break (30 minutes)

## 15:20 - 15:50 Thursday, 27th June, 2024

## Venue Arcade (Bush House)

# SY-3A: Considering the impact of evolution and population dynamics on behavioral and neuropsychiatric phenotypes

## 15:50 - 17:30 Thursday, 27th June, 2024

## Venue Auditorium (Bush House)

## Emma Johnson, Chair

## Matthew C. Keller, Discussant

## 15:50 - 16:10

### SY-3A: Sex differences in the association of socioeconomic factors and cognitive function with family history of Alzheimer’s disease \*\*

**Jun He**1,2, Brenda Cabrera-Mendoza1,2, Eleni Friligkou1,2, Adam P. Mecca1,3, Christopher H. van Dyck1,3,4, Gita A. Pathak1,2, Renato Polimanti1,2,5

1Department of Psychiatry, Yale University School of Medicine, New Haven, USA. 2Department of Psychiatry, Veteran Affairs Connecticut Healthcare System, West Haven, USA. 3Alzheimer's Disease Research Unit, Yale University School of Medicine, New Haven, USA. 4Departments of Neuroscience and Neurology, Yale University School of Medicine, New Haven, USA. 5Wu Tsai Institute, Yale University, New Haven, USA

## 16:10 - 16:30

### SY-3A: The impact of participant behaviour and study design characteristics on findings obtained from the UK Biobank

**Tabea Schoeler**1, Jean-Baptiste Pingault2, Zoltán Kutalik1

1Department of Computational Biology, University of Lausanne, Lausanne, Switzerland. 2Department of Clinical, Educational and Health Psychology, University College London, London, United Kingdom

## 16:30 - 16:50

### SY-3A: Understanding the Genetic Architecture in the Tails of Complex Traits From Population Genetic Simulations

**Anil P.S. Ori1**,2, Carla G. Delgado3, Clive J. Hoggart1, Paul F. O'Reilly1

1Department of Genetics and Genomic Sciences, Icahn School of Medicine, Mount Sinai, New York, New York, USA. 2Department of Psychiatry & Genetic Epidemiology, Amsterdam UMC location University of Amsterdam, Amsterdam, Netherlands. 3Genomics plc, -, Oxford, United Kingdom

## 16:50 - 17:10

### SY-3A: Associations between genome-wide autozygosity and complex traits in two ancestrally diverse US cohorts.

**Emma C Johnson**1, Eleni Friligkou2,3, Sarah MC Colbert4, Gita A Pathak2,3, Brenda Cabrera-Mendoza2,3, Frank R Wendt5,6, Drew Helmer7, Elizabeth Hauser8, Matthew C Keller9,10, Renato Polimanti2,3, James F Wilson11,12

1Department of Psychiatry, Washington University School of Medicine, St. Louis, USA. 2Department of Psychiatry, Yale University School of Medicine, West Haven, USA. 3Department of Psychiatry, Veterans Affairs Connecticut Healthcare Center, West Haven, USA. 4Department of Genetics and Genomics, Icahn School of Medicine at Mount Sinai, New York, USA. 5Department of Anthropology, University of Toronto, Mississauga, Canada. 6Biostatistics Division, Dalla Lana School of Public Health, Toronto, Canada. 7Department of Medicine, Baylor College of Medicine, Houston, USA. 8Department of Biostatistics and Bioinformatics, Duke University, Durham, USA. 9Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 10Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 11Centre for Global Health Research, Usher Institute, University of Edinburgh, Edinburgh, United Kingdom. 12MRC Human Genetics Unit, Institute of Genetics and Cancer, University of Edinburgh, Edinburgh, United Kingdom

## 17:10 - 17:30

### SY-3A: Discussant

**Matthew C. Keller**

Institute for Behavioral Genetics, University of Colorado, Boulder, USA. Psychology & Neuroscience, University of Colorado, Boulder, USA

# SY-3B: Exploring psychiatric-somatic multimorbidity using genetic epidemiology

## 15:50 - 17:30 Thursday, 27th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Kaili Rimfeld, Chair

## 15:50 - 16:10

### SY-3B: Exploring psychiatric-somatic multimorbidity using genetic epidemiology Adolescent multimorbidity and health-related quality of life: genetic insights from the Norwegian Mother, Father and Child Cohort Study (MoBa)

**Daniela Bragantini**1,2, Elizabeth Corfield1,2, Amy Shakeshaft3,4, Ole A Andreassen5,6, Helga Ask2,7, Alexandra Havdahl2,1,7, Laurie J Hannigan2,1

1Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 2PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 3Wolfson Centre for Young People’s Mental Health, Division of Psychological Medicine and Clinical Neuroscience, Cardiff University, Cardiff, United Kingdom. 4Centre for Neuropsychiatric Genetics and Genomics, Division of Psychological Medicine and Clinical Neurosciences, Cardiff University, Cardiff, United Kingdom. 5NORMENT Centre, Institute of Clinical Medicine, University of Oslo, Oslo, Norway. 6Division of Mental Health and Addiction, Oslo University Hospital, Oslo, Norway. 7PROMENTA Research Center, University of Oslo, Oslo, Norway

## 16:10 - 16:30

### SY-3B: Exploring psychiatric-somatic multimorbidity using genetic epidemiology Health and wellbeing among close family members of children with comorbid health conditions: triangulating the evidence on spillover effects

**Laurie J Hannigan**1,2,3, Daniela Bragantini2,1, Adrian Dahl Askelund2,1, Helga Ask1,4, Alexandra Havdahl1,2,4

1PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 2Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 3Population Health Sciences, University of Bristol, Bristol, United Kingdom. 4PROMENTA Research Center, University of Oslo, Oslo, Norway

## 16:30 - 16:50

### SY-3B: Exploring psychiatric-somatic multimorbidity using genetic epidemiology Internalising and cardiometabolic multimorbidity in individuals with neurodevelopmental copy number variants in UK Biobank

**Ioanna Katzourou1**, LINC Consortium1, George Kirov1, James Walters1, Michael J Owen1,2, Peter Holmans1, Marianne van den Bree1,2

1Centre for Neuropsychiatric Genetics and Genomics, Cardiff University, Cardiff, United Kingdom. 2Neuroscience and Mental Health Innovation Institute, Division of Psychological Medicine and Clinical Neurosciences, Cardiff University, Cardiff, United Kingdom

## 16:50 - 17:10

### SY-3B: Exploring psychiatric-somatic multimorbidity using genetic epidemiology Socioeconomic position and somatic comorbidity in mental disorders \*\*

Martin Tesli1, Vidar Hjellvik2, **Andreas Jangmo**1, Marit Haram1, Ingvild Odsbu2, Inger Ariansen2, Steinar Krokstad3, Øyvind Næss2, Ronald Kessler4, Lars J Kjerpeseth2, Jørgen Bramness5

1Department of Mental Health and Suicide, Norwegian Institute of Public Health, Oslo, Norway. 2Department of Chronic Diseases, Norwegian Institute of Public Health, Oslo, Norway. 3Department of Public Health and Nursing, Norwegian University of Science and Technology, Trondheim, Norway. 4Department of Health Care Policy, Harvard Medical School, Boston, USA. 5Department of Alcohol, Tobacco and Drugs, Norwegian Institute of Public Health, Oslo, Norway

# SY-3C: Genetics of anxiety and trauma-related outcomes

## 15:50 - 17:30 Thursday, 27th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Thalia C. Eley, Patrizia Pezzoli, Co-Chairs

## Brittany L. Mitchell, Discussant

## 15:50 - 16:10

### SY-3C: Validation of the short-form PTSD checklist for use in large genetically informative cohorts

**Jacob Knyspel**, Jonathan Coleman

Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom

## 16:10 - 16:30

### SY-3C: The effect of polygenic liability for psychiatric disorders on COVID-19 outcomes in people with depression: the mediating role of anxiety

**Anna Monistrol-Mula**1,2,3, Sarah E. Medland4,5, Lucía Colodro-Conde4,5, Brittany L. Mitchell4

1Group of Epidemiology of Psychiatric disorders and Ageing, Sant Joan de Déu Research Institute, Barcelona, Spain. 2Centre for Biomedical Research on Mental Health (CIBERSAM), Centre for Biomedical Research on Mental Health (CIBERSAM), Madrid, Spain. 3Department of Medicine, University of Barcelona, Barcelona, Spain. 4Mental Health and Neuroscience program, QIMR Berghofer Medical Research Institute, Brisbane, Australia. 5School of Psychology, The University of Queensland, Brisbane, Australia

## 16:30 - 16:50

### SY-3C: Assessing the impact of childhood trauma on later intimate partner violence using genetically informed methods \*\*

**Patrizia Pezzoli**, Wikus Barkhuizen, Jean-Baptiste Pingault, Essi Viding

Clinical, Educational and Health Psychology, University College London (UCL), London, United Kingdom

## 16:50 - 17:10

### SY-3C: Genetic and environmental influences on self-reported treatment outcomes for anxiety and depression: A twin study.

**Celestine Lockhart**1, Megan Skelton1, Matthew Hotopf2,3, Genevieve Morneau-Vaillancourt1,4, Elisavet Palaiologou1, Robert Plomin1, Tom A. McAdams1,5, Thalia C. Eley1,6

1Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom. 2South London and Maudsley, NHS Foundation, London, United Kingdom. 3Department of Psychological Medicine, King's College London, London, United Kingdom. 4School of Criminology, Faculty of Arts and Sciences, University of Montreal, Montreal, Canada. 5Promenta Research Centre, University of Oslo, Oslo, Norway. 6UK National Institute for Health Research (NIHR) Biomedical Research Centre, South London and Maudsley Hospital, London, United Kingdom

## 17:10 - 17:30

### SY-3C: Discussant

**Brittany L Mitchell**

Mental Health and Neuroscience, QIMR Berghofer Medical Research Institute, Brisbane, Australia

# [Poster Session I](#Posters1)

## 17:30 - 19:30 Thursday, 27th June, 2024

## Venue Eighth Floor Bush House

# Friday, 28th June

# Registration 8:30am - 5:00 pm

## 08:30 - 17:00 Friday, 28th June, 2024

## Venue Arcade (Bush House)

# Plenary 3: Karoline Kuchenbäcker

## 09:00 - 10:00 Friday, 28th June, 2024

## Venue Auditorium (Bush House)

## Abdel Abdellaoui, Chair

**Karoline Kuchenbäcker**, Professor of Genetic Epidemiology, Mental Health Neuroscience, Division of Psychiatry, University College London &  Scientific Lead for Diverse Data, Genomics England

**Equity in genomic research \*\***

# Coffee/Tea/Snacks Break (20 minutes)

## 10:00 - 10:20 Friday, 28th June, 2024

## Venue Arcade (Bush House)

# SY-4A: Harmful Mutation: addressing misuse, misapplication, misinterpretation of genetics

## 10:20 - 12:20 Friday, 28th June, 2024

## Venue Auditorium (Bush House)

## Lucas J. Matthews, Chair

## Eric Turkheimer, Discussant

10:20 - 10:40

### SY-4A: The Moralistic Fallacy Fallacy \*\*

**Lucas J. Matthews**

Psychiatry, Columbia University, New York, USA

## 10:40 - 11:00

### SY-4A: The preprint problem: Fringe, genetically informed studies of group differences in behavior housed on open science platforms \*\*

**Evan J Giangrande**

Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, USA

## 11:00 - 11:20

### SY-4A: Purported Genetic Basis of Group Differences in Intelligence is a Conspiracy Theory \*\*

**Eric Turkheimer**

Department of Psychology, University of Virginia, Charlottesville, USA

## 11:20 - 11:40

### SY-4A: Citizen scientific racism: Analyzing the "misappropriation" of behavior genetics \*\*

**Aaron Panofsky**

Institute for Society and Genetics, UCLA, Los Angeles, USA. Public Policy, UCLA, Los Angeles, USA

## 11:40 - 12:00

### SY-4A: A Multi-stakeholder Approach to Mitigating the Harms and Promoting the Benefits of Social and Behavioral Genomics \*\*

**Daphne O Martschenko**

Center for Biomedical Ethics (Department of Pediatrics), Stanford Medicine, Stanford, USA

# SY-4B: Epigenetic measures of biological aging across the life span and new quantifications of child development

## 10:20 - 12:20 Friday, 28th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Laurel Raffington, Chair

## Kathryn Paige Harden, Discussant

## 10:20 - 10:40

### SY-4B: [T] Do children who develop faster go on to age faster in midlife?

**J. Kathy Xie**1, Avshalom Caspi1,2,3, HonaLee Harrington1, Renate M Houts1, Terrie E Moffitt1,2,3

1Psychology & Neuroscience, Duke University, Durham, USA. 2Psychiatry & Behavioral Sciences, Duke University, Durham, USA. 3Institute of Psychiatry, King's College London,

## 10:40 - 11:00

### SY-4B: Linked emergence of racial disparities in mental health and epigenetic biological aging across childhood and adolescence \*\*

Muna Aikins1, **Yayouk E. Willems**1, Colter Mitchell2, Bridget Goosby3, Laurel Raffington4

1Biosocial, Max Planck Institute for Human Development, Berlin, Germany. 2Population Studies Center of the Institute for Social Research, University of Michigan, Ann Arbor, USA. 3Population Research Center, University of Texas, Austin, USA. 4Biosocial, Max Planck Institute for Human Development, Berlin, USA

## 11:00 - 11:20

### SY-4B: [T] Associations of DNA-methylation profile scores of cognition with cognitive development, academic performance, and socioeconomic attainments

**Deniz Fraemke**1, Jan-Henrik Walter1, Kathryn Paige Harden2, Margherita Malanchini3, Elliot Max Tucker-Drob2,4, Laurel Raffington1

1Max Planck Research Group Biosocial – Biology, Social Disparities, and Development, Max Planck Institute for Human Development, Berlin, Germany. 2Department of Psychology, University of Texas at Austin, Austin, USA. 3School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 4Population Research Center, University of Texas at Austin, Austin, USA

## 11:20 - 11:40

### SY-4B: [T] Epigenome-wide analyses of pubertal development in adolescence: Connections with biological aging

**Abby J deSteiguer**1, Trey Smith2, Joshua Goode2, Yayouk Willems3, Elliot M Tucker-Drob1,4, Laurel Raffington3, Colter Mitchell2, K. Paige Harden1,4

1Department of Psychology, University of Texas at Austin, Austin, TX, USA. 2Institute of Social Research, University of Michigan-Ann Arbor, Ann Arbor, MI, USA. 3Max Planck Research Group Biosocial – Biology, Social Disparities, and Development, Max Planck Institute for Human Development, Berlin, Germany. 4Population Research Center, University of Texas at Austin, Austin, TX, USA

## 11:40 - 12:00

### SY-4B: Harnessing epigenetics to study the shared nature of development in childhood and biological aging in adulthood \*\*

**Laurel Raffington**

Max Planck Research Group Biosocial, Max Planck Institute for Human Development, Berlin, Germany

## 12:00 - 12:20

### SY-4B: Discussant

**K. Paige Harden**

Psychology, University of Texas at Austin, Austin, USA

# SY-4C: Leveraging genetically-informed designs to investigate early life factors associated with development of psychopathology

## 10:20 - 12:20 Friday, 28th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Kaili Rimfeld, Chair

## Jenae Neiderhiser, Discussant

## 10:20 - 10:40

### SY-4C: Multivariate parental effects across the internalizing-externalizing spectrum in childhood: results from the Norwegian Mother, Father, and Child Cohort Study

**Espen Moen Eilertsen**1, Nikolai Haahjem Eftedal1, Rosa Cheesman1, Ziada Ayorech1, Joakim Coleman Ebeltoft1, Hans Fredrik Sunde2, Anneli Tandberg1, Fartein Torvik1,2, Eivind Ystrom1,3,4

1Promenta Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 2Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. 3Pharmaco-Epidemiology and Drug Safety Research Group, School of Pharmacy, University of Oslo, Oslo, Norway. 4Departmnet of mental disorders, Norwegian Institute of Public Health, Oslo, Norway

## 10:40 - 11:00

### SY-4C: A genetically informed investigation into the bidirectional links between parenting style and child externalizing behaviours

**Joanna K Bright**1, Yasmin I Ahmadzadeh1, Olakunle Oginni1,2, Essi Viding3, Eivind Ystrøm4,5, Tom A McAdams1,4

1SGDP Centre, IoPPN, King's College London, London, United Kingdom. 2Centre for Neuropsychiatric Genetics and Genomics, Cardiff University, Cardiff, United Kingdom. 3Division of Psychology and Language Sciences, University College London, London, United Kingdom. 4PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 5PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

## 11:00 - 11:20

### SY-4C: [T] Exploring the direction of effects between parenting behaviours and offspring depressive symptoms: an intergenerational MR-DoC study

**Meredith Han**1,2, Joanna Bright1, Christopher Rayner1, Olakunle Oginni3, Eivind Ystrom4,5, Tom McAdams1,4

1SGDP, King's College London, London, United Kingdom. 2Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore. 3Wolfson Centre for Young people’s Mental Health, Cardiff University, Cardiff, United Kingdom. 4PROMENTA Research Center, University of Oslo, Oslo, Norway. 5PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

## 11:20 - 11:40

### SY-4C: [T] Genetic Risk and Prenatal Substance Exposure on Callous-Unemotional Behaviors and the Effect on Parenting: A Developmental Cascade Model

**Chia-li Yu**1, Jody M. Ganiban2, Daniel S. Shaw3, Misaki N. Natsuaki4, Leslie D. Leve5, Jenae M. Neiderhiser1

1Psychology, Penn State University, University Park, PA, USA. 2Psychology, George Washington University, Washington, DC, USA. 3Psychology, University of Pittsburgh, Pittsburgh, PA, USA. 4Psychology, University of California, Riverside, Riverside, CA, USA. 5Prevention Science Institute, University of Oregon, Eugene, OR, USA

## 11:40 - 12:00

### SY-4C: The associations between educational experiences and mental health from childhood to young adulthood

**Rebecca Ferdinand**1, Margherita Malanchini2,3, Robert Plomin3, Kaili Rimfeld1,3

1Department of Psychology, Royal Holloway, University of London, London, United Kingdom. 2Department of Biological and Experimental Psychology, Queen Mary, University of London, London, United Kingdom. 3Social, Genetic and Developmental Psychiatry Centre, , Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom

## 12:00 - 12:20

### SY-4C: Discussant

Jenae Neiderhiser

Psychology, Penn State University, State College, USA. Human Development and Family Studies, Penn State University, State College, USA

# SY-4D: Leveraging in-depth phenotyping and genetics to predict depression heterogeneity

## 10:20 - 12:20 Friday, 28th June, 2024

## Venue Strand (Main Campus) K1.28

## Gerome Breen, Chair

## Sarah Medland, Discussant

## 10:20 - 10:40

### SY-4D: [T] Incorporating genetic and clinical predictors for antidepressant side effects in the Genetic Link of Anxiety and Depression Study

**Danyang Li**, Yuhao Lin, Helena L Davies, Gerome Breen

1. Social Genetic and Developmental Psychiatry Centre, King’s College London, London, United Kingdom

## 10:40 - 11:00

### SY-4D: [T] An exploration of the genetic etiology of MDD and depressive symptoms in the BIONIC sample

**Floris Huider**

Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

## 11:00 - 11:20

### SY-4D: Joint multi-family history and multi-polygenic score prediction of major depressive disorder \*\*

**Rujia Wang**1,2, Helena Davies1,2, Sang-Hyuck Lee1,2, Jonathan R.I. Coleman1,2, Raquel Iniesta3, Thalia C. Eley1,2, Gerome Breen1,2

1Social, Genetic, and Developmental Psychiatry Centre; Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom. 2UK National Institute for Health Research (NIHR) Biomedical Research Centre, South London and Maudsley Hospital and King’s College London, London, United Kingdom. 3Department of Biostatistics and Health Informatics, King's College London, London, United Kingdom

## 11:20 - 11:40

### SY-4D: Using polygenic risk scores to characterise antidepressant treatment response in the Australian Genetics of Depression Study

**Brittany L Mitchell**1, Nicholas G Martin1, Sarah E Medland1, Naomi R Wray2,3

1Mental Health and Neuroscience, QIMR Berghofer Medical Research Institute, Brisbane, Australia. 2Institute for Molecular Bioscience, University of Queensland, Brisbane, Australia. 3Department of Psychiatry, University of Oxford, Oxford, United Kingdom

## 11:40 - 12:00

### SY-4D: Discussant

**Gerome Breen**

Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom

# Lunch/IDEA Committee - Conversation open to all (1 hour, 10 minutes)

## 12:20 - 13:30 Friday, 28th June, 2024

## Venue Arcade (Bush House)

# SY-5A: Intergenerational transmission of education

## 13:30 - 15:10 Friday, 28th June, 2024

## Venue Auditorium (Bush House)

## Elsje van Bergen, Chair

## Rosa Cheesman, Discussant

## 13:30 - 13:50

### SY-5A: Intergenerational transmission of education Modeling intergenerational parental and extended family effects in the presence of indirect assortative mating

**Fartein A Torvik**1,2, Espen M Eilertsen2, Hans F Sunde1

1Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. 2Promenta Research Center, University of Oslo, Oslo, Norway

## 13:50 - 14:10

### SY-5A: Intergenerational transmission of education Why does educational inequality run in families? 100,000 extended families show larger role for genetics than for nuclear- and extended-family environments

**Elsje van Bergen**1, Hans Fredrik Sunde2, Caroline Rowland3, Monica Melby-Lervåg4, Fartein Ask Torvik2

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. 3Language Development Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 4Special Needs Education, University of Oslo, Oslo, Norway

## 14:10 - 14:30

### SY-5A: Intergenerational transmission of education Gene-environment correlation: The role of family environment in academic development

Quan Zhou1, Agnieszka Gidziela1, Andrea G. Allegrini2, Rosa Cheesman3, Jasmin Wertz4, Robert Plomin5, Kaili Rimfeld6, **Margherita Malanchini**1

1School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 2Division of Psychology and Language Sciences, University College London, London, United Kingdom. 3Department of Psychology, University of Oslo, Oslo, Norway. 4School of Philosophy, Psychology and Language Sciences, University of Edinburgh, Edinburgh, United Kingdom. 5Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom. 6Department of Psychology, Royal Holloway University of London, London, United Kingdom

## 14:30 - 14:50

### SY-5A: Intergenerational transmission of education The role of mothers’ speech in the intergenerational transmission of educational attainment \*\*

**Sophie von Stumm**, Anna Brown, Alexandra Starr

Education, University of York, York, United Kingdom

## 14:50 - 15:10

### SY-5A: Discussant

**Rosa Cheesman**

Psychology, University of Oslo, Oslo, Norway

# SY-5B: Illuminating Phenotypic Interconnections: Insights from Biobanks and Statistical Genetic Approaches

## 13:30 - 15:10 Friday, 28th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Roseann E. Peterson

## 13:30 - 13:50

### SY-5B: Phenome-wide Associations of Sex Chromosome Aneuploidies Reveal Multi-System Health Effects \*\*

Dana M. Lapato1,2,3, Madhurbain Singh1,2, Amanda E. Gentry1, Tim B. Bigdeli3, Chris Chatzinakos3, **Roseann E. Peterson**3,1

1Virginia Institute for Psychiatric and Behavioral Genetics, Department of Psychiatry, Virginia Commonwealth University, Richmond, USA. 2Department of Human and Molecular Genetics, Virginia Commonwealth University, Richmond, USA. 3Department of Psychiatry and Behavioral Sciences, Institute for Genomics in Health, SUNY Downstate Health Sciences University, Brooklyn, USA

## 13:50 - 14:10

### SY-5B: Comparative penetrance and pleiotropy of neuropsychiatric copy number variants and polygenic risk scores in the United States Veteran population \*\*

**Tim B Bigdeli**1,2,3,4, Bryan R Gorman5, Giulio Genovese6, Michael Francis5, Chris Chatzinakos3,7, Roseann E Peterson7,3,1, Aoxing Liu6,8, Molly Sacks9, Georgios Voloudakis10,11, Andrea Ganna8, Jonathan Sebat12, David L Braff12, Mihaela Aslan13,14, Panos Roussos10,11, Philip D Harvey15,16, Saiju Pyarajan17

1Research Service Line, VA New York Harbor Healthcare System, Brooklyn, USA. 2Psychiatry & Behavioral Sciences, SUNY Downstate Health Sciences University, Brooklyn, USA. 3Institute for Genomics in Health, SUNY Downstate Health Sciences University, Brooklyn, USA. 4Department of Epidemiology & Biostatistics, SUNY Downstate Health Sciences University, Brooklyn, USA. 5Center for Data and Computational Sciences (C-DACS), VA Boston Healthcare System, Boston, USA. 6Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, USA. 7Department of Psychiatry & Behavioral Sciences, SUNY Downstate Health Sciences University, Brooklyn, USA. 8Helsinki Institute of Life Science HiLIFE, University of Helsinki, Helsinki, Finland. 9Bioinformatics and Systems Biology, University of California, San Diego, La Jolla, USA. 10Department of Psychiatry, ames J. Peters Veterans Affairs Medical Center, Bronx, USA. 11Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, USA. 12Department of Psychiatry, University of California, San Diego, La Jolla, USA. 13Clinical Epidemiology Research Center (CERC), VA Connecticut Healthcare System, West Haven, USA. 14School of Medicine, Yale University, New Haven, USA. 15Research Service Line, Bruce W. Carter Miami Veterans Affairs (VA) Medical Center, Miami, USA. 16Department of Psychiatry, University of Miami Miller School of Medicine, Miami, USA. 17Massachusetts Area Veterans Epidemiology, Research and Information Center (MAVERIC), Department of Veterans Affairs, Jamaica Plain, USA

## 14:10 - 14:30

### SY-5B: [T] Parsing the Genetic Architectures of Smoking Initiation and Tobacco Use Disorder Using Genomic Causal-Common-Contingent Modeling \*\*

**Madhurbain Singh**1,2, Peter B. Barr3,4,5,6, Chris Chatzinakos3,4,1,7, Rachel L. Kember8,9, Sandra Sanchez-Roige10,11,12, Elizabeth C. Prom-Wormley13,1, Tim B. Bigdeli3,4,6, Hermine H. M. Maes1,2,7, Michael C. Neale1,7,2, Roseann E. Peterson3,4,1,7

1Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, VA, USA. 2Department of Human and Molecular Genetics, Virginia Commonwealth University, Richmond, VA, USA. 3Institute for Genomics in Health, SUNY Downstate Health Sciences University, Brooklyn, NY, USA. 4Department of Psychiatry and Behavioral Sciences, SUNY Downstate Health Sciences University, Brooklyn, NY, USA. 5Department of Epidemiology and Biostatistics, SUNY Downstate Health Sciences University, Brooklyn, NY, USA. 6VA New York Harbor Healthcare System, Brooklyn, NY, USA. 7Department of Psychiatry, Virginia Commonwealth University, Richmond, VA, USA. 8Department of Psychiatry, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, USA. 9Mental Illness Research, Education and Clinical Center, Crescenz VAMC, Philadelphia, PA, USA. 10Department of Psychiatry, University of California San Diego, La Jolla, CA, USA. 11Department of Medicine, Division of Genetic Medicine, Vanderbilt University, Nashville, TN, USA. 12Institute of Genomic Medicine, University of California San Diego, La Jolla, CA, USA. 13Department of Epidemiology, Virginia Commonwealth University, Richmond, VA, USA

## 14:30 - 14:50

### SY-5B: gSEM: Common and Independent Genetic Factors Underlie Substance Use, Psychotic, Mood, and Anxiety Disorders

Yousef Khan1, Christal N Davis1,2, Zeal Jinwala1, Kyra Feuer1, Sylvanus Toikumo1, Emily E Hartwell1,2, Roseann E Peterson3, Alexander S Hatoum4, Henry R Kranzler1,2, **Rachel L Kember**1,2

1Department of Psychiatry, University of Pennsylvania, Philadelphia, USA. 2Mental Illness Research, Education and Clinical Center, Crescenz VAMC, Philadelphia, USA. 3Institute for Genomics in Health, Department of Psychiatry, SUNY Downstate Health Sciences University, Brooklyn, USA. 5Department of Psychological & Brain Sciences, Washington University in St. Louis, St Louis, USA

# SY-5C: Novel Investigations Into the Genetic Architecture of Neurodevelopmental Disorders and Traits

## 13:30 - 15:10 Friday, 28th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Lukas Schaffer, Chair

## Angelica Ronald, Discussant

## 13:30 - 13:50

### SY-5C: [T] Genetic Pathways for Autism Spectrum Disorder Unique of ADHD at Multiple Levels of Biological Analysis

**Lukas S Schaffer**1,2, Sophie Breunig1,2, Jeremy M Lawrence1,2, Isabelle F Foote1, Andrew D Grotzinger1,2

1Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 2Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA

## 13:50 - 14:10

### SY-5C: [T] Direct and Indirect Genetic Effects on Early Neurodevelopmental Traits

**Laura Hegemann**1,2,3, Espen Eilersten4, Johanne Hagen Pettersen1,3,5, Elizabeth C. Corfield2,3, Rosa Cheesman4, Leonard Frach6, Ludvig Daae Bjørndal4, Helga Ask3,4, Eivind Ystrom3,4, Beate St Pourcain7,8,9, Alexandra Havdahl2,3,4, Laurie J. Hannigan2,3,7

1Department of Psychology, University of Oslo, Oslo, Norway. 2Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 3PsychGen Center for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 5Department of Child Health and Development, Norwegian Institute of Public Health, Oslo, Norway. 6Department of Clinical, Educational and Health Psychology, Division of Psychology and Language Sciences, University College London, London, United Kingdom. 7MRC Integrative Epidemiology Unit (IEU), University of Bristol, Bristol, United Kingdom. 8Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 9Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

## 14:10 - 14:30

### SY-5C: Revisiting the fractionable autistic triad hypothesis: How do the same and different teacher versus parent perspectives add to our understanding?

**Yujing Lin1**, Francesca Happé1, Kaili Rimfeld1,2, Margherita Malancini1,3, Angelica Ronald4, Robert Plomin1

1Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom. 2Department of Psychology, Royal Holloway University of London, London, United Kingdom. 3School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 4School of Psychology, Faculty of Health and Medical Sciences, University of Surrey, Surrey, United Kingdom

## 14:30 - 14:50

### SY-5C: Discussant

**Angelica Ronald**

Psychology, University of Surrey, Guildford, United Kingdom

# SY-5D: Risk and Resilience for the Development of Externalizing Problem Behaviors across Childhood and Adolescence

## 13:30 - 15:10 Friday, 28th June, 2024

## Venue Strand (Main Campus) K1.28

## Savannah G. Ostner, Chair

## Kathryn Lemery-Chalfant, Discussant

13:30 - 13:50

### SY-5D: [T] What Are the Longitudinal Associations Between Maternal Nurturance and Youth Antisocial Behavior? A Cross-Lagged Twin Differences Study \*\*

**Alaina M Di Dio**1, Elizabeth A Shewark2, Luke W Hyde3, S. Alexandra Burt2

1Department of Psychology, Oberlin College, Oberlin, USA. 2Department of Psychology, Michigan State University, East Lansing, USA. 3Department of Psychology, University of Michigan, Ann Arbor, USA

## 13:50 - 14:10

### SY-5D: Parent-Offspring Stress to Externalizing Pathways: A Test of Genetic Mediation Through Negative Emotionality

**Veronica Oro**1, Jenae M Neiderhiser2, Misaki N Natsuaki3, Gordon T Harold4, Jody M Ganiban5, Daniel S Shaw6, Leslie D Leve1,7

1Prevention Science Institute, University of Oregon, Eugene, USA. 2Department of Psychology, The Pennsylvania State University, College Park, USA. 3Department of Psychology, University of California- Riverside, Riverside, USA. 4Faculty of Education, University of Cambridge, Cambridge, United Kingdom. 5Department of Psychological and Brain Sciences, George Washington University, Washington, DC, USA. 6Department of Psychology, University of Pittsburgh, Pittsburgh, USA. 7Department of Counseling Psychology and Human Services, University of Oregon, Eugene, USA

## 14:10 - 14:30

### SY-5D: [T] Resilience Factors and Adolescent Externalizing Symptomology: Genetic and Environmental Contributions \*\*

**Savannah G Ostner**, Sierra Clifford, Leah D Doane, Mary C Davis, Kathryn Lemery-Chalfant

Department of Psychology, Arizona State University, Tempe, USA

## 14:30 - 14:50

### SY-5D: Examining the Interplay between Polygenic Risk and Family Processes on Adolescent Externalizing Behaviors \*\*

Jinni Su1, Kit K Elam2, **Angel D Trevino**1, **Belal Jamil**1, Kathryn Lemery-Chalfant1, José M Causadias3, Eleanor K Seaton4, Kevin J Grimm1, Rick A Cruz1

1Department of Psychology, Arizona State University, Tempe, USA. 2Department of Applied Health Science, Indiana University, Bloomington, USA. 3School of Social and Family Dynamics, Arizona State University, Tempe, USA. 4Department of Psychology, University of Illinois Urbana-Champaign, Champaign, USA

## 14:50 - 15:10

### SY-5D: Discussant

**Kathryn Lemery-Chalfant**

Psychology, Arizona State University, Tempe, USA

# Coffee/Tea/Snacks Break (30 minutes)

## 15:10 - 15:40 Friday, 28th June, 2024

## Venue Arcade (Bush House)

# LT-6A: Methods I

## 15:40 - 17:10 Friday, 28th June, 2024

## Venue Auditorium (Bush House)

## Michael Hunter, Chair

## 15:40 - 15:50

### LT-6A: Tools for Biometric Modeling in Large Population Databases

**Michael D. Hunter**1, Mason Garrison2, Xuanyu Lyu3, Rachel Good2, Alexandra Burt4

1Human Development and Family Studies, The Pennsylvania State University, University Park, USA. 2Psychology, Wake Forest University, Winston-Salem, USA. 3Institute for Behavior Genetics, University of Colorado, Boulder, USA. 4Psychology, Michigan State University, East Lansing, USA

## 15:50 - 16:00

### LT-6A: Charting New Paths in Behavior Genetics: Developing a Comprehensive R Visualization Atlas \*\*

**S. Mason Garrison**

Department of Psychology, Wake Forest University, Winston-Salem, USA

## 16:00 - 16:10

### LT-6A: Multivariate Path Analysis with the Reticular Action Model (RAM)

**Michael C Neale**

Psychiatry, VCU, Richmond, USA. Biological Psychology, VU, Amsterdam, Netherlands

## 16:10 - 16:20

### LT-6A: Multivariate Modeling of Assortative Mating: Quantifying Variations of Within-Trait and Cross-Trait Homogamy in Spousal Selection

**Robert T Michaels**1,2, Michael C Neale1,3

1Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA. 2Integrative Life Sciences Doctoral Program, Virginia Commonwealth University, Richmond, USA. 3Department of Psychiatry, School of Medicine, Virginia Commonwealth University, Richmond, USA

## 16:20 - 16:30

### LT-6A: Integrating Genomic SEM with PGS to uncover general and specific genetic influences

**Ivan Voronin**1, Isabelle Ouellet-Morin2, Michel Boivin1

1École de psychologie, Université Laval, Québec, Canada. 2École de criminologie, Université de Montréal, Montréal, Canada

## 16:30 - 16:40

### LT-6A: Using Coordinated Epistasis to Investigate Genetic Architecture of Psychiatric Comorbidity

**Jolien Rietkerk**1,2,3, Lianyun Huang1,2,3, Vivek Appadurai4,5, Thomas Werge5,6,7, Andrew J. Schork4,5,8, Andrew Dahl9, Na Cai1,2,3

1Helmholtz Pioneer Campus, Helmholtz Munich, Neuherberg, Germany. 2Computational Health Centre, Helmholtz Munich, Neuherberg, Germany. 3School of Medicine and Health, Technical University Munich, Munich, Germany. 4Section for Geogenetics, GLOBE Institute, Faculty of Health and Medical Sciences, Copenhagen University, Copenhagen, Denmark. 5Institute of biological Psychiatry, Mental Health Center, Sct. Hans, Copenhagen University Hospital, Mental Health Services CPH, Copenhagen, Denmark. 6Lundbeck Foundation GeoGenetics Centre, Natural History Museum of Denmark, University of Copenhagen, Copenhagen, Denmark. 7Department of Clinical Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark. 8Neurogenomics Division, The Translational Genomics Research Institute, Phoenix, Arizona, USA. 9Section of Genetic Medicine, University of Chicago, Chicago, Illinois, USA

## 16:40 - 16:50

### LT-6A: Simulations of measurement non-invariance effects on PRS associations with psychopathology factors across race, ethnicity, and sex at birth \*\*

**Irwin D Waldman**

Psychology, Emory University, Atlanta, USA

## 16:50 - 17:00

### LT-6A: New ways to share, validate, reward, and interact with research in behavioral genetics \*\*

**Philipp Koellinger**

Economics, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

# Lightning-6B: Depression and Anxiety

## 15:40 - 17:10 Friday, 28th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Ellen J Thompson, Chair

## 15:40 - 15:50

### LT-6B: [T] Does the multivariate genetic architecture of negative emotionality differ by trauma exposure?

**Garrett W Ennis**1, Elliot M Tucker-Drob1,2

1Department of Psychology, University of Texas at Austin, Austin, USA. 2Population Research Center, University of Texas at Austin, Austin, USA

## 15:50 - 16:00

### LT-6B: Genetics of SSRI Antidepressant Use in UK Biobank and the US Million Veteran Program \*\*

**Daniel F Levey**1,2, Marco Galimberti1, Joseph Deak1, Priya Gupta1, Kelly Harrington3, J. Michael Gaziano4,5, Murray B Stein6,7, Joel Gelernter1

1Psychiatry, Yale University, New Haven, USA. 2Research, United States Department of Veterans Affairs, West Haven, USA. 3Psychiatry, United States Department of Veterans Affairs, Boston, USA. 4Million Veteran Program Coordinating Center, United States Department of Veterans Affairs, Boston, USA. 5Medicine, Brigham and Women’s Hospital, Boston, USA. 6Psychiatry, United States Department of Veterans Affairs, San Diego, USA. 7Psychiatry, University of California San Diego, New Haven, USA

## 16:00 - 16:10

### LT-6B: Extracting stability of generalized anxiety increases heritability estimates: A longitudinal twin study in young adults

Julia S Funk1,2, Aliyah Kassam1, Celestine Lockhart1, Elisavet Palaiologou1, Megan Skelton1, Genevieve Morneau-Vaillancourt1,3, **Thalia C Eley**1

1Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, United Kingdom. 2Institute of Clinical Psychology and Psychological Treatment, Department of Psychology, LMU Munich, Munich, Germany. 3School of Criminology, Faculty of Arts and Sciences, University of Montreal, Montreal, Canada

## 16:10 - 16:20

### LT-6B: Multi-variant fine-mapping to identify putative causal variants from genome-wide association studies of major depressive disorder

**Jonathan RI Coleman1**,2, John P Vincent1

1Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom. 2National Institute for Health and Care Research Maudsley Biomedical Research Centre, South London and Maudsley National Health Service Trust, London, United Kingdom

## 16:20 - 16:30

### LT-6B: The impact of climate conditions on the aetiology of psychological distress: insights from a genetically informative design

**Juan J Madrid-Valero**, Federico J Blanco, José M Martínez-Selva, Juan F Sánchez-Romera, Juan R Ordoñana

Human Anatomy and Psychobiology, University of Murcia, Murcia, Spain

## 16:30 - 16:40

### LT-6B: The number of comorbidities in depression patients correlates with their MDD polygenic score

Penelope A Lind1, Ian B Hickie2, **Nicholas G Martin3**, Sarah E Medland1

1Psychiatric Genetics, QIMR, Brisbane, Australia. 2Psychiatry, Univ Sydney, Sydney, Australia. 3Genetics, QIMR, Brisbane, Australia

## 16:40 - 16:50

### LT-6B: Using Repeated Measures to Improve the Precision and Power of Genome-Wide Association Studies (GWAS) \*\*

**Alex SF Kwong**1, Mark J Adams1, Poppy Z Grimes1, Tim T Morries2, Gareth Griffith2, Thalia C Eley3, Kate Tilling2, Andrew McIntosh1

1Psychiatry, University of Edinburgh, Edinburgh, United Kingdom. 2MRC IEU, University of Bristol, Bristol, United Kingdom. 3SGDP, King's College London, London, United Kingdom

## 16:50 - 17:00

### LT-6B: Developmental timing of pain symptoms: associations with early adulthood pain and anxiety in two longitudinal studies

**Ellen J Thompson**1,2, Amanda Ly3, Geneviève Morneau-Vaillancourt4, Olakunle Oginni5, Elisavet Palaiologou5, Elham Assary5, Celestine Lockhart5, Tom McGregor5, Hannah Sallis6, Lauren Heathcote7, Rebecca M Pearson8, Edmund Keogh9, Thalia Eley5

1School of Psychology, University of Sussex, Falmer, United Kingdom. 2Department of Twin Research and Genetic Epidemiology, School of Life Course & Population Sciences, Faculty of Life Sciences & Medicine, King’s College London, London, United Kingdom. 3MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 4School of Criminology, University of Montreal, Montreal, Canada. 5Social, Genetic & Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, United Kingdom. 6MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 7Health Psychology Section, Psychology Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom. 8Department of Psychology, Manchester Met University, Manchester, United Kingdom. 9Department of Psychology, University of Bath, Bath, United Kingdom

# Lightning-6C: Well-being/Health & Activity

## 15:40 - 17:10 Friday, 28th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Meike Bartels, Chair

## 15:40 - 15:50

### LT-6C: Wellbeing as a catalyst: The association between wellbeing at a younger age and sociodemographic, health, and lifestyle-related factors later in life

**Anne J.M.R. Geijsen1**,2, Meike Bartels1,2

1Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical Centre, Amsterdam, Netherlands

## 15:50 - 16:00

### LT-6C: How do lifestyle factors modify the association between genetic predisposition and obesity-related phenotypes? A 4-way decomposition analysis using UK Biobank

**Mengrong Zhang**, Frederick Ho, Joey Ward, Rona Strawbridge, Donald Lyall, Jill Pell, Carlos Celis

University of Glasgow, School of Health and Wellbeing, Glasgow, United Kingdom

## 16:00 - 16:10

### LT-6C: Epigenome-wide association study meta-analysis of wellbeing

**Meike Bartels**1,2, Margot P. van de Weijer3, Bart M.L. Baselmans4, Jenny van Dongen1,5

1Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical Centre, Amsterdam, Netherlands. 3Department of Psychiatry, Amsterdam University Medical Center, Amsterdam, Netherlands. 4Biomedical Technology, Faculty of Technology, Amsterdam University of Applied Sciences, Amsterdam, Netherlands. 5Amsterdam Reproduction and Development (AR&D) Research Institute, Amsterdam University Medical Centre, Amsterdam, Netherlands

## 16:10 - 16:20

### LT-6C: [T] The association between frequency of social media use, wellbeing, and depressive symptoms: disentangling genetic and environmental factors

**Selim Sametoğlu**1,2, Meike Bartels1,2, Dirk HM Pelt1,2, Margot P van de Weijer3

1Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical CentreUniversity Medical Centre, Amsterdam, Netherlands. 3Department of Psychiatry, Amsterdam University Medica, University of Amsterdam, Amsterdaml Centers, Amsterdam, Netherlands

## 16:20 - 16:30

### LT-6C: New Game+: Video Gaming Correlates with Cognition, a Co-Sibling Control Design

**Shandell Pahlen**1, Anqing Zheng1, Tina T Vo2, Nicholas D Bowman3, Robin P Corley1, Sally J Wadsworth1, Chandra A Reynolds1,2,4

1Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 2Department of Psychology, University of California, Riverside, USA. 3Newhouse School of Public Communications, Syracuse University, Syracuse, USA. 4Department of Psychology and Neuroscience, University of Colorado, Boulder, USA

## 16:30 - 16:40

### LT-6C: A contextual genomic perspective on physical activity and its relationship to health and illness

Marco Galimberti1,2, Daniel F. Levey1,2, Joseph D. Deak1,2, Keyrun Adhikari1,2, Cassie Overstreet1,2, Priya Gupta1,2, Rachana Nitin3, Hang Zhou1,2, Nicole J. Lake4, Kelly M. Harrington5,6, Luc Djousse6,7, Lea K. Davis3, J. Michael Gaziano6,8, Murray B. Stein9,10, **Joel Gelernter**1,2

1Psychiatry, Yale Univ. School of Medicine, West Haven, CT, USA. 2Psychiatry, VA CT Healthcare Center, West Haven, CT, USA. 3Medicine, Vanderbilt Univ Medical Center, Nashville, TN, USA. 4Genetics, Yale Univ. School of Medicine, New Haven, CT, USA. 5Psychiatry, BU School of Medicine, Boston, MA, USA. 6MVP Coordinating Center, VA Boston Healthcare Center, Boston, MA, USA. 7Medicine, Brigham and Women's Hospital, Boston, MA, USA. 8Medicine, Harvard Medical School, Boston, MA, USA. 9Psychiatry, UC San Diego, San Diego, CA, USA. 10Psychiatry, VA San Diego Healthcare System, San Diego, CA, USA

## 16:40 - 16:50

### LT-6C: [T] Increasing Exercise Intensity: A Study of Behavioral Substitution on Health Biomarkers

**Ryan Bruellman**1, Shandell Pahlen2,3, Jarrod M Ellingson4,2, Robin P Corley2, Sally J Wadsworth2, Ilana Bennett3,1, Chandra A Reynolds2,1,3

1Genetics, Genomics & Bioinformatics, University of California Riverside, Riverside, USA. 2Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 3Department of Psychology, University of California Riverside, Riverside, USA. 4Department of Psychiatry, University of Colorado, Denver, USA

## 16:50 - 17:00

### LT-6C: [T] Do chronic pain polygenic scores derived in older adults in the U.K. Biobank (UKB) predict adolescent pain reports in the Adolescent Brain Cognitive Development (ABCD) study?

**Lydia Rader1**,2, Katerina Zorina-Lichtenwalter2, Daniel E Gustavson1,2, Tor D Wager3, Naomi P Friedman1,2

1Department of Psychology & Neuroscience, University of Colorado Boulder, Boulder, USA. 2Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 3Department of Psychological and Brain Sciences, Dartmouth College, Hanover, USA

## 17:00 - 17:10

### LT-6C: [T] The association between physical activity and dementia risk after adjusting for genetic and environmental confounds: a multi-national twin study

**Matthew J. D. Pilgrim**1, Elina Sillanpää2, Chandra Reynolds3,4,5, Margaret Gatz6,7, Christopher R. Beam1

1Department of Psychology, University of Southern California, Los Angeles, USA. 2Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland. 3Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 4Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 5Department of Psychology, University of California Riverside, Riverside, USA. 6Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden. 7Center for Economic and Social Research, University of Southern California, Los Angeles, USA

# Lightning-6D: Gene-Environment Interplay [rGE, GxE]

## 15:40 - 17:10 Friday, 28th June, 2024

## Venue Strand (Main Campus) K1.28

## Beate St Pourcain, Chair

## 15:40 - 15:50

### LT-6D: Estimation of causal effects across the lifecourse through Multivariable Mendelian Randomization

**Eleanor Sanderson**, Tom G Richardson, Kate Tilling, George Davey Smith

MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom

## 15:50 - 16:00

### LT-6D: Investigating gene-environment interplay using polygenic scores: Estimation of parental effects on BMI, ADHD and EA in the Norwegian Mother, Father and Child Cohort Study. \*\*

**Noemie Valenza-Troubat**1, Dinka Smajlagic2,1, Xuanyu Lyu1, Rosa Cheesman2, Perline Demange2, Espen Moen Eilertsen2, Fartein Ask Torvik3, Laurie Hannigan3, Eivind Ystrom2,4, Alexandra Havdahl2,5,6,7, Matthew C Keller1

1Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 2PROMENTA Research Centre, Department of Psychology, University of Oslo, Oslo, Norway. 3Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. 4Department of Mental Disorders, Norwegian Institute of Public Health, Oslo, Norway. 5PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 6Nic Waals Institute, Lovisenberg Diakonale Hospital, Oslo, Norway. 7Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, United Kingdom

## 16:00 - 16:10

### LT-6D: [T] The fluid and transactional nature of parent-child conflict from childhood into emerging adulthood

**Sarah L Carroll**1, Elizabeth A Shewark1, Kelly L Klump1, Jenae M Neiderhiser2, Luke W Hyde3, S. Alexandra Burt1

1Psychology, Michigan State University, East Lansing, USA. 2Psychology, Pennsylvania State University, State College, USA. 3Psychology, University of Michigan, Ann Arbor, USA

## 16:10 - 16:20

### LT-6D: [T] Gene-Environment Interplay Isn’t Just Moderation: Simultaneously Testing Moderation and Mediation in Gene-Environment Models for Externalizing Outcomes

**LiChen Dong**1,2,3, A. Brooke Sasia1,2,3, James J. Li1,2,3

1Department of Psychology, University of Wisconsin-Madison, Madison, USA. 2Waisman Center, University of Wisconsin-Madison, Madison, USA. 3Center for Demography of Health and Aging, University of Wisconsin-Madison, Madison, USA

## 16:20 - 16:30

### LT-6D: Factors Shaping Resilient Functioning in Children Facing Genetic Vulnerability and Adverse Home Environments

**Danielle M Seay**1, Miglena Y Ivanova1,2, Jody M Ganiban3, Daniel S Shaw4, Misaki N Natsuaki5, Leslie D Leve6, Jenae M Neiderhiser1

1Department of Psychology, The Pennsylvania State University, University Park, USA. 2Edna Bennett Pierce Prevention Research Center, The Pennsylvania State University, University Park, USA. 3Departments of Clinical and Developmental Psychology, George Washington University, District of Columbia, USA. 4Department of Psychology, University of Pittsburgh, Pittsburgh, USA. 5Department of Psychology, The University of California, Riverside, Riverside, USA. 6Department of Counseling Psychology and Human Services, University of Oregon, Eugene, USA

## 16:30 - 16:40

### LT-6D: [T] ] Can household chaos explain the discrepancy between within- and between-family polygenic score predictions of children’s school achievement?

**Alexandra Starr**1, Quan Zhou2, Margherita Malanchini2,3, Sophie von Stumm1

1Department of Education, University of York, York, United Kingdom. 2School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 3Social, Genetic & Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, United Kingdom

## 16:40 - 16:50

### LT-6D: Gene-environment interplay in adolescent developmental psychopathology

**Agnieszka Gidziela**1,2, Andrea G Allegrini3,2, Rosa Cheesman4, Angelica Ronald5, Essi Viding3, Thalia C Eley2, Kaili Rimfeld6,2, Robert Plomin2, Margherita Malanchini1,2

1School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 2Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom. 3Division of Psychology and Language Sciences, University College London, London, United Kingdom. 4Department of Psychology, PROMENTA Research Center, University of Oslo, Oslo, Norway. 5School of Psychology, University of Surrey, Guilford, United Kingdom. 6Department of Psychology, Royal Holloway University of London, Egham, United Kingdom

## 16:50 - 17:00

### LT-6D: Genomic and non-genomic contributions to children’s cognition, language, and social skills: Evidence for independent phenotypic domains with strong gene-environment correlations \*\*

Fenja Schlag1, Lucía de Hoyos1, Ellen Verhoef1, Simone van den Bedem1, Brad Verhulst2, Simon E Fisher1,3, **Beate St Pourcain**1,3,4

1Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 2Department of Psychiatry, Texas A&M University, College Station, USA. 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands. 4MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom

## 17:00 - 17:10

### LT-6D: Genetic Epidemiology of Music Engagement From Early to Late Adolescence using Twin-Parent Modeling

**Hermine HM Maes**1,2,3, Daniel E Gustavson4, Naomi P Friedman4, Robin P Corley4, Sally J Wadsworth4, Chandra A Reynolds4

1Human and Molecular Genetics, Virginia Commonwealth University, Richmond, VA, USA. 2Psychiatry, Virginia Commonwealth University, Richmond, VA, USA. 3Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, VA, USA. 4Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, CO, USA

# [Poster Session II](#Posters2)

## 17:10 - 19:10 Friday, 28th June, 2024

## Venue Great Hall (the Strand building)

###### **Saturday, 29th June**

# Registration 8:30am - 5:00 pm

## 08:30 - 17:00 Saturday, 29th June, 2024

## Venue Arcade (Bush House)

# Plenary 4: Neil Davies

## 09:00 - 10:00 Saturday, 29th June, 2024

## Venue Auditorium (Bush House)

## Chandra A. Reynolds, Chair

**Neil Davies**, Professor of Medical Statistics at the Division of Psychiatry, and the Department of Statistical Sciences, University College London

***How can molecular genetic family-based studies help behavioural geneticists?***

# Coffee/Tea/Snacks Break (20 Minutes)

## 10:00 - 10:20 Saturday, 29th June, 2024

## Venue Arcade (Bush House)

# OS-7A: Methods II

## 10:20 - 11:50 Saturday, 29th June, 2024

## Venue Auditorium (Bush House)

## Margherita Malanchini, Chair

## 10:20 - 10:35

### OS-7A: Predicting behavioural traits from polygenic scores between and within families

**Robert J Plomin**1, Francesca Procopio1, Engin Keser1, Yujing Lin1, Kaito Kawakami1, Thalia C. Eley1, Andrea G. Allegrini2, Kaili Rimfeld3, Margherita Malanchini4

1Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom. 2Department of Psychology and Language Sciences, University College London, London, United Kingdom. 3Department of Psychology, Royal Holloway University of London, London, United Kingdom. 4School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom

## 10:35 - 10:50

### OS-7A: [T] Benefits of Nuclear Twin Family Models for Estimating Heritability: An Investigation of 93 Personality-Relevant Constructs Using JASP

**Jana Instinske**, Christian Kandler

Department of Psychology, University of Bremen, Bremen, Germany

## 10:50 - 11:05

### OS-7A: [T] Untangling Causal Heterogeneity using Finite Mixture Models

**Philip B. Vinh**1,2, Brad Verhulst3, Conor V. Dolan4, Hermine H. H. Maes5,2, Michael C. Neale6,2,4

1Department of Human Molecular Genetics, Virginia Commonwealth University, Richmond, USA. 2Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA. 3Department of Psychiatric and Behavior Sciences, Texas A&M University, College Station, USA. 4Department of Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 5Department of Human and Molecular Genetics, Virginia Commonwealth University, Richmond, USA. 6Department of Psychiatry, Virginia Commonwealth University, Richmond, USA

## 11:05 - 11:20

### OS-7A: Using extended twin family designs to differentiate multiple forms of intergenerational transmission

Tong Chen1, **Matthew C Keller**2

1Department of Psychology, The Pennsylvania State University, University Park, USA. 2Department of Psychology and Neuroscience and Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA

## 11:20 - 11:35

### OS-7A: Distinguishing Specific from Broad Genetic Associations between External Correlates and Common Factors

**Javier de la Fuente**1,2, Diego Londoño-Correa1, Elliot M. Tucker-Drob1,2

1Department of Psychology, University of Texas at Austin, Austin, TX, USA. 2Population Research Center, University of Texas at Austin, Austin, TX, USA

## 11:35 - 11:50

### OS-7A: Comparing Multivariate GWAS results from different software applications.

**Brad Verhulst**, Sarah Benstock, John Hettema

Psychiatry and Behavioral Sciences, Texas A&M University, College Station, USA

# OS-7B: Neighborhood/Exposome

## 10:20 - 11:50 Saturday, 29th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Dirk Pelt, Chair

## 10:20 - 10:35

### OS-7B: Drawing parallels across complex trait genomics and social science: A framework to combine social and genetic risk factors for depression

**Katherine N Thompson**1, Baptiste Couvy-Duchesne2, Rafael Geurgas1, Saul Newman3, Robbee Wedow1, Felix C Tropf1,3

1Department of Sociology, Purdue University, West Lafayette, USA. 2Institute for Molecular Bioscience, University of Queensland, Queensland, Australia. 3Centre for Longitudinal Studies, University College London, London, United Kingdom

## 10:35 - 10:50

### OS-7B: [T] Illuminating the Developmental Etiology of Youth Resilience \*\*

**Alexandra Y Vazquez**1, Shaunna L. Clark2, Elizabeth A. Shewark1, Kelly L. Klump1, Luke W. Hyde3, S. Alexandra Burt1

1Psychology, Michigan State University, Lansing, USA. 2Psychiatry, Texas A&M University, College Station, USA. 3Psychology, University of Michigan, Ann Arbor, USA

## 10:50 - 11:05

### OS-7B: Toxic environments: Examining metal and air pollution exposure as an etiologic moderator of children’s externalizing behaviors. \*\*

**Amanda M Ramos**1, Elizabeth A Shewark2, Kelly L Klump2, S. Alexandra Burt2

1Human Development and Family Studies, Utah State University, Logan, USA. 2Department of Psychology, Michigan State University, East Lansing, USA

## 11:05 - 11:20

### OS-7B: Controlling for the genetic relatedness matrix in spatial regression models

**Rafael Geurgas**1, Felix C. Tropf1,2

1Sociology, Purdue, West Lafayette, USA. 2Population Data Science, College London, London, United Kingdom

## 11:20 - 11:35

### OS-7B: External validation of a population-based multimodal machine learning prediction model for wellbeing in a depression and elderly cohort

**Dirk H.M. Pelt**1,2, Philippe Habets3, Martijn W. Heymans4,2, Martijn Huisman4,5,2, Christiaan H. Vinkers3,6,7,2, René Pool1, Brenda W.J.H. Penninx3,7,2, Meike Bartels1,2

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical Center, Amsterdam, Netherlands. 3Department of Psychiatry, Amsterdam University Medical Center, Amsterdam, Netherlands. 4Department of Epidemiology and Datascience, Amsterdam University Medical Center, Amsterdam, Netherlands. 5Department of Sociology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 6Anatomy & Neurosciences, Amsterdam University Medical Center, Amsterdam, Netherlands. 7Amsterdam Neuroscience (Mood, Anxiety, Psychosis, Stress & Sleep), Amsterdam University Medical Center, Amsterdam, Netherlands

11:35 - 11:50

### OS-7B: Positive Neighborhood Features Moderate the Etiology of Youth Resilience Trajectories \*\*

**Elizabeth A. Shewark**1, Alexandra Y. Vazquez1, Sarah L. Carroll1, Amy K. Nuttall2, Amber L. Pearson3, Laura E. Miller-Graff4, Luke Hyde5, Kelly L. Klump1, S. Alexandra Burt1

1Psychology, Michigan State University, East Lansing, USA. 2Human Development and Family Studies, Michigan State University, East Lansing, USA. 3Public Health, Michigan State University, Flint, USA. 4Psychology, University of Notre Dame, Notre Dame, USA. 5Psychology, University of Michigan, Ann Arbor, USA

# SY-7C: Using genetically informed methods to identify predictors of adolescent mental health

## 10:20 - 11:50 Saturday, 29th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Laura Hegemann, Chair

## Thalia C. Eley, Discussant

## 10:20 - 10:40

### SY-7C: Using Mendelian randomisation to identify predictors of depression trajectories from adolescence to early adulthood

**Robyn E Wootton**1, Adrian Dahl Askelund2, Michael Lawton3, Kate Tilling3, Alexandra Havdahl4

1School of Psychological Science, University of Bristol, Bristol, United Kingdom. 2Nic Waals Institute, Lovisenberg Hospital, Oslo, Norway. 3MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 4PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

## 10:40 - 11:00

### SY-7C: [T] Assessing causal links between age at menarche and adolescent mental health: triangulation of evidence from a Registered Report

**Adrian D Askelund**1,2,3, Robyn E Wootton2,4,5,3, Fartein A Torvik1,6, Rebecca B Lawn7, Helga Ask3,8, Elizabeth C Corfield2,3, Maria C Magnus6, Ted Reichborn-Kjennerud3,9, Per M Magnus6, Ole A Andreassen10,11, Camilla Stoltenberg12,13, George Davey Smith4, Neil M Davies14,15,16, Alexandra Havdahl2,3,4,8, Laurie J Hannigan2,3,4

1Department of Psychology, University of Oslo, Oslo, Norway. 2Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 3PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 5School of Psychological Science, University of Bristol, Bristol, United Kingdom. 6Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. 7Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, USA. 8Promenta Research Center, University of Oslo, Oslo, Norway. 9Institute of Clinical Medicine, University of Oslo, Oslo, Norway. 10Centre for Precision Psychiatry, Oslo University Hospital, Oslo, Norway. 11KG Jebsen Centre for Neurodevelopmental Disorders, University of Oslo, Oslo, Norway. 12Department of Global Public Health and Primary Care, University of Bergen, Bergen, Norway. 13NA, NORCE Norwegian Research Centre, Bergen, Norway. 14Division of Psychiatry, University College London, London, United Kingdom. 15Department of Statistical Sciences, University College London, London, United Kingdom. 16KG Jebsen Center for Genetic Epidemiology, Norwegian University of Science and Technology, Trondheim, Norway

## 11:00 - 11:20

### SY-7C: [T] Direct and indirect genetic influences on adolescent mental distress during the Covid-19 lockdown

**Johanne H Pettersen**1,2,3, Espen M Eilertsen4, Laura Hegemann1,3,5, Laurie J Hannigan1,2,5,6, Kristin Gustavson3,7, Ingunn O Lund1,2,3, Pia Jensen1,2,3, Ole A Andreassen8,9, Alexandra Havdahl1,5,4, Eivind Ystrom1,2,4, Ragnhild E Brandlistuen2, Helga Ask1,2,4

1PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 2Department of Child Health and Development, Norwegian Institute of Public Health, Oslo, Norway. 3Department of Psychology, University of Oslo, Oslo, Norway. 4PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 5Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 6Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, United Kingdom. 7Department of Childhood and Families, Norwegian Institute of Public Health, Oslo, Norway. 8Centre for Precision Psychiatry, Division of Mental Health and Addiction, University of Oslo and Oslo University Hospital, Oslo, Norway. 9KG Jebsen Centre for Neurodevelopmental Disorders, University of Oslo, Oslo, Norway

## 11:20 - 11:40

### SY-7C: [T] Predicting first-episode psychosis using polygenic risk and longitudinal child and adolescent phenotypes

**Viktoria Birkenæs**1, Pravesh Parekh1, Ole Andreassen1,2, Alexandra Havdahl3,4,5, Ida Elken Sønderby1,6,7

1Centre for Precision Psychiatry, Oslo University Hospital, Oslo, Norway. 2KG Jebsen Centre for Neurodevelopmental Disorders, University of Oslo, Oslo, Norway. 3PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 5PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 6Department of Medical Genetics, University of Oslo, Oslo, Norway. 7KG Jebsen Centre for Neurodevelopmental Disorders, Oslo University Hospital, Oslo, Norway

## 11:40 - 11:50

### SY-7C: Discussant

**Thalia C. Eley**

Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, United Kingdom

# SY-7D: Searching for time- and context-specific genetic effects on behaviour

## 10:20 - 11:50 Saturday, 29th June, 2024

## Venue Strand (Main Campus) K1.28

## Christopher Rayner

## 10:20 - 10:40

### SY-7D: Parent-specific and individual genetic effects of education-related polygenic scores on behavioural problems in childhood: A longitudinal analysis of the Millennium Cohort Study.

**Jose J. Morosoli**1,2,3, Elizabeth Orpwood1, Andrea G. Allegrini1,4, Jean-Baptiste Pingault1,4

1Clinical, Educational, and Health Psychology, University College London, London, United Kingdom. 2Mental Health and Neuroscience, QIMR Berghofer, Brisbane, Australia. 3School of Psychology, University of Queensland, Brisbane, Australia. 4Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom

10:40 - 11:00

### SY-7D: Exploring genetic effects on the variability of childhood behaviour in the MoBa cohort

**Christopher Rayner**1, Yasmin Ahmadzadeh1, Ziada Ayorech2, Isabella Badini1, Rosa Cheesman2, Laurie J Hannigan3, Ralph PO Porneso2, Eivind Ystrom2, Tom A McAdams4

1Social, Genetic and behavioural Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom. 2PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 3Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4Social, Genetic and behavioural Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom

## 11:00 - 11:20

### SY-7D: Investigating non-additive genetic effects in education outcomes using longitudinal data

**Ralph Porneso**1, Espen Moen Eilertsen1, Perline Demange1, Ziada Ayorech1, Nicola Barban2, Alexandra Havdahl3, Eivind Ystrøm1

1PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 2Department of Statistics “P. Fortunati”, University of Bologna, Bologna, Italy. 3Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

## 11:20 - 11:40

### SY-7D: [T] Noncognitive skills in education: Translating genetic predisposition into expressed individual differences in academic development

**Quan Zhou**1, Wangjingyi Liao1, Andrea Allegrini2, Kaili Rimfeld3,4, Robert Plomin4, Margherita Malanchini1,4

1School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 2Division of Psychology and Language Sciences, University College London, London, United Kingdom. 3Department of Psychology, Royal Holloway, University of London, London, United Kingdom. 4Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom

# Lunch/BUSINESS MEETING (All members please attend)

## 11:50 - 13:00 Saturday, 29th June, 2024

## Venue Auditorium (Bush House)

# SY-8A: Advances in the genetics of musicality and cross-trait associations

## 13:00 - 15:00 Saturday, 29th June, 2024

## Venue Auditorium (Bush House)

## Tara L Henechowicz, Chair

## Hermine H.M. Maes, Discussant

## 13:00 - 13:20

### SY-8A: Genetic pathways to music-evoked emotions: from twins to genome-wide association studies

**Giacomo Bignardi**1, Else Eising1, Laura W. Wesseldijk2,3,4, Barbara Molz1, Ernest Mas-Herrero5,6,7, Robert J. Zatorre8, Miriam A. Mosing4,2,9,10, Fredrik Ullén4,2, Simon E Fisher1,11

1Language & Genetics, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 2Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden. 3Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 4Department of Cognitive Neuropsychology, Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany. 5Department of Cognition, Universitat de Barcelona, Barcelona, Spain. 6Institute of Neurosciences, Universitat de Barcelona, Barcelona, Spain. 7Cognition and Brain Plasticity Group, Institut d'Investigació Biomèdica de Bellvitge, Barcelona, Spain. 8Montreal Neurological Institute, McGill University, Montréal, Canada. 9Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden. 10Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia. 11Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

## 13:20 - 13:40

### SY-8A: Musical rhythm abilities and risk for developmental speech-language problems and disorders: epidemiological and polygenic associations \*\*

**Srishti Nayak**1,2, Eniko Ladanyi3,1, Else Eising4, Yasmina Mekki1, Rachana Nitin5, Catherine T Bush6, Daniel E Gustavson7, Manuel Anglada-Tort8, Hope S Lancaster9, Miriam A Mosing10,11, Fredrik Ullen10, Cyrille L Magne2, Simon E Fisher4,12, Nori Jacoby13, Reyna L Gordon1,14,15

1Dept. of Otolaryngology - Head & Neck Surgery, Vanderbilt University Medical Center, Nashville, USA. 2Dept. of Psychology, Middle Tennessee State University, Murfreesboro, USA. 3Dept. of Linguistics, University of Potsdam, Potsdam, Germany. 4Language and Genetics, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 5Dept. of Medicine, Vanderbilt University Medical Center, Nashville, USA. 6Dept. of Hearing and Speech Sciences, Vanderbilt University Medical Center, Nashville, USA. 7Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 8Dept. of Psychology, Goldsmiths, University of London, London, United Kingdom. 9Speech and Language Research, Boys Town National Research Hospital, Omaha, USA. 10Dept. of Cognitive Neuropsychology, Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany. 11Dept. of Medical Epidemiology, Karolinska Institute, Solna, Sweden. 12Donders Institute for Brain, Cognition, and Behaviour, Radboud University, Nijmegen, Netherlands. 13Computational Auditory Perception, Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany. 14Vanderbilt Brain Institute, Vanderbilt University Medical Center, Nashville, USA. 15Vanderbilt Institute for Global Health, Vanderbilt University Medical Center, Nashville, USA

## 13:40 - 14:00

### SY-8A: [T] Protective genetic associations between active music engagement in mid- to late-life and resilience to mental health

**Tara L Henechowicz**1,2, Peyton L. Coleman3,4, Rachana Nitin3, Yasmina N Mekki3,5, Daniel Felsky2,6, Reyna L Gordon3,7,8

1Music and Health Science Research Collaboratory, University of Toronto, Toronto, Canada. 2Krembil Centre for Neuroinformatics, Centre for Addiction and Mental Health, Toronto, Canada. 3Vanderbilt Genetics Institute, Vanderbilt University Medical Center, Nashville, USA. 4Center for Digital Genomic Medicine, Vanderbilt University Medical Center, Nashville, USA. 5Department of Otolaryngology–Head and Neck Surgery, Vanderbilt University Medical Center, Nashville, USA. 6Psychiatry, University of Toronto, Toronto, Canada. 7Vanderbilt Brain Institute, Vanderbilt University, Nashville, USA. 8Department of Psychology, Vanderbilt University, Nashville, USA

## 14:00 - 14:20

### SY-8A: Is music listening associated with mental health? A genetically informative approach.

Laura W Wesseldijk1,2,3, Fredrik Ullén4,2, **Miriam A Mosing**1,2,5,6

1Behavior Genetics Unit, Department of Cognitive Neuropsychology,, Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany. 2Department of Neuroscience,, Karolinska Institutet,, Stockholm, Sweden. 3Department of Psychiatry, Amsterdam UMC, Department of Psychiatry, University of Amsterdam, Amsterdam, Netherlands. 4Department of Cognitive Neuropsychology,, Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany. 5Department of Medical Epidemiology and Biostatistics, Karolinska Institutet,, Stockholm, Sweden. 6Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia

## 14:20 - 14:40

### SY-8A: ♫ Notes from a genome: what Beethoven's DNA tells us about genetics \*\*

**Laura W. Wesseldijk**1,2,3, Tara L. Henechowicz4,5, David J. Baker6, Giacomo Bignardi7,8, Robert Karlsson9, Reyna L. Gordon10,11,12,13, Miriam A. Mosing1,3,9,14, Fredrik Ullén1,3, Simon Fisher7,15

1Department of Cognitive Neuropsychology, Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany. 2Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 3Department of Neuroscience, Karolinska Institute, Stockholm, Sweden. 4Faculty of Music, University of Toronto, Toronto, Canada. 5Krembil Centre for Neuroinformatics, Centre for Addiction and Mental Health, Toronto, Canada. 6Institute for Logic, Language, and Computation, University of Amsterdam, Amsterdam, Netherlands. 7Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 8Max Planck School, Max Planck School of Cognition, Leipzig, Netherlands. 9Department of Medical Epidemiology and Biostatistics, Karolinska Institute, Stockholm, Sweden. 10Department of Otolaryngology – Head & Neck Surgery, Vanderbilt University Medical Center, Nashville, USA. 11Blair School of Music, Vanderbilt University, Nashville, USA. 12Vanderbilt Genetics Institute, Vanderbilt University, Nashville, USA. 13Department of Hearing & Speech Sciences, Vanderbilt University Medical Center, Nashville, USA. 14Melbourne School of Psychological Sciences, Faculty of Medicine, Dentistry, and Health Sciences, University of Melbourne, Melbourne, Australia. 15Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

## 14:40 - 15:00

### SY-8A: Discussant

**Hermine HM Maes**

Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA

# SY-8B: Roads less traveled in social science genetics

## 13:00 - 15:00 Saturday, 29th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Eivind Ystrom, Chair and Discussant

## 13:00 - 13:20

### SY-8B: Genetic associations with educational field choices in >460,000 Nordic individuals

**Rosa Cheesman**1, Ville Anapaz2, Sjoerd van Alten3, Ziada Ayorech1, Perline Demange1, Joakim Ebeltoft1, Espen Moen Eilertsen1, Hannu Lahtinen2, Torkild Hovde Lyngstad4, Ralph Porneso1, Qi Qin1, Andrea Ganna2, Eivind Ystrom1,5

1Department of Psychology, University of Oslo, Oslo, Norway. 2Institute for Molecular Medicine Finland (FIMM), University of Helsinki, Helsinki, Finland. 3School of Business and Economics, Vrije Universitet Amsterdam, Amsterdam, Netherlands. 4Department of Sociology and Human Geography, University of Oslo, Oslo, Norway. 5PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

## 13:20 - 13:40

### SY-8B: Social origins and socioeconomic outcomes: A combined twin and adoption study

**Arno Van Hootegem**1, Adrian Farner Rogne2, Caroline Tveter Cros1, Torkild Hovde Lyngstad1

1Department of Sociology and Human Geography, University of Oslo, Oslo, Norway. 2Arbeid og velferd (ARV), Institute for Social Research, Oslo, Norway

## 13:40 - 14:00

### SY-8B: Genetic propensity for externalizing behaviours, family socioeconomic status, and adverse high-school outcomes \*\*

**Gaia Ghirardi**1, Tobias Wolfram2, Mirko Ruks2, Felix Tropf3,4

1Department of Political and Social Sciences, European University Institute (EUI), Florence, Italy. 2Department of Sociology, University of Bielefeld, Bielefeld, Germany. 3Department of Sociology, Purdue University, Purdue, USA. 4Population Data Science, Centre for Longitudinal Studies, London, United Kingdom

## 14:00 - 14:20

### SY-8B: [T] Nature meets schooling: Why boys fall behind in GPA despite equal genetic potential.

**Sverre Berg Ofstad**, Perline Demange, Espen Eilertsen, Nikolai Eftedal, Rosa Gillespie Cheesman, Eivind Ystrøm

Institute of Psychology, University of Oslo, Oslo, Norway

## 14:20 - 14:40

### SY-8B: [T] Triangulating Approaches to Evaluate the Genetic and Environmental Composition of Socioeconomic Status

**Joakim C Ebeltoft**1, Espen Eilertsen1, Rosa Cheesman1, Ziada Ayorech1, Arno Van Hootegem2, Torkild Lyngstad2, Eivind Ystrøm1

1Psychology, University of Oslo, Oslo, Norway. 2Sociology, University of Oslo, Oslo, Norway

## 14:40 - 15:00

### SY-8B: Discussant

Eivind Ystrom

Psychology, University of Oslo, Oslo, Norway

# SY-8C: Applications of diverse methodologies for the assessment of direct and indirect genetic effects

## 13:00 - 15:00 Saturday, 29th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Noemie Valenza-Troubat, Chair

## David Evans, Discussant

## 13:00 - 13:20

### SY-8C: Parent-of-origin effects in attention-deficit/hyperactivity disorder \*\*

**Dinka Smajlagic**1, Elizabeth C Corfield2,3, Siobhan Connolly4, Hakon Hakonarson5,6, Irwin Waldman7, Josephine Elia8, Elizabeth Heron4, Mona Bekkhus1, Martin Tesli9,10, Ted Reichborn-Kjennerud2,11, Alexandra Havdahl1,2,3, Jan Haavik12,13, Stefan Johansson14, Tetyana Zayats1,15,16

1PROMENTA Research Centre, Department of Psychology, University of Oslo, Oslo, Norway. 2PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 3Nic Waals Institute, Lovisenberg Diakonale Hospital, Oslo, Norway. 4Neuropsychiatric Genetics Research Group, Department of Psychiatry, Trinity College Dublin, Dublin, Ireland. 5Center for Applied Genomics, Children's Hospital of Philadelphia, Philadelphia, USA. 6Department of Pediatrics, Perelman School of Medicine University of Pennsylvania, Philadelphia, USA. 7Psychology Department, Emory University, Georgia, USA. 8Department of Child and Adolescent Psychiatry, The Children's Hospital of Philadelphia, Philadelphia, USA. 9Department of Mental Health and Suicide, Norwegian Institute for Public Health, Oslo, Norway. 10Centre for Research and Education in Forensic Psychiatry, Department of Mental Health and Addiction, Oslo University Hospital, Oslo, Norway. 11Institute of Clinical Medicine, University of Oslo, Oslo, Norway. 12Department of Biomedicine, University of Bergen, Bergen, Norway. 13Bergen Center for Brain Plasticity, Division of Psychiatry, Haukeland University Hospital, Bergen, Norway. 14Department of Clinical Science, University of Bergen, Bergen, Norway. 15Analytic and Translational Unit, Massachusetts General Hospital, Boston, USA. 16Stanley Center for Psychiatric Disorders, Broad Institute of MIT and Harvard, Boston, USA

## 13:20 - 13:40

### SY-8C: Trio genome-wide association studies

**Isabella Badini**1, Neil Davies1,2

1Division of Psychiatry, UCL, London, United Kingdom. 2Department of Statistical Science, UCL, London, United Kingdom

## 13:40 - 14:00

### SY-8C: Beyond trio: genetic effects in the extended family and proximal environments

**Perline A Demange**, Espen Eilertsen, Eivind Ystrøm

PROMENTA, University of Oslo, Oslo, Norway

## 14:00 - 14:20

### SY-8C: [T] Multivariate SEM-PGS Model: Using Polygenic Scores to Investigate Cross-Trait Genetic Nurture and Assortative Mating

**Xuanyu Lyu**1,2, Jared Balbona1, Yongkong Kim1, Matthew C Keller1,2

1Institute for Behavioral Genetics, University of Colorado at Boulder, Boulder, USA. 2Department of Psychology & Neuroscience, University of Colorado at Boulder, Boulder, USA

## 14:20 - 14:40

### SY-8C: On The Importance of Modelling Indirect Effects in Genetic Epidemiological Studies

**David Evans**

Institute for Molecular Bioscience, University of Queensland, Brisbane, Australia. Frazer Institute, University of Queensland, Brisbane, Australia. MRC Integrative Epidemiology Unit, University of Bristol, Brisbane, United Kingdom

# SY-8D: Integrating twin studies, psychology, and statistical and population genetics to advance our understanding of externalizing disorders

## 13:00 - 15:00 Saturday, 29th June, 2024

## Venue Strand (Main Campus) K1.28

## Danielle M. Dick, Chair

## Abraham Palmer, Discussant

## 13:00 - 13:20

### SY-8D: Characterizing Behavioral Manifestations of a Genetic Liability Towards Self-Regulation Deficits Across Development

**Maia Choi**1, Sarah J Brislin2, Holly E Poore2, Fazil Aliev2, Stephanie M Zellers3, Danielle M Dick2

1Psychology, Rutgers University, Piscataway, USA. 2Psychiatry, Rutgers University, Piscataway, USA. 3Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland

## 13:20 - 13:40

### SY-8D: Externalizing 2.0: Boosting discovery of genetic variants associated with externalizing behaviors with larger and more diverse samples \*\*

**Camille M Williams**1,2, Peter T Tanksley1,2, Holly Poore3, Diego Londono-Correa1, Natasia S Courchesne-Krak4, Yuchen Ning5, Peter Barr6, Irwin D Waldman7, Sandra Sanchez-Roige8,9, Travis T Mallard10,11,12, Richard Karlsson Linnèr13, Abraham A Palmer14, Danielle M Dick15, K. Paige Harden1,2

1Department of Psychology, University of Texas at Austin, Austin, USA. 2Population Research Center, University of Texas at Austin, Austin, USA. 3Department of Psychiatry, Robert Wood Johnson Medical School, Rutgers University, Piscataway, USA. 4Department of Psychiatry, University of California San Diego, San Diego, USA. 5Department of Economics, School of Business and Economics, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 6Department of Psychiatry and Behavioral Sciences, SUNY Downstate Health Sciences University, Brooklyn, USA. 7Department of Psychology, Emory University, Atlanta, USA. 8Department of Medicine, Division of Genetic Medicine, Vanderbilt University, Nashville, USA. 9Department of Psychiatry, University of California San Diego, LA Jolla, USA. 10Psychiatric and Neurodevelopmental Genetics Unit, Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. 11Department of Psychiatry, Harvard Medical School, Boston, USA. 12Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Boston, USA. 13Department of Economics, Universiteit Leiden, Leiden, Netherlands. 14Department of Psychiatry, University of California San Diego, La Jolla, USA. 15Rutgers Addiction Research Center in the Brain Health Institute, Department of Psychiatry, Robert Wood Johnson Medical School, Rutgers University, Piscataway, USA

## 13:40 - 14:00

### SY-8D: Characterizing the genetic architecture of impulsivity and its overlap with psychopathology

**Travis T Mallard**1,2,3, Justin D Tubbs1,2,3, Mariela Jennings4, Yingzhe Zhang5, Daniel E Gustavson6, Andrew D Grotzinger6,7, Margaret L Westwater8, Camille M Williams9,10, Lea K Davis11,12,13, Armin Raznahan14, Elliot M Tucker-Drob9,10, Karmel W Choi1,2,3, Tian Ge1,2,3, Jordan W Smoller1,2,3, Abraham A Palmer4,15, Sandra Sanchez-Roige4,11,15

1Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. 2Department of Psychiatry, Harvard Medical School, Boston, USA. 3Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Boston, USA. 4Department of Psychiatry, University of California San Diego, La Jolla, USA. 5Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, USA. 6Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 7Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 8Department of Psychiatry, University of Oxford, Oxford, United Kingdom. 9Department of Psychology, University of Texas at Austin, Austin, USA. 10Population Research Center, University of Texas at Austin, Austin, USA. 11Department of Medicine, Vanderbilt University Medical Center, Nashville, USA. 12Department of Psychiatry and Behavioral Sciences, Vanderbilt University Medical Center, Nashville, USA. 13Department of Biomedical Informatics, Vanderbilt University Medical Center, Nashville, USA. 14Section on Developmental Neurogenomics, National Institute of Mental Health, Bethesda, USA. 15Institute for Genomic Medicine, University of California San Diego, La Jolla, USA

## 14:00 - 14:20

### SY-8D: [T] Testing for Polygenic Adaptation in Complex Human Traits Using Cross-Ancestry and Within-Sibling GWAS Results

**Diego A Londono-Correa**1, Camille M Williams1, Vagheesh M Narasimhan2, Kathryn Paige Harden1,3

1Psychology, University of Texas at Austin, Austin, USA. 2Integrative Biology, University of Texas at Austin, Austin, USA. 3Population Research Center, University of Texas at Austin, Austin, USA

## 14:20 - 14:40

### SY-8D: Externalizing behavior predicts the willingness to donate DNA for science

**Richard Karlsson Linnér**1, Manisha Jain2

1Department of Economics, Universiteit Leiden, Leiden, Netherlands. 2Department of Economics, University of Wisconsin-Madison, Madison, USA

## 14:40 - 15:00

### SY-8D: Discussant

**Abraham Palmer**

Department of Psychiatry, University of California San Diego, La Jolla, USA. nstitute for Genomics Medicine, University of California San Diego, La Jolla, USA

# Coffee/Tea/Snacks Break (30 minutes)

## 15:00 - 15:30 Saturday, 29th June, 2024

## Venue Arcade (Bush House)

# Lightning-9A: Outcomes of Externalizing/Social Difficulties

## 15:30 - 16:50 Saturday, 29th June, 2024

## Venue Auditorium (Bush House)

## Elizabeth Prom-Wormley, Chair

## 15:30 - 15:40

### LT-9A: [T] Genome-wide meta-regression analysis of social behaviour from toddlerhood to early adulthood

**Lucía de Hoyos**1, Fenja Schlag1, Daniëlle Admiraal1, cognitive working group for the EAGLE social behaviour project1, Beate St Pourcain1,2,3

1Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 2Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands. 3MRC Integrative Epidemiology Unit, University of Bristol, Bristol, Netherlands

## 15:40 - 15:50

### LT-9A: [T] Longitudinal Genetic Analysis of Aggression across the Life Span

**Susanne Bruins**1,2, Camiel M van der Laan1, Meike Bartels1,2, Conor V Dolan1, Dorret I Boomsma1,2,3

1Department of Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam UMC, Amsterdam, Netherlands. 3Amsterdam Reproduction and Development Research Institute, Amsterdam UMC, Amsterdam, Netherlands

## 15:50 - 16:00

### LT-9A: [T] Adolescent Reward and Cognitive Control Constructs Independently Relate to Polygenic Scores for Adult Psychopathology

**Analicia K Howard**1,2, Daniel E Gustavson2, Naomi P Friedman1,2

1Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 2Institute of Behavioral Genetics, University of Colorado Boulder, Boulder, USA

## 16:00 - 16:10

### LT-9A: [T] Examining the Role of Externalizing Polygenic Risk Scores and Reciprocal Relationship between Externalizing Behaviors and Substance Use Intentions in Racially/Ethnically Diverse Adolescents \*\*

**Angel D Trevino**1, Belal Jamil1, Kit K Elam2, Rick A Cruz1, Kathryn Lemery-Chalfant1, Kevin J Grimm1, Jose M Causadias3, Eleanor K Seaton4, Jinni Su1

1Psychology, Arizona State University, Tempe, USA. 2School of Public Health, Indiana University Bloomington, Bloomington, USA. 3School of Social and Family Dynamics, Arizona State University, Tempe, USA. 4Psychology, University of Illinois Urbana-Champaign, Champaign, USA

## 16:10 - 16:20

### LT-9A: Intergenerational transmission of comorbid internalizing and externalizing psychopathology at age 11: Evidence from an adoption design for general transmission of comorbidity rather than homotypic transmission.

**Kristine Marceau**1, Sohee Lee1, Muskan Datta1, Olivia C Robertson2, Daniel S Shaw3, Miksaki Natsuaki4, Leslie D Leve5, Jody Ganiban6, Jenae M Neiderhiser7

1Human Development and Family Science, Purdue University, West Lafayette, USA. 2School of Public Health, Indiana University, Bloomington, USA. 3Psychology, University of Pittsburgh, Pittsburgh, USA. 4Psychology, University of California, Riverside, Riverside, USA. 5Prevention Science Institute, University of Oregon, Eugene, USA. 6Psychological and Brain Sciences, George Washington University, Washington DC, USA. 7Psychology, The Pennsylvania State University, State College, USA

## 16:20 - 16:30

### LT-9A: Genomic SEM factors of substance use related psychopathology, internalizing, and externalizing predicts adolescent drug use in the ABCD sample

**Chelsie E Benca-Bachman**1, Ami S Ikeda1, Leslie A Brick2, Rameez A Syed1, Valerie S Knopik3, Rohan H.C. Palmer1

1Psychology, Emory University, Atlanta, USA. 2Psychiatry and Human Behavior, Brown University, Providence, USA. 3Human Development and Family Studies, Purdue University, West Lafayette, USA

## 16:30 - 16:40

### LT-9A: The Genetic and Environmental Contributions to the Associations between Extracurricular Activities and Substance Initiation in African American Adolescent Twins \*\*

**Elizabeth C Prom-Wormley**1,2, Michael M Vanyukov3,4,5, Isha Rane1, Hermine HM Maes6,7,8

1Epidemiology, Virginia Commonwealth University, Richmond, USA. 2Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA. 3Pharmaceutical Sciences, University of Pittsburgh, Pittsburgh, USA. 4Psychiatry, University of Pittsburgh, Pittsburgh, USA. 5Human and Molecular Genetics, University of Pittsburgh, Pittsburgh, USA. 6Human and Molecular Genetics, Virginia Commonwealth University, Richmond, USA. 7Psychiatry, Virginia Commonwealth University, Richmond, USA. 8Massey Cancer Center, Virginia Commonwealth University, Richmond, USA

# Lightning-9B: Personality/Attitudes/Public Science

## 15:30 - 16:50 Saturday, 29th June, 2024

## Venue Lecture Theatre 1 (Bush House)

## Ana Butkovic, Chair

## 15:30 - 15:40

### LT-9B: The heritability of beliefs about heritability: An adoption study of lay intuitions about 21 human traits \*\*

**Emily A Willoughby**1, Alan C. Love2, Matt McGue1, James J. Lee1

1Psychology, University of Minnesota, Minneapolis, USA. 2Philosophy, University of Minnesota, Minneapolis, USA

## 15:40 - 15:50

### LT-9B: [T] Science Reducing Racial Prejudice through Genetics Education and Curriculum: Teaching Perspectives and Results \*\*

**Kathryn F Malerbi**1, Yeongmi Jeong2, Monica Weindling3, Andy Brubaker3, Jean Flanagan3, Brian M Donovan3, Robbee Wedow2,4

1Department of Public Health, Purdue University, West Lafayette, USA. 2Department of Sociology, Purdue University, West Lafayette, USA. 3Biological Sciences Curriculum Study (BSCS) Science Learning, BSCS, Colorado Springs, USA. 4Department of Medical & Molecular Genetics, Indiana University School of Medicine, Indianapolis, USA

## 15:50 - 16:00

### LT-9B: [T] The Impact of Stressful Life Events on Genetic Liability for Neuroticism

**Sarah E Benstock**, John Hettema, Brad Verhulst

Psychiatry and Behavioral Science, Texas A&M University, College Station, USA

## 16:00 - 16:10

### LT-9B: The Genetic Architecture of Personality Traits: A GWAS Update from the Revived Genomics of Personality Consortium

**Ted Schwaba**1, Margaret L. Clapp Sullivan2, Abdel Abdellaoui3,4, Michel G. Nivard5,6,7, Elliot M. Tucker-Drob2,8

1Psychology, Michigan State University, East Lansing, USA. 2Psychology, University of Texas at Austin, Austin, USA. 3ANS - Complex Trait Genetics, Amsterdam UMC, Amsterdam, Netherlands. 4Adult Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 5Faculty of Behavioural and Movement Sciences, Biological Psychology, VU Amsterdam, Amsterdam, Netherlands. 6APH - Mental Health, VU Amsterdam, Amsterdam, Netherlands. 7APH - Methodology, VU Amsterdam, Amsterdam, Netherlands. 8Population Research Center, University of Texas at Austin, Austin, USA

## 16:10 - 16:20

### LT-9B: Familial transmission of personality traits and life satisfaction are far higher than typical single-method studies show

**René Mõttus**1,2, Christian Kandler3, Michelle Luciano2, Uku Vainik1,4

1Institute of Psychology, University of Tartu, Tartu, Estonia. 2Department of Psychology, University of Edinburgh, Edinburgh, United Kingdom. 3Institute of Psychology, University of Bremen, Bremen, Germany. 4Institute of Genomics, University of Tartu, Tartu, Estonia

## 16:20 - 16:30

### LT-9B: Basic psychological needs and life satisfaction: A twin study

Denis Bratko, **Ana Butkovic**

Department of Psychology, Faculty of Humanities and Social Sciences, University of Zagreb, Zagreb, Croatia

## 16:30 - 16:40

### LT-9B: Genetic and Environmental Differences in Right-Wing Authoritarianism and Social Dominance Orientation from Adolescence to Adulthood - A Multi-Corhort Twin Family Study

**Christian Kandler1**, Jana Instinske1, Edward Bell2

1Psychology, University of Bremen, Bremen, Germany. 2Sociology, University of Western Ontario, London, Canada

# Lightning-9C: Substance Use

## 15:30 - 16:50 Saturday, 29th June, 2024

## Venue Lecture Theatre 2 (Bush House)

## Gretchen R.B. Saunders, Chair

## 15:30 - 15:40

### LT-9C: [T] Measuring the associations between brain morphometry and polygenic risk scores for substance use disorders in cannabis naive adolescents

**Sydney Kramer**1, Mei-Hsin Su1, Roxann Roberson-Nay2, Nathan Gillespie2

1Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA. 2Department of Psychiatry, Virginia Commonwealth University, Richmond, USA

## 15:40 - 15:50

### LT-9C: [T] Generational Differences in Genetic Effects on Alcohol and Tobacco Use Behaviors: a GxE Analysis in the UK Biobank.

**Jordan D Alexander**1, Gretchen RB Saunders1, Xingyan Wang2, Shuang Gao3, Seon-Kyeong Jang4, Dajiang J Liu3, Scott I Vrieze1

1Department of Psychology, University of Minnesota, Minneapolis, USA. 2T.H. Chan School of Public Health, Harvard University, Boston, USA. 3Department of Public Health Sciences, Penn State College of Medicine, Hershey, USA. 4Department of Computational Medicine, University of California, Los Angeles, Los Angeles, USA

## 15:50 - 16:00

### LT-9C: Higher cigarette taxes during adolescence more effective at curbing smoking and associated chronic illnesses in genetically vulnerable

**Robel Alemu**1,2, Lauren L Schmitz3

1Anderson School, UCLA, Los Angeles, USA. 2Medical and Population Genetics, Broad Institute of MIT and Harvard, Cambridge, USA. 3La Follette School of Public Affairs, University of Wisconsin-Madison, Madison, USA

## 16:00 - 16:10

### LT-9C: [T] Unraveling Adolescent Behavioral Profiles: Polygenic Risk and Associations with Alcohol-Related Outcomes in the Adolescent Brain and Cognitive Development (ABCD) Study \*\*

**Belal Jamil**1, Angel D Treviño1, Kit K Elam2, Kathryn Lemery-Chalfant1, Josè M Causadias3, Eleanor K Seaton4, Kevin J Grimm1, Rick A Cruz1, Jinni Su1

1Psychology, Arizona State University, Tempe, USA. 2Applied Health Science, Indiana University, Bloomington, USA. 3School of Social and Family Dynamics, Arizona State University, Tempe, USA. 4Psychology, Univesrity of Illinois, Champaign, USA

## 16:10 - 16:20

### LT-9C: Examining the Shared Genetic Liability of Prescription Opioid Misuse, Depression, and Anxiety

Kathleen Martin1, Chelsie E Benca-Bachman1, Rameez Syed1, **Rohan HC Palmer**1,2

1Psychology, Emory University, Atlanta, USA. 2Psychiatry, Providence VA Medical Center, Providence, USA

## 16:20 - 16:30

### LT-9C: Epigenetic markers of inflammatory burden associated with high frequency cannabis use in a high-risk sample of adolescents

**Leslie A Brick**1, Sarah Merrill1, Seyma Katrinli2, Alicia Smith2, Nugent Nicole1

1Psychiatry and Human Behavior, Brown Medical School, Providence, USA. 2Department of Gynecology and Obstetrics, Emory University, Atlanta, USA

## 16:30 - 16:40

### LT-9C: Associations Among Orexin Polygenic Predisposition and Pain, Sleep Disturbances, and Alcohol Sips in Early Adolescence \*\*

**Kit K Elam**1, Chung Jung Mun2,3, Jinni Su4, Patrick Quinn1, Fazil Aliev5, Angel Trevino4, Jodi Kutzner1, David De Sa Nogueira5, Gary Aston-Jones5, Danielle Dick5

1Applied Health Science, Indiana University, Bloomington, USA. 2Edson College of Nursing, Arizona State University, Phoenix, USA. 3Department of Psychiatry and Behavioral Sciences, Johns Hopkins School of Medicine, Baltimore, USA. 4Psychology, Arizona State University, Tempe, USA. 5Rutgers Addiction Research Center, Rutgers University, Piscataway, USA

## 16:40 - 16:50

### LT-9C: Transferability of tobacco and alcohol use polygenic scores across populations \*\*

**Gretchen R.B. Saunders**1, Scot Vrieze1, Dajiang J. Liu2

1Psychology, University of Minnesota, Minneapolis, USA. 2Department of Public Health Sciences, Penn State College of Medicine, Hershey, USA

# Lightning-9D: Schizophrenia/Psychopathology/Comorbidity

## 15:30 - 16:50 Saturday, 29th June, 2024

## Venue Strand (Main Campus) K1.28

## Dirk J.A. Smit, Chair

## 15:30 - 15:40

### LT-9D: [T] Examining the Genetic Links between Clusters of Immune-mediated Diseases and Psychiatric Disorders

**Sophie Breunig**1,2, Younga (Heather) Lee3, Andrew D Grotzinger1,2

1Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 2Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 3Center for Precision Psychiatry, Massachusetts General Hospital, Boston, USA

## 15:40 - 15:50

### LT-9D: [T] Investigating generality and specificity in the association between genetic risk for psychopathology and cognitive development \*\*

**Wangjingyi Liao**1, Engin Kaser2, Andrea Allegrini3,2, Kaili Rimfeld4,2, Robert Plomin2, Margherita Malanchini1,2

1School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 2Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom. 3Division of Psychology and Language Sciences, University College London, London, United Kingdom. 4Department of Psychology, Royal Holloway, University of London, London, United Kingdom

## 15:50 - 16:00

### LT-9D: [T] Biological pathways of cognitive health, major depressive disorder, and schizophrenia in diverse ancestry populations \*\*

**Tim J van der Es**1,2, Max Lam3,4, David Howard1, Cathryn Lewis1, LIU J Jun5

1Social Genetic Developmental Psychiatry centre, King's College London, London, United Kingdom. 2Genome Institute of Singaopore, A\*STAR, Singapore, Singapore. 3neuropsychiatric Genomics Laboratory, Institute of Mental Health, Singapore, Singapore. 4Broad Institute, MIT and Harvard, Massachusetts, USA. 5Genome Institute of Singapore, A\*STAR, Singapore, Singapore

## 16:00 - 16:10

### LT-9D: Genomic Insights into the Shared and Distinct Genetic Architecture of Cognitive Function and Schizophrenia

**Olivia Wootton**1,2, Alexey A Shadrin3, Thomas Bjella3, Torill Ueland3,4, Ole A Andreassen3, Dan J Stein1,5, Shareefa Dalvie6

1Department of Psychiatry and Neuroscience Institute, University of Cape Town, Cape Town, South Africa. 2Wellcome Sanger Institute, Wellcome Genome Campus, Hinxton, United Kingdom. 3NORMENT, Division of Mental Health and Addiction, Oslo University Hospital & Institute of Clinical Medicine, University of Oslo, Oslo, Norway. 4Department of Psychology, University of Oslo, Oslo, Norway. 5SAMRC Unit on Risk & Resilience in Mental Disorders, South African Medical Research Council, Cape Town, South Africa. 6Division of Human Genetics, Department of Pathology, University of Cape Town, Cape Town, South Africa

## 16:10 - 16:20

### LT-9D: Adolescent psychopathology and cognitive/academic functioning: Impact of comorbidity using a genetically sensitive design

**Olakunle Oginni**1, Frühling Rijsdijk2,3, Umar Toseeb4, Boladale Mapayi5, Kolawole Mosaku5, Adam Tarnoki6, David Tarnoki6, Kaili Rimfeld7

1Wolfson Centre for Young People's Mental Health, Cardiff University, Cardiff, United Kingdom. 2Department of Psychology, Anton de Kom University, Paramaribo, Suriname. 3Social, Genetic and Developmental Psychiatry, King's College London, London, United Kingdom. 4Department of Education, University of York, York, United Kingdom. 5Department of Mental Health, Obafemi Awolowo University, Ile-Ife, Nigeria. 6Medical Imaging Centre, Semmelweis University, Budapest, Hungary. 7Department of Psychology, Royal Holloway University of London, London, United Kingdom

## 16:20 - 16:30

### LT-9D: Schizophrenia Genetic Risk and Voxel-Wise Structural MRI: A Multiplex, Extended Pedigree Study

**Michael F. Pogue-Geile**1, Petra E. Rupert1, David R. Roalf2, Konasale Prasad3, Christie W. Musket4, Susan S. Kuo5, Ruben C. Gur2, Laura Almasy6, Raquel E. Gur2, Vishwajit L. Nimgaonkar3

1Department of Psychology, University of Pittsburgh, Pittsburgh, USA. 2Department of Psychiatry, University of Pennsylvania, Philadelphia, USA. 3Department of Psychiatry, University of Pittsburgh, Pittsburgh, USA. 4Department of Psychiatry, Yale University, New Haven, USA. 5Broad Institute, MIT & Harvard, Cambridge, USA. 6Department of Genetics, University of Pennsylvania, Philadelphia, USA

## 16:30 - 16:40

### LT-9D: Association of genetic risk scores of schizophrenia-specific and highly pleiotropic variants for neuropsychiatric disorders with brain structure

**Lydia M Federmann**1,2, Lisa Sindermann2, Sabrina Primus3, Frederico Raimondo1,4, Konrad Oexle3, Janik Goltermann5, Juliane Winkelmann3, Markus M Nöthen2, Katrin Amunts1,6, Thomas W Mühleisen1,6,7, Sven Cichon1,7,8, Simon B Eickhoff1,4, Felix Hoffstaedter1,4, Udo Dannlowski5, Kaustubh R Patil1,4, Andreas J Forstner1,2

1Institute of Neuroscience and Medicine, Research Centre Jülich, Jülich, Germany. 2Institute of Human Genetics, University of Bonn, School of Medicine & University Hospital Bonn, Bonn, Germany. 3Institute of Neurogenomics, Helmholtz Zentrum München, Munich, Germany. 4Institute of Systems Neuroscience, Heinrich Heine University Düsseldorf, Düsseldorf, Germany. 5Institute for Translational Psychiatry, Westphalian Wilhelms-University Münster, Münster, Germany. 6Cécile and Oskar Vogt Institute for Brain Research, Medical Faculty & University Hospital Düsseldorf, Heinrich Heine University Düsseldorf, Düsseldorf, Germany. 7Department of Biomedicine, University of Basel, Basel, Switzerland. 8Institute of Medical Genetics and Pathology, University Hospital Basel, Basel, Switzerland

## 16:40 - 16:50

### LT-9D: Parsing the genetics of obsessive-compulsive disorder: phenotypic characterisation of genetic subtypes

Joëlle A. Pasman1,2, Blanche B. SChoonderbeek3, Odile A. van den Heuvel1,4, **Dirk J.A. Smit**1,4

1Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 2Medical Epidemiology and Biostatistics, Karolinska Institute, Stockholm, Sweden. 3faculty of Medicine, University of Amsterdam, Amsterdam, Netherlands. 4-, Amsterdam Neuroscience, Amsterdam, Netherlands

# Executive Committee Meeting II

## 17:00 - 18:00 Saturday, 29th June, 2024

## Venue The Council Room (Strand building)

## Chandra Reynolds, Chair

# Reception & Banquet

## 18:30 - 23:59 Saturday, 29th June, 2024

## Venue Lincoln's Inn, Great Hall of Lincoln’s Inn Fields

## Reception & Banquet 6:30PM-12:00AM

## *Reception start 6:30pm. Dinner 8-10pm.*

# Posters I

## 17:30 - 19:30 Thursday, 27th June, 2024

## Venue Eighth Floor Bush House

### (P1.01) [R] Dissecting Genetic and Environmental Contribution on the Link Between Adolescent Gender Nonconformity and Trait Risk-Taking \*\*

**Yang Viki Xu**, D. A. Briley, Jaime Derringer

Department of Psychology, University of Illinois, Urbana-Champaign, Champaign, USA

### (P1.02) Leveraging genetics to examine the causal role of adolescent depression on later adult outcomes: evidence from one sample and two sample mendelian randomization

**Alex SF Kwong**1, Robyn Wootton2, Mark J Adams1, Amelia Edmondson-Stait1, Tom Palmer3, Christel Middeldorp4, Andrew McIntosh1

1Department of Psychiatry, University of Edinburgh, Edinburgh, United Kingdom. 2Psychology, University of Bristol, Bristol, United Kingdom. 3MRC IEU, University of Bristol, Bristol, United Kingdom. 4Public Health, Amsterdam UMC, Amsterdam, Netherlands

### (P1.03) Genetic and non-genetic parental influences on childhood neuroticism and depression using Norwegian Mother, Father, and Child Cohort Study \*\*

**Dinka Smajlagic**1,2, Noemie Valenza-Troubat1, Xuanyu Lyu1, Alexandra Havdahl3,4,2, Tetyana Zayats5,6, Christian M Page7,8, Mona Bekkhus2, Matthew Keller1

1Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 2PROMENTA Research Centre, Department of Psychology, University of Oslo, Oslo, Norway. 3PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4Nic Waals Institute, Lovisenberg Diakonale Hospital, Oslo, Norway. 5Analytic and Translational Unit, Massachusetts General Hospital, Boston, USA. 6Stanley Center for Psychiatric Disorders, Broad Institute of MIT and Harvard, Boston, USA. 7Department of Physical Health and Ageing, Division for Physical and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 8Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway

### (P1.04) Investigating genetic nurture effects in internalizing disorders

**Victória Trindade Pons**, Albertine Oldehinkel, Hanna M van Loo

Department of Psychiatry, University Medical Center Groningen, Groningen, Netherlands

### (P1.05) The Role of Early-Life Positive Parent Attributes on the Genetic and Environmental Contributions to Mental Health Symptomology in Middle Childhood

**Samantha A Miadich**1, Mary C Davis2, Leah D Doane2, Kathryn Lemery-Chalfant2

1Department of Psychology, University of Massachusetts Lowell, Lowell, USA. 2Department of Psychology, Arizona State University, Tempe, USA

### (P1.06) [R] Evocative Gene-Environment Correlation Between Polygenic Scores for Externalizing Behaviors and Supportive Parenting: A Within-Family Analysis

**LiChen Dong**1,2,3, James J. Li1,2,3

1Department of Psychology, University of Wisconsin-Madison, Madison, USA. 2Waisman Center, University of Wisconsin-Madison, Madison, USA. 3Center for Demography of Health and Aging, University of Wisconsin-Madison, Madison, USA

### (P1.07) [R] Behavioral inhibition and parental supervision: Testing transactional pathways across early childhood and influence of gene-environment correlation

**Li Yu**1, Kristine Marceau1, Valerie Knopik1, Misaki Natsuaki2, Daniel Shaw3, Leslie Leve4, Jody Ganiban5, Jenae Neiderhiser6

1Department of Human Development and Family Science, Purdue University, West Lafayette, USA. 2Department of Psychology, University of California, Riverside, USA. 3Department of Psychology, University of Pittsburgh, Pittsburgh, USA. 4Prevention Science Institute, University of Oregon, Eugene, USA. 5Department of Psychological and Brain Sciences, Washington University, Washington, DC, USA. 6Department of Psychology, Penn State University, University Park, USA

### (P1.08) Genetic Architecture of Pubertal Traits and Sex-Steroids: Cross-Sex Factor Associations

**Megan W Patterson**1, Naomi P Friedman2, Matthew C Keller2, Andrew D Grotzinger2

1Department of Psychiatry, University of Colorado Anschutz Medical Campus, Aurora, CO, USA. 2Institute for Behavioral Genetics, Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, CO, USA

### (P1.09) Why is Parental BMI Associated with Offspring Adiposity? A Mendelian Randomization Analysis of Genetic Trios

**Liam Wright**1, Gemma Shireby1, Tim T Morris1, Neil M Davies2, David Bann1

1Centre for Longitudinal Studies, University College London, London, United Kingdom. 2Division of Psychiatry, University College London, London, United Kingdom

### (P1.10) [R] Genetic and Environmental Contributions to Physical Activity and Dietary Intake in the Context of Adiposity: Insights from a Community Sample of Twin Children

**Eva M Bartsch**1, Sierra Clifford1, Gianna Rea-Sandin2,1, Mary C Davis1, Leah D Doane1, Kathryn Lemery-Chalfant1

1Department of Psychology, Arizona State University, Tempe, USA. 2Department of Psychology, University of Minnesota, Minneapolis, USA

### (P1.11) Stratifying psychotic disorder severity and genetic risk using longitudinal inpatient hospitalization data

**Evan J Giangrande**1,2, Anders Kämpe3,4, Jaana Suvisaari5, Markku Lähteenvuo3, Emilia Vartiainen3, Olli Pietiläinen6,2, Aarno Palotie3,2, Jordan W Smoller7,8, Benjamin M Neale9,2

1Center for Genomic Medicine, Massachusetts General Hospital, Boston, USA. 2Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, USA. 3Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland. 4Molecular Medicine and Surgery, Karolinska Institutet, Stockholm, Sweden. 5Finnish Institute for Health and Welfare, Ministry of Social Affairs and Health, Helsinki, Finland. 6Neuroscience Center, Helsinki Institute of Life Science, University of Helsinki, Helsinki, Finland. 7Psychiatric and Neurodevelopmental Genetics Unit, Massachusetts General Hospital, Boston, USA. 8Department of Psychiatry, Massachusetts General Hospital, Boston, USA. 9Analytic and Translational Genetics Unit, Massachusetts General Hospital, Boston, USA

### (P1.12) Genomic links between eating disorders symptoms, suicidal ideation and self-harm.

**Agnieszka Gidziela**1, Una Foye1, Rina Dutta2, Ulrike Schmidt2, Gerome Breen1, Moritz Herle1

1Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom. 2Department of Psychological Medicine, King's College London, London, United Kingdom

### (P1.13) [R] Associations between cannabis use and suicidal thoughts and behaviors: A clinical longitudinal sibling study \*\*

**Elisa F Stern**1,2, Jarrod M Ellingson3, Jonathan D Shaefer4, Jesse D Hinckley3, Michael C Stallings1,2, Tamara L Wall5, Robin p Corley2, Soo Hyun Rhee1,2

1Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 2Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA. 3Department of Psychiatry, University of Colorado School of Medicine, Aurora, USA. 4Department of Psychology, Vanderbilt University, Nashville, USA. 5Department of Psychiatry, University of California San Diego, San Diego, USA

### (P1.14) [R] The Development of Emotional Overeating: A longitudinal Twin Study from Toddlerhood to early Adolescence

**Vaishnavi K Madhavan**1, Zeynep Nas2, Jacqueline Blissett3, Clare Llewellyn2, Moritz Herle4

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Department of Behavioural Science & Health, University College London, London, United Kingdom. 3School of Psychology & Institute of Health and Neurodevelopment, Aston University, Birmingham, United Kingdom. 4Social, Genetic & Developmental Psychiatry Centre, King's College London, London, United Kingdom

### (P1.15) A Twin Study of Social Media Addiction in the ABCD

**Robert T Michaels**1,2, Nathan A Gillespie1, Michael C Neale1,3

1Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA. 2Integrative Life Sciences Doctoral Program, Virginia Commonwealth University, Richmond, USA. 3Department of Psychiatry, School of Medicine, Virginia Commonwealth University, Richmond, USA

### (P1.16) [R] The development of reappraisal and suppression strategies in adolescents: A twin study

**Katherine N Alexander**, Amanda M. Ramos

HDFS, Utah State University, Logan, USA

### (P1.17) Like Parent, Like Child? A Meta-Analysis of Parent and Child Reading Ability in Family Risk Studies of Dyslexia

**Britt Min**1, Monica Melby-Lervåg2, Elsje van Bergen1

1Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 2Special Needs Education, University of Oslo, Oslo, Norway

### (P1.18) [R] Rosetta: A method for integration of genetically informative studies of reading comprehension

**Emma C Bartley**1, Christopher W Bartlett2,3, Lee A Thompson4, Erik G Willcutt5, Stephen A Petrill1

1Department of Psychology, The Ohio State University, Columbus, OH, USA. 2The Steve Cindy Rasmussen Institute for Genomic Medicine, Battelle Center for Computational Biology, Abigail Wexner Research Institute at Nationwide Children’s Hospital, The Ohio State University, Columbus, OH, USA. 3Department of Pediatrics, College of Medicine, The Ohio State University, Columbus, OH, USA. 4Department of Psychological Sciences, Case Western Reserve University, Cleveland, OH, USA. 5Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, CO, USA

### (P1.19) Genetic and environmental influences on reading performance

**Amaia Carrión-Castillo**1,2, Marie Lallier1,2, Manuel Carreiras1,2

1-, Basque Center on Cognition, Brain and Language, Donostia/San Sebastián, Spain. 2-, Ikerbasque, Basque Foundation for Science, Bilbao, Spain

### (P1.20) Educational Genetics in Adaptive Learning Environments: Applying a Twin Model when Zygosity is unknown

**Madelief I. Kuijper**1, Abe D. Hofman2,3, Bruno Sauce Silva1, Elsje Van Bergen1

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Psychological Methods, Universieit van Amsterdam, Amsterdam, Netherlands. 3Data Science & Psychometrics, Prowise Learn, Amsterdam, Netherlands

### (P1.21) Triangulating Evidence of Declining Heritability Across Educational Levels in Norway: Insights from Twin Models and Polygenic Scores

**Eirik H Kvalvik**1, Ole Rogeberg2, Yunpeng Wang1, Torkild H Lyngstad3

1Department of Psychology, University of Oslo, Oslo, Norway. 2Department of Economics, Frisch Centre, Oslo, Norway. 3Department of Sociology and Human Geography, University of Oslo, Oslo, Norway

### (P1.22) Parental Influence on Children's Educational Achievements: Analyzing Direct and Indirect Genetic Effects through Trio-GCTA \*\*

**Qiyuan Peng**1, Espen M. Eilertsen1, Rosa Cheesman1, Cornelius A. Rietveld2, Eivind Ystrom1, Alexandra S. Havdahl1,3

1Department of Psychology, University of Oslo, Oslo, Norway. 2Erasmus School of Economics, Erasmus University Rotterdam, Rotterdam, Netherlands. 3PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

### (P1.23) Rethinking partner similarity: Understanding indirect assortative mating and its consequences for educational attainment.

**Hans Fredrik Sunde**1, Espen Moen Eilertsen2, Fartein Ask Torvik1,2

1Centre for Fertility and Health, Norwegian Institute of Public Health, Oslo, Norway. 2Department of Psychology, University of Oslo, Oslo, Norway

### (P1.24) Causally-informative analyses of the effect of job displacement on all-cause and specific-cause mortality: A Finnish register and twin study

**Stephanie Zellers**1,Terhi Maczulskij2, Elissar Al Kazzi1, Antti Latvala1,3, Jaakko Kaprio1

1Institute for Molecular Medicine Finland, University of Helsinki, Helsink, Finland. 2Growth, international trade and competition, ETLA Economic Research, Helsinki, Finland. 3Institute of Criminology and Legal Policy, University of Helsinki, Helsinki, Finland

### (P1.25) Does socioeconomic advantage interrupt the intergenerational transmission of psychopathology?

**Jessie Baldwin**1, Tom McAdams2

1Clinical, Educational and Health Psychology, UCL, London, United Kingdom. 2Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom

### (P1.26) Multi-generational effects of dementia risk and onset on labour market outcomes and financial decision making.

Silvia Barcellos1, Titus Galama1,2**, Marina Aguiar Palma**2, Sjoerd van Alten2

1School of Economics, USC, Los Angeles, USA. 2School of Economics, VU, Amsterdam, Netherlands

### (P1.27) Genomic analyses of bullying victimisation in children and adolescents

**Tracy Odigie**1, Leonard Frach1, Andrea Allegrini1, Wikus Barkhuizen1, Laura Hegemann2,3, Laurie J Hannigan2,4,5, Alexandra Havdahl2,3,5, Jean-Baptiste Pingault1,6

1Department of Clinical, Educational and Health Psychology, Division of Psychology and Language Sciences, University College London, London, United Kingdom. 2Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 3Department of Psychology, University of Oslo, Oslo, Norway. 4Medical Research Council Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 5Center for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 6Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom

### (P1.28) Associations of Polygenic Scores with Phenotypic Delay Discounting and Non-Systematic Responding in the Adolescent Brain Cognitive Development Study

**Jill A Rabinowitz**1, Justin C Strickland2, Julia W Felton3, John J Meredith4, Renata B Cupertino4, Brion S Maher5, Abraham Palmer4,6, Sandra Sanchez-Roige4,7

1Department of Psychiatry, Rutgers University, New Brunswick, USA. 2Department of Psychiatry and Behavioral Services, Johns Hopkins, Baltimore, USA. 3N/A, Henry Ford Hospital, Detroit, USA. 4Department of Psychiatry, University of California San Diego, La Jolla, USA. 5Department of Mental Health, Johns Hopkins, Baltimore, USA. 6Institute for Genomics Medicine, University of California San Diego, La Jolla, USA. 7Department of Medicine, Vanderbilt University Medical Center, Nashville, USA

### (P1.29) Genetic architecture of risky sexual behavior: correlational structure and causal effects

**Noah Berley**1, Brooke Huibregtse1, Luke Evans2, Michael Stallings1

1Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 2Ecology and Evolutionary Biology, University of Colorado Boulder, Boulder, USA

### (P1.30) [R] Trajectories of conduct problems from early childhood to early adulthood in the Twins Early Development Study: risk factors and outcomes.

**Elisavet Palaiologou**1, Joanna Bright1, Gerome Breen1, Elham Assary1, Matthew Hotopf2,3, Celestine Lockhart1, Megan Skelton1, Argyris Stringaris4, Thomas McGregor1, Essi Viding5, Ewan Carr6,1, Thalia C Eley1

1Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom. 2Department of Psychological Medicine, Institute of Psychology, Psychiatry and Neuroscience, King's College London, London, United Kingdom. 3South London and Maudsley, NHS Foundation Trust, London, United Kingdom. 4Division of Psychiatry, University College London, London, United Kingdom. 5Division of Psychology and Language Sciences, University College London, London, United Kingdom. 6Department of Biostatistics and Health Informatics, King’s College London, London, United Kingdom

### (P1.31) Crops and Cradles: Analyzing the Impact of Agricultural Transition on Reproductive Preference \*\*

**Chen Zhu**

College of Economics and Management, China Agricultural University, Beijing, China

### (P1.32) The Effects of Housing-, Health- and Crime-Related Life Events on Social Withdrawal in Young Adults: A Longitudinal Co-Twin Control Study

**Alexandra Zapko-Willmes**1, Susanne Buecker2, Michael P. Grosz3, Lianne P. de Vries4

1Psychology, University of Siegen, Siegen, Germany. 2Psychology and Psychotherapy, Witten/Herdecke University, Witten, Germany. 3Health, HMU Health and Medical University Potsdam, Potsdam, Germany. 4Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

### (P1.33) Political stratification and genetic sorting: Evidence from Swedish twins

**Rafael Ahlskog**, Sven Oskarsson

Dept of Government, Uppsala university, Uppsala, Sweden

### (P1.34) [R] The Pathway to Effortful Control in Adolescence: The Role of Parental Personality, Family Environment, and Genetic Factors

**Zhaoying Chen**1, Chang Liu2, Leslie D Leve3, Daniel S Shaw4, Misaki N Natsuaki5, Jenae M Neiderhiser6, Jody M Ganiban1

1Department of Psychological and Brain Science, The George Washington University, Washington, D.C., USA. 2Department of Psychology, Washington State University, Pullman, Washington, USA. 3Prevention Science Institute, University of Oregon, Eugene, Oregon, USA. 4Department of Psychology, University of Pittsburgh, Pittsburgh, Pennsylvania, USA. 5Department of Psychology, University of California, Riverside, Riverside, California, USA. 6Department of Psychology, The Pennsylvania State University, University Park, Pennsylvania, USA

### (P1.35) [R] How Schools and Residential Areas Moderate the Effects of Polygenic Scores for Complex Behavioral Traits on Educational Performance in Norway \*\*

**Qi Qin**, Espen Moen Eilertsen, Eivind Ystrom, Rosa Cheesman

PROMENTA, Department of Psychology, University of Oslo, Oslo, Norway

### (P1.36) A systematic review of the reporting and handling of missing data in genetic epidemiological studies of mental health-related traits in childhood and adolescence using cohort data

**Meseret Mamo Bazezew**1,2,3, Adrian Dahl Askelund1,2,3, Laura Hegemann1,2,3, Alexandra Havdahl4,2,3, Laurie Hannigan4,5

1Psychiatric Genetic Epidemiology, Lovisenberg Diaconal Hospital, Oslo, Norway. 2PsychGen Center for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 3Psychology, University of Oslo, Oslo, Norway. 4Psychiatric Genetic Epidemiology, Lovisenberg, Oslo, Norway. 5PsychGen Center for Genetic Epidemiology, Norwegian Institute of Public Health, Oslo, Norway

### (P1.37) [R] Disentangling sources of gene-environment correlation – A simulation study on detecting cultural transmission and sibling interaction using polygenic scores

**Josefina B Bernardo**1, Charlotte KL Pahnke2, Elsje van Bergen1, Conor V Dolan1

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Institute of Human Genetics, University Hospital Bonn, Bonn, Germany

### (P1.38) [R] Investigation of age effects in polygenic score-based models of cultural transmission.

**Charlotte K. L. Pahnke**1, Josefina B. Bernardo2, Elsje van Bergen2, Markus M. Nöthen1, Andreas J. Forstner1,3, Conor V. Dolan2

1Institute of Human Genetics, University of Bonn & University Hospital Bonn, Bonn, Germany. 2Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 3Institute of Neuroscience and Medicine (INM-1), Research Center Jülich, Jülich, Germany

### (P1.39) [R] Cross-sectional Causal Modeling with Polygenic Scores

**Madhurbain Singh**1,2,3, Brad Verhulst4, Jouke-Jan Hottenga3, René Pool3, Dorret I. Boomsma3, Hermine H. M. Maes1,2,5, Conor V. Dolan3, Michael C. Neale1,5,2,3

1Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, VA, USA. 2Department of Human and Molecular Genetics, Virginia Commonwealth University, Richmond, VA, USA. 3Department of Biological Psychology, Vrije Universiteit (VU) Amsterdam, Amsterdam, Netherlands. 4Department of Psychiatry and Behavioral Sciences, Texas A&M University, College Station, TX, USA. 5Department of Psychiatry, Virginia Commonwealth University, Richmond, VA, USA

### (P1.40) Investigating Non-Shared Environmental Influences: A Rapid Review of Qualitative MZ Twin Differences Studies

**Filip O. Kaleta**, Nandini Bhandoh, Tom A. McAdams, Yasmin I. Ahmadzadeh, Kennath Widanaralalage, Helena M.S. Zavos

Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, United Kingdom

### (P1.41) A Mendelian randomization analysis of ADHD on education performance using twins from the ABCD study

**Luis FS Castro-de-Araujo**1,2, Yi Zhou1, Mei-Hsin Su1, Michael C Neale1

1Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA. 2Department of Psychiatry, The University of Melbourne, Melbourne, Australia

### (P1.42) Disentangling Dyslexia: Towards Early Identification through Biological and Non-Biological Factors

**Emma V de Heus**1, Else Eising2, Simon E Fisher2,3, Peter F de Jong4, Elsje van Bergen1

1Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 3Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands. 4Programme Group Developmental Disorders and Special Education, University of Amsterdam, Amsterdam, Netherlands

### (P1.43) Variation in corpus callosum thickness and subcortical brain volumes in autism.

Vaishvi Agrawal1, Elsje van Bergen1,2, **Dennis van 't Ent**1,2

1Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 2Amsterdam Public Health, (APH), Amsterdam, Netherlands

### (P1.44) Exploring the genetics of stuttering persistence

**Else Eising**1, Valerie Rebattu1,2, Dorret I Boomsma3,4,5, René Pool4,6, Marie-Christine J Franken7, Simon E Fisher1,8

1Language and Genetics Department, Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands. 2Netherlands Twin Register, Netherlands Twin Register, Amsterdam, Netherlands. 3Netherlands Twin Register, Netherlands Twin Register, Nijmegen, Netherlands. 4Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 5Amsterdam Reproduction and Development (AR&D) Research Institute, Amsterdam UMC, Amsterdam, Netherlands. 6Amsterdam Public Health Research Institute, Amsterdam UMC, Amsterdam, Netherlands. 7Department of Otorhinolaryngology and Head and Neck Surgery, Erasmus UMC, Rotterdam, Netherlands. 8Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands

### (P1.45) Untangling the Impact of the Home Environment on ADHD Symptoms: A Study on Cousins Raised Separately \*\*

Kyle J. Knaut, **Holland K. Tyson, S. Mason Garrison**

Department of Psychology, Wake Forest University, Winston-Salem, USA

### (P1.46) [R] Longitudinal genetic effects of common and rare variation on cognition and behavioural traits across development

**Emma E. Wade**\*, Daniel S. Malawsky\*, Mahmoud Koko, Wei Huang, Matthew E. Hurles, Hilary C. Martin

Human Genetics Programme, Wellcome Trust Sanger Institute, Hinxton, United Kingdom

# Posters II

## 17:10 - 19:10 Friday, 28th June, 2024

## Venue Great Hall (the Strand building)

### (P2.01) A Chip Off The Old Block? Genetics and The Intergenerational Transmission of Socioeconomic Status

**Sjoerd van Alten**1, Marina Aguiar Palma2,3, Silvia Barcellos4, Leandro Carvalho4, Titus Galama2,4

1School of Economics and Businness Economics, Vrije Universiteit, Amsterdam, Netherlands. 2School of Economics and Business Economics, Vrije Universiteit, Amsterdam, Netherlands. 3FGV Rio, Fundação Getulio Vargas, Rio de Jaineiro, Brazil. 4Center for Economic and Social Research, University of Southern California, Los Angeles, USA

### (P2.02) Heritability of humor production ability – a twin study

**Stephanie Zellers**1, Gil Greengross2, Nancy Segal3, Jaakko Kaprio1, Paul Silvia4

1Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland. 2Department of Psychology, Aberystwyth University, Aberystwyth, United Kingdom. 3Department of Psychology, California State University Fullerton, Fullerton, USA. 4Department of Psychology, University of North Carolina Greensboro, Greensboro, USA

### (P2.03) Comparing factor and network models of cognitive abilities using twin data

**Jacob Knyspel**, Robert Plomin

Social, Genetic & Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, United Kingdom

### (P2.04) Effects of Polygenic Scores for a Common Executive Function Factor on the Course of Executive Function

Maria Heilbronner1, Hajar Rafiee1, Alba Navarro-Flores1,2, Bernadette Wendel3, Sergi Papiol1,4, Kristina Adorjan1,5, Monika Budde1, Mojtaba Oraki Kohshour1, Sabrina K. Schaupp1, Eva C. Schulte1,6,7, Fanny Senner1,8,9, Peter Falkai8, Thomas G. Schulze1,10,11, **Urs Heilbronner**1

1Institute of Psychiatric Phenomics and Genomics (IPPG), LMU University Hospital, LMU Munich, Munich, Germany. 2International Max Planck Research School for Translational Psychiatry (IMPRS-TP), Max Planck Institute of Psychiatry, Munich, Germany. 3Department of Genetic Epidemiology, University Medical Center Göttingen, Georg-August-University, Göttingen, Germany. 4Max Planck Institute of Psychiatry, Max Planck Institute of Psychiatry, Munich, Germany. 5University Hospital of Psychiatry and Psychotherapy, University of Bern, Bern, Switzerland. 6Department of Psychiatry and Psychotherapy, Faculty of Medicine and University Hospital Bonn, University of Bonn, Bonn, Germany. 7Institute of Human Genetics, Faculty of Medicine and University Hospital Bonn, University of Bonn, Bonn, Germany. 8Department of Psychiatry and Psychotherapy, LMU University Hospital, LMU Munich, Munich, Germany. 9Centres for Psychiatry Suedwuerttemberg, Centres for Psychiatry Suedwuerttemberg, Ravensburg, Germany. 10Department of Psychiatry and Behavioral Sciences, SUNY Upstate Medical University, Syracuse, USA. 11Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, Baltimore, USA

### (P2.05) Polygenic Analyses Show Important Differences Between MDD Symptoms Collected Using PHQ9 and CIDI-SF

**Lianyun Huang**1,2,3, Sonja Tang4,5, Jolien Rietkerk1,2,3, Vivek Appadurai6, Morten Dybdahl Krebs6, Andrew Joseph Schork6,7,8, Thomas Werge6,9,10, Verena Zuber4,5, Kenneth Kendler11, Na Cai1,2,3

1Helmholtz Pioneer Campus, Helmholtz Munich, Neuherberg, Germany. 2Computational Health Centre, Helmholtz Munich, Neuherberg, Germany. 3School of Medicine, Technical University of Munich, Munich, Germany. 4School of Public Health, Imperial College London, London, United Kingdom. 5MRC Centre for Environment and Health, Imperial College London, London, United Kingdom. 6Institute of Biological Psychiatry, Mental Health Center, Copenhagen University Hospital, Copenhagen, Denmark. 7Neurogenomics Division, The Translational Genomics Research Institute, Phoenix, Arizona, USA. 8Section for Geogenetics, GLOBE Institute, Copenhagen, Denmark. 9Lundbeck Foundation GeoGenetics Centre, Natural History Museum of Denmark, University of Copenhagen, Copenhagen, Denmark. 10Department of Clinical Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark. 11Virginia Institute for Psychiatric and Behavioral Genetics and Department of Psychiatry, Virginia Commonwealth University, Virginia, USA

### (P2.06) Shared genetic liability between nausea and vomiting during pregnancy and mental health disorders

Jodie N Painter1,2,3, Katrina G Grasby1, Penelope A Lind1,2,3, **Lucía Colodro-Conde**\*1,4, Sarah E Medland\*1,4

1Mental Health & Neuroscience, QIMR Berghofer Medical Research Institute, Brisbane, Australia. 2School of Biomedical Sciences, Faculty of Health, Queensland University of Technology, Brisbane, Australia. 3School of Biomedical Sciences, Faculty of Medicine, University of Queensland, Brisbane, Australia. 4School of Psychology, University of Queensland, Brisbane, Australia

### (P2.07) Importance of Caucuses Within Professional Organizations: Creating the Behavior Genetics Association Student Caucus

**Amy M Loviska**, Valerie Knopik

Human Development and Family Science, Purdue University, West Lafayette, USA

### (P2.08) Establishing the Bidirectional Effects Between Body Mass Index and Manic and Depressive Symptoms Using Two-Sample Mendelian Randomisation

**Alex H R Monson**1, Claire M A Haworth1, Robyn E Wootton1,2,3,4

1School of Psychological Science, University of Bristol, Bristol, United Kingdom. 2Nic Waals Institute, Lovisenberg Hospital, Oslo, Norway. 3MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 4PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway

### (P2.09) Associations between offspring and parental polygenic scores for depression and offspring clinically diagnosed mental illness: Influences from age at onset and parental sex

**Andreas Jangmo**1, Marit Haram1,2, John R Shorter3,4,5, Joëlle A Pasman6,7, Joeri J Meijsen3,4, Elisabeth C Corfield8,9, Espen Hagen10, Oleksandr Frei10,11, Ted Reichborn-Kjennerud1,8, Alfonso Buil3,4, Yu Li6, Patrick F Sullivan6,12, Ole A Andreassen10,13, Martin Tesli1

1Department of Mental Health and Suicide, Norwegian Institute of Public Health, Oslo, Norway. 2Division of Mental Health and Addiction, Oslo University Hospital, Oslo, Norway. 3Institute of Biological Psychiatry, Mental Health Center Sct. Hans, Mental Health Services Copenhagen, Roskilde, Denmark. 4The Lundbeck Foundation Inititive for Integrative Psychiatric Research, iPSYCH, Copenhagen, Denmark. 5Department of Science and Environment, Roskilde University, Roskilde, Denmark. 6Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden. 7Adult Psychiatry, Amsterdam University Medical Centers, Amsterdam, Netherlands. 8PsychGen Center for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 9Nic Waals Institute, Lovisenberg Diakonale Hospital, Oslo, Norway. 10NORMENT Centre, Institute of Clinical Medicine, University of Oslo, Oslo, Norway. 11Centre for Bioinformatics, Department of Informatics, University of Oslo, Oslo, Norway. 12Departments of Genetics and Psychiatry, University of North Carolina at Chapel Hill, North Carolina, USA. 13KG Jebsen Centre for Neurodevelopmental Disorders, Oslo University Hospital and Institute of Clinical Medicine, Oslo, Norway

### (P2.10) [R] Characterizing Early Childhood Self-harm in the Norwegian Mother, Father and Child Cohort Study (MoBa)

**Anastasia Izotova**1,2,3, Line Indrevoll Stänicke1,2, Becky Mars4,5, Laurie J. Hannigan1,3,4, Helga Ask3,6, Kim Stene-Larsen7, George Davey Smith8, Anne Reneflot7, Anne-Siri Øyen1, Alexandra Havdahl1,3,6, Robyn E. Wootton1,3,9

1Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 2Department of Psychology, University of Oslo, Oslo, Norway. 3PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 4Population Health Sciences, University of Bristol, Bristol, United Kingdom. 5NIHR Biomedical Research Centre, University Hospitals Bristol NHS Foundation Trust, Bristol, United Kingdom. 6PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 7Department of Mental Health and Suicide, Norwegian Institute of Public Health, Oslo, Norway. 8MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 9School of Psychological Science, University of Bristol, Bristol, United Kingdom

### (P2.11) [R] Shared genetic architecture and causality between autism spectrum disorder and irritable bowel syndrome, pain, and fatigue

**Yiran Li**1, Tian Xie1, Catharina A Hartman1, Harold Snieder2

1Department of Psychiatry, University Medical Center Groningen, University of Groningen, Groningen, Netherlands. 2Department of Epidemiology, University Medical Center Groningen, University of Groningen, Groningen, Netherlands

### (P2.13) Co-development of ADHD and emotional problems trajectories from childhood to early adulthood: predictors and outcomes

**Yuan You**1, Helena M.S. Zavos2, Laurie John Hannigan3, Chris Rayner1, Tom A. McAdams1

1Social, Genetic & Developmental Psychiatry Centre, Institute of Psychiatry, Psychology & Neuroscience, London, United Kingdom. 2Department of Psychology, Institute of Psychiatry, Psychology & Neuroscience, London, United Kingdom. 3MRC (Medical Research Council) Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom

### (P2.14) [R] Analyzing novel sexual orientation and gender identity phenotypes using genetic relatedness matrices \*\*

**Brooke Kadel**, D. A. Briley, Jaime Derringer

Psychology, University of Illinois at Urbana-Champaign, Champaign, USA

### (P2.15) [R] Metabolomics and transcriptomic analyses highlight differences in gene-expression of the TGF-B and WNT signaling pathways between Monozygotic and Dizygotic twins.

**Nikki Hubers**1,2,3, Gabin Drouard4, Rick Jansen5, René Pool1, Jouke-Jan Hottenga1, Gonneke Willemsen6, Jaakko Kaprio4, Jenny van Dongen2,1,3, Dorret I Boomsma1,2,3

1Biological Psychology, Vrije Universiteit, Amsterdam, Netherlands. 2Amsterdam Reproduction and Development, Amsterdam UMC, Amsterdam, Netherlands. 3Amsterdam Public Health, Amsterdam UMC, Amsterdam, Netherlands. 4Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland. 5Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 6Faculty of Health, Sport and Wellbeing, Inholland University of Applied Sciences, Haarlem, Netherlands

### (P2.16) [R] Identifying metabolomic risk factors for psychiatric and neurodegenerative disorders: A metabolome-wide mendelian randomisation study

**Lachlan Gilchrist**1,2, Sulev Koks2,3, Cathryn M. Lewis1,4, Petroula Proitsi5

1Social, Genetic and Developmental Psychiatry, King's College London, London, United Kingdom. 2Perron Institute for Neurological and Translational Science, Perron Institute, Perth, Australia. 3Centre for Molecular Medicine and Innovative Therapeutics, Murdoch University, Perth, Australia. 4Department of Medical and Molecular Genetics, King's College London, London, United Kingdom. 5Centre for Preventive Neurology, Wolfson Institute of Population Health, Queen Mary’s University of London, London, United Kingdom

### (P2.17) [R] Detaching from the Nine-to-Five: How Retirement has an effect on the Genetic Influences on Chronotype \*\*

**Anne Landvreugd**1,2, Marijke Gordijn3, Michel G Nivard1,2, Meike Bartels1,2

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical Centres, Amsterdam, Netherlands. 3Groningen Institute for Evolutionary Life Sciences, University of Groningen, Groningen, Netherlands

### (P2.18) Accelerated biological aging during the covid-19 pandemic – a TwinLife epigenetic change satellite study

**Alicia M. Schowe**1,2, Darina Czamara1, Dmitry V. Kuznetsov3, Bastian Moenkediek3, Jana Instinske4, Christian Kandler4, Charlotte K.L. Pahnke5, Theresa Rohm4, Carlo Maj6,7, Andreas J. Forstner5,8, Markus M. Nöthen5, Elisabeth B. Binder1

1Dept. of Genes and Environment, Max Planck Institute, Munich, Germany. 2Biomedical Sciences, Graduate School of Systemic Neurosciences, Ludwig-Maximilians Universität, Munich, Germany. 3Dept. of Sociology, University of Bielefeld, Bielefeld, Germany. 4Dept. of Psychology, University of Bremen, Bremen, Germany. 5Institute of Human Genetics, University of Bonn, School of Medicine & University Hospital, Bonn, Germany. 6Institute for Genomic Statistics and Bioinformatics, University of Bonn, Bonn, Germany. 7Center for Human Genetics, University Hospital of Marburg, Marburg, Germany. 8Institute of Neuroscience and Medicine (INM-1), Research Center Jülich, Jülich, Germany

### (P2.19) [R] Tracking School-Related Stressors in Accelerated Epigenetic Aging

**Dmitry V. Kuznetsov**1, Weigel Lena1, Alicia M. Schowe2,3, Anastasia Andreas4, Yixuan Liu1, Martin Diewald1

1Faculty of Sociology, Bielefeld University, Bielefeld, Germany. 2Dept. Genes and Environment, Max-Planck-Institute of Psychiatry, Munich, Germany. 3Graduate School of Systemic Neuroscience, Ludwig-Maximilian’s Universität, Munich, Germany. 4Dept. of Psychology, Saarland University, Saarland, Germany

### (P2.20) Epigenome-wide association study of APOE ε4 allele status in the Louisville Twins

**Christopher R Beam**1, Kelly M Bakulski2, Ebrahim Zandi3, Deborah Finkel4,5, Eric Turkheimer6, Kristin Higdon7, A Cevelle Barna7, Ariel King7, Kendra Sikes7, Lesa Ryan7, Deborah Winders Davis7,8

1Psychology, University of Southern California, Los Angeles, USA. 2Epidemiology, University of Michigan, Ann Arbor, USA. 3Molecular Microbiology, USC Keck School of Medicine, Los Angeles, USA. 4Center for Economic and Social Research, University of Southern California, Los Angeles, USA. 5Institute for Gerontology, Jönköping University, Jönköping, Sweden. 6Psychology, University of Virginia, Charlottesville, USA. 7Norton Children’s Research Institute, University of Louisville School of Medicine, Louisville, USA. 8Pediatrics, University of Louisville School of Medicine, Louisville, USA

### (P2.21) Gene-environment interaction study of adverse childhood experiences and DNA methylation age acceleration

Cheyenne S Eames1, Christopher R Beam1, Eric N Penichet1, Deborah Finkel2,3, Eric Turkheimer4, Kristin Higdon5, A Cevelle Barna5, Ariel King5, Kendra Sikes5, Lesa Ryan5, **Deborah Winders Davis**5,6

1Psychology, University of Southern California, Los Angeles, USA. 2Center for Economic and Social Research, University of Southern California, Los Angeles, USA. 3Institute for Gerontology, Jönköping University, Jönköping, Sweden. 4Psychology, University of Virginia, Charlottesville, USA. 5Norton Children’s Research Institute, University of Louisville School of Medicine, Louisville, USA. 6Pediatrics, University of Louisville School of Medicine, Louisville, USA

### (P2.22) [R] Unraveling the relationship between creativity and mental health using a genetically informative sample

**Penghao Xia**1,2, Laura W. Wesseldijk1,3,2, Yi Lu4, Fredrik Ullén1,2, Miriam A. Mosing1,2,4,5

1• Department of Cognitive Neuropsychology, Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany. 2• Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden. 3• Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 4• Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden. 5• Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia

### (P2.23) The potential mediating role of brain volume in associations between smoking and psychiatric disorders

**Margot P. van de Weijer**1,2, Shu Liu1, Anaïs B. Thijssen1, Robyn E. Wootton3,4, Jentien M. Vermeulen1, Guido A. van Wingen1,5, Dirk J.A. Smit1, Marcus R. Munafò3, Karin J.H. Verweij1, Jorien L. Treur1

1Psychiatry, Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical Centers, Amsterdam, Netherlands. 3School of Psychological Science, University of Bristol, Bristol, United Kingdom. 4Nic Waals Institute, Lovisenberg Diaconal Hospital, Oslo, Norway. 5Amsterdam Brain and Cognition, University of Amsterdam, Amsterdam, Netherlands

### (P2.24) Multi-polygenic Scores in Psychopathology: A Systematic Review

**Nisa R Rainy**1, Emma Meaburn1, Bonamy Oliver2

1Psychological Sciences, Birkbeck University of London, London, United Kingdom. 2IOE Psychology & Human Development, UCL, London, United Kingdom

### (P2.25) Preliminary results from the ClozaGene study examining the experiences of 1021 Australians prescribed clozapine

Penelope A Lind1, Richard K Parker1, Korinne Northwood2,3, Dan J Siskind2,3, **Sarah E Medland**1

1Psychiatric Genetics, QIMR Berghofer, Brisbane, Australia. 2Faculty of Medicine, University of Queensland, Brisbane, Australia. 3Metro South Addiction and Mental Health Service, Queensland Health, Brisbane, Australia

### (P2.26) [R] Shared Genetic Liability across Clusters of Psychiatric and Non-Psychiatric Medical Illness

**Jeremy M Lawrence**1,2, Isabelle F Foote1, Sophie Breunig1,2, Luke Schaffer1,2, Andrew D Grotzinger1,2

1Institute for Behavioral Genetics, CU Boulder, Boulder, USA. 2Psychology & Neuroscience, CU Boulder, Boulder, USA

### (P2.27) [R] Using polygenic scores corrected for the general psychopathology factor to predict specific psychopathology

**Engin Keser**1, Wangjingyi Liao2, Andrea G. Allegrini3, Thalia C. Eley1, Kaili Rimfeld4, Margherita Malanchini2, Robert Plomin1

1Social, Genetic and Developmental Psychiatry Centre, King's College London, London, United Kingdom. 2School of Biological and Behavioural Sciences, Queen Mary University of London, London, United Kingdom. 3Department of Psychology and Language Science, University College London, London, United Kingdom. 4Department of Psychology, Royal Holloway University of London, London, United Kingdom

### (P2.28) The phenotypic and genetic architecture of a neurodevelopmental spectrum across childhood and adolescence

Giorgia Michelini1, **Chiara Caserini**1, Thalia C Eley2, Margherita Malanchini1, Kaili Rimfeld3

1Department of Biological & Experimental Psychology, Queen Mary University of London, London, United Kingdom. 2Social, Genetic & Developmental Psychiatry Centre, King’s College London, London, United Kingdom. 3Department of Psychology, Royal Holloway University of London, London, United Kingdom

### (P2.29) Isolating the Genetics of Mania through Genomic Structural Equation Modelling.

**Giuseppe Pierpaolo Merola**1,2, Johan Zvrskovec2,3, Gerome Breen2,3

1Psychiatry Unit, Health Sciences, University of Florence, Florence, Italy. 2Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, United Kingdom. 3National Institute for Health and Care Research (NIHR), Maudsley Biomedical Research Centre, South London and Maudsley Hospital, London, United Kingdom

### (P2.30) Associations between genetic predisposition to psychiatric disorders and the severity of acute COVID-19 illness: A meta-analysis across five COVIDMENT cohorts

**Kadri Kõiv**1, Ragna Bugge Askeland2, Ingibjörg Magnúsdóttir3, Daniel McCartney4, Lea Arregui Nordahl Christoffersen5,6, Elis Haan1, Helga Ask2,7, Ole Birger Vesterager Pedersen6, Unnur Anna Valdimarsdóttir3,8,9, Kelli Lehto1

1Estonian Genome Centre, Institute of Genomics, University of Tartu, Tartu, Estonia. 2PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute of Public Health, Oslo, Norway. 3Centre of Public Health Sciences, Faculty of Medicine, School of Health Sciences, University of Iceland, Reykjavik, Iceland. 4Centre for Genomic and Experimental Medicine, Institute of Genetics and Cancer, University of Edinburgh, Western General Hospital, Edinburgh, United Kingdom. 5Institute of Biological Psychiatry, Mental Health Services Copenhagen, Copenhagen University Hospital, Copenhagen, Denmark. 6Department of Clinical Immunology, Zealand University Hospital, Koege, Denmark. 7PROMENTA Research Center, Department of Psychology, University of Oslo, Oslo, Norway. 8Unit of Integrative Epidemiology, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden. 9Department of Epidemiology, Harvard T H Chan School of Public Health, Boston, MA, USA

### (P2.31) [R] Executive function mediates the genetic associations between ADHD and comorbid psychiatric conditions

**Michael I Ehinmowo**1,2, Daniel E Gustavson2,3, Naomi P Friedman2,3, Andrew D Grotzinger2,3

1Psychology, University of Ibadan,, Ibadan, Nigeria. 2Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 3Psychology and Neuroscience, University of Colorado, Boulder, USA

### (P2.32) The NIH Environmental influences on Child Health Outcomes (ECHO) Program: Publicly available data from the ECHO Cohort \*\*

**Erica L Spotts**

Office of Behavioral and Social Sciences, National Institutes of Health, Bethesda, USA

### (P2.33) The International Statistical Genetics Workshop

### Michel G Nivard1,2, Abdel Abdellaoui3, David M Evans4, Matthew C Keller5, Jeff Lessem5, Hermine H Maes6, Sarah E Medland7, Benjamin M Neale8

### 1 Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2 Amsterdam Public Health Research Institute, Amsterdam University Medical Centres, Amsterdam, Netherlands. 3Psychiatry, AUMC, Amsterdam, Netherlands. 4 Diamantina Institute, University of Queensland, Queensland, Australia. 5 IBG, CU, Boulder, USA. 6 VIP&BG, VCU, Richmond, USA. 7Psychiatric genetics, QIMR Berghofer, Queensland, Australia. 8 ATGU, MGH, Boston, USA

### (P2.34) International Statistical Genetics Workshop Online Content and Resources \*\*

**Jeffrey M Lessem**1, Sarah E Medland2, Abdel Abdellaoui3, Hermine H Maes4, Matthew C Keller1

1Institute for Behavioral Genetics, University of Colorado, Boulder, USA. 2Psychiatric Genetics, QIMR Berghofer Medical Research Institute, Herston, Australia. 3Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 4Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University, Richmond, USA

### (P2.35) Polygenic Scores for Social and Behavioral Traits: From Survey Questions to Public Perceptions \*\*

**Courtney L Canter**1,2, Jean Cadigan3, Anya E. R. Prince4

1Anthropology, UNC Chapel Hill, Chapel Hill, USA. 2School of Medicine, UNC Chapel Hill, Chapel Hill, USA. 3Social Medicine, UNC Chapel Hill, Chapel Hill, USA. 4College of Law, University of Iowa, Iowa City, USA

### (P2.36) Constellations of genetic, familial, and environmental risk for AUD: A latent class analysis of the Collaborative Study on the Genetics of Alcoholism (COGA) Prospective Study

**Sarah E Paul**1, Alexander S Hatoum1, Alex P Miller2, Kathleen K Bucholz2, Ryan Bogdan1

1Psychological and Brain Sciences, Washington University in St. Louis, St. Louis, USA. 2Psychiatry, Washington University School of Medicine, St. Louis, USA

### (P2.37) [R] Alcohol Use Versus Alcohol Dependence: An Analysis of Longitudinal Twin Data from the Minnesota Center for Twin and Family Research

**Brooke A Huizenga**1, Jordan D Alexander1, Matt McGue1, Stephanie M Zellers2, Scott I Vrieze1

1Department of Psychology, University of Minnesota, Minneapolis, USA. 2Institute for Molecular Medicine Finland, University of Helsinki, Helsinki, Finland

### (P2.38) [R] Examining ADHD Diagnosis and Cannabis Use Frequency: The Role of Family Environment in a Nationally-Representative Sample \*\*

**Holland K Tyson**1, Emma E Webster2, Kyle J Knaut1, S. Mason Garrison1

1Psychology, Wake Forest University, Winston-Salem, USA. 2Psychology, Emory University, Atlanta, USA

### (P2.39) [R] Genome-wide association meta-analysis of infant fussiness in the first year

**Anja C Hollowell**1, Anna Gui2, Laurie Hannigan3,4,5, Elizabeth C Corfield3,4, Morgan J Morgan6, Christel Middeldorp7, Beate St Pourcain8,5,9, Tomoki Arichi10, Frank Dudbrige11, Mark H Johnson1,12, Alexandra K S Havdahl3,4,13, Angelica Ronald6

1Centre for Brain and Cognitive Development, Birkbeck, University of London, London, United Kingdom. 2Department of Psychology, University of Essex, Colchester, United Kingdom. 3Nic Waals Institutt, Lovisenberg Diakonale Hospital, Oslo, Norway. 4PsychGen Centre for Genetic Epidemiology and Mental Health, Norwegian Institute for Public Health, Oslo, Norway. 5MRC Integrative Epidemiology Unit, University of Bristol, Bristol, United Kingdom. 6School of Psychology, University of Sussex, Guildford, United Kingdom. 7Department of Child and Youth Psychiatry and Psychology, Amsterdam UMC, Amsterdam, Netherlands. 8Max Planck Institute for Psycholinguistics, Radboud University, Nijmegen, Netherlands. 9Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, Netherlands. 10Centre for the Developing Brain, King's College London, London, United Kingdom. 11Department of Population Health Sciences, University of Leicester, Leicester, United Kingdom. 12Department of Psychology, University of Cambridge, Cambridge, United Kingdom. 13PROMENTA Research Centre, Department of Psychology, University of Oslo, Oslo, Norway

### (P2.40) Mapping brain-personality associations with genetic correlations reveals polylocalised, replicable, and interpretable brain maps

**Uku Vainik**1,2,3, Vincent Bazinet3, René Mõttus4,1

1Institute of Psychology, University of Tartu, Tartu, Estonia. 2Institute of Genomics, University of Tartu, Tartu, Estonia. 3Montreal Neurological Institute, McGill University, Montreal, Canada. 4Departmet of Psycholigy, University of Edinburgh, Edinburgh, United Kingdom

### (P2.41) The phenotypic and genomic structure of normal and psychopathological personality in the GLAD+ COPING sample.

**Johan Zvrskovec**1,2, Rujia Wang1,2, Raquel Iniesta3, Gerome Breen1,2

1Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom. 2UK National Institute for Health Research (NIHR) Biomedical Research Centre for Mental Health, South London and Maudsley Hospital, London, United Kingdom. 3Department of Biostatistics and Health Informatics, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, United Kingdom

### (P2.42) [R] The association between metabolite concentrations and wellbeing in adults.

**Natalia Azcona-Granada**1,2, Anne J.M.R. Geijsen1,2, René Pool1,2, Dirk H.M. Pelt1,2, Meike Bartels1,2

1Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health Research Institute, Amsterdam University Medical Centre, Amsterdam, Netherlands

### (P2.43) Is Happiness Always a Personal(ity) Thing? A Quasi-Replication and Extension of Previous Well-Being Studies.

**Marco Deppe**1, Charlotte K. L. Pahnke2, Carlo Maj3, Markus M. Nöthen4, Andreas J. Forstner2, Christian Kandler1

1Institute for Psychology, University of Bremen, Bremen, Germany. 2Institute for Human Genetics, University of Bonn and University Hospital Bonn, Bonn, Germany. 3Center for Human Genetics, Philipps University Marburg, Marburg, Germany. 4Institite for Human Genetics, University of Bonn and University Hospital Bonn, Bonn, Germany

### (P2.44) Changes in BMI and cognitive functioning from childhood to midlife predict midlife physical function: The Louisville Twin Study

**Deborah Finkel**1,2, Eric Turkhemier3, Deborah W. Davis4,5, Christopher R. Beam6

1Center for Economic and Social Research, University of Southern California, Los Angeles, USA. 2Institute for Gerontology, Jönköping University, Jönköping, USA. 3Department of Psychology, University of Virginia, Charlottesville, USA. 4Norton Children’s Research Institute affiliated with the University of Louisville School of Medicine Institute, University of Louisville, Louisville, USA. 5Department of Pediatrics, University of Louisville, Louisville, USA. 6Department of Psychology, University of Southern California, Los Angeles, USA

### (P2.45) [R] Examining the Heritability of Objectively Assessed and Parent-Reported Sleep Duration in a Community Sample of Twins Across Infancy, Childhood, and Adolescence \*\*

**Christy Bui**, Kathryn Lemery-Chalfant, Sierra Clifford, Mary C Davis, Leah D Doane

Psychology, Arizona State University, Tempe, USA

### (P2.46) [R] Genetic and Environmental Influences on the Covariation Between Subjective Well-Being, Eudaimonic Well-Being, and Problematic Substance Use

**Elisa F Stern**1,2, Soo Hyun Rhee1,2, Chandra Reynolds1,2, Sally Wadsworth2, Robin Corley2, Mark A Whisman1

1Department of Psychology and Neuroscience, University of Colorado Boulder, Boulder, USA. 2Institute for Behavioral Genetics, University of Colorado Boulder, Boulder, USA

### (P2.47) Dutch Stakeholder Perspectives on Genomic Research in Autism: a Pilot Exploration \*\*

**Melanie de Wit**1,2, Janneke R. Zinkstok3,4, Abdel Abdellaoui5, Sander Begeer1,2, Tinca J.C. Polderman1,6,2

1Department of Clinical, Neuro and Developmental Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. 2Amsterdam Public Health, Research Institute, Amsterdam, Netherlands. 3Department of Psychiatry, Radboud University Medical Centre, Nijmegen, Netherlands. 4Karakter, Child and Adolescent Psychiatry, Nijmegen, Netherlands. 5Department of Psychiatry, Amsterdam UMC, Amsterdam, Netherlands. 6Department of Child and Adolescent Psychiatry and Psychosocial Care, Amsterdam UMC, Amsterdam, Netherlands

### (P2.48) [R] A Qualitative Analysis on Perceptions of Sexual Orientation and Gender Identity Genetics Research \*\*

**Briana L Kunstman**, Allison Woosley, Jaime Derringer

Department of Psychology, University of Illinois, Urbana-Champaign, USA

### (P2.49) [R] Predicting political beliefs with polygenic scores for cognitive performance and educational attainment

**Tobias Edwards**, Alexandros Giannelis, Emily A. Willoughby, James J Lee

Psychology, University of Minnesota, Twin Cities, Minneapolis, USA

### (P2.50) Genetic and Environmental Links between the Big Five Personality Traits and Socio-political Attitudes

**Edward Bell**1, Jana Instinske2, Christian Kandler2

1Department of Sociology, University of Western Ontario, London, Canada. 2Department of Psychology, University of Bremen, Bremen, Germany

### (P2.51) [R] Exploring the direction of effects between Quantifying Opinions of Sexual Orientation and Gender Identity Genetics Research \*\*

**Allison Woosley**, Briana Kunstman, Jaime Derringer

Psychology, University of Illinois-Urbana Champaign, Urbana-Champaign, USA

### (P2.52) [R] The world as I see it: genetic and environmental influences on primal world beliefs studied in a Swedish twin sample

**Sophie Perizonius**1,2, Laura W. Wesseldijk1,2,3, Fredrik Ullén1,2, Miriam A. Mosing1,2,4

1Cognitive Neuropsychology, Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany. 2Neuroscience, Karolinska Institutet, Stockholm, Sweden. 3Psychiatry, Amsterdam UMC, University of Amsterdam, Amsterdam, Netherlands. 4Faculty of Medicine, Dentistry, and Health Sciences, Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, Australia

### (P2.53) Biobank Participants’ Perspectives on Five Polygenic Scores for Social Traits \*\*

Jean Cadigan1, Margaret Waltz1, Courtney Canter2, **Anneliese Long**2, Anya E.R. Prince3

1Social Medicine, University of North Carolina at Chapel Hill, Chapel Hill, USA. 2Anthropology, University of North Carolina, Chapel Hill, USA. 3College of Law, University of Iowa, Iowa City, USA

### (P2.54) When More Genetic Information Biases Decision-Making in Embryo Selection \*\*

**Rémy A Furrer**1, Dorit Barlevy2, Stacey Pereira3, Shai Carmi4, Todd Lencz5, Gabriel Lázaro-Muñoz6

1Global Health and Social Medicine, Harvard Medical School, Boston, USA. 2Center for Medical Ethics and Health Policy, Baylor College of Medicine, Waco, USA. 3Center for Medical Ethics and Health Policy, Baylor College of Medicine, Waco, USA. 4Braun School of Public Health, Hebrew University of Jerusalem, Jerusalem, Israel. 5nstitute of Behavioral Science, The Feinstein Institutes for Medical Research, Northwell Health, Manhasset, USA. 6Department of Global Health and Social Medicine, Harvard Medical School, Boston, USA