



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 Vainik^{1,2,3}, Luca Pagani^{1,4}, Francesco Montinaro^{1,5}, 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 Pingault^{1,2}

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 Han^{1,2}, 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 Institutet, 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 Tropf^{1,2}, 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. Schowe^{2,3}, 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. Womack^{3,4}, Evan J. Giangrande^{5,6}, Alyssa C. Kam², A. Ceville Barna⁷, Sarah Deans⁷, Deborah W. Davis^{7,8}, Deborah Finkel^{9,10}, 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 Turley**^{1,2}, Silvia H Barcellos^{1,4}

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. Bates^{2,1}, Jody M. Ganiban³, Jenae M. Neiderhiser⁴, Misaki N. Natsuaki⁵, Daniel S. Shaw⁶, **Leslie D Leve**^{2,1}

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 a 15-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 Nonkovic¹, 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 Ikeda¹, 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 Lafayette, 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 Giangrande^{5,6,7}, Sophie A Bell⁸, Deborah W Davis^{9,10}, Deborah Finkel^{11,12}, **Eric Turkheimer**⁸

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 Martin^{1,2}, Lucy Riglin^{1,2}, Amy Shakeshaft^{1,2}, Victoria Powell^{1,2}, George Kirov², Michael J Owen², Michael C O'Donovan², Anita Thapar^{1,2}

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 Hannigan^{1,2,3}, Ted Reichborn-Kjennerud^{2,4}, Helga Ask^{2,5}, Alexandra Havdahl^{2,1,5}

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 Ronald¹, 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

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 Wigdor^{2,1}, Patrick Campbell^{3,1}, Daniel S Malawsky¹, Kaitlin E Samochoa⁴, Kartik Chundru^{1,5}, Varun Warriar⁶, 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.

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 Davies^{3,6,7,8}, 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. Jepsen 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 Demontis^{3,4}, Georgios Athanasiadis⁵, G Bragi Walters^{6,7}, Tetyana Zayats^{1,2,8}, Daniel Howrigan^{1,2}, Stephen Faraone⁹, Kári Stefánsson^{6,7}, Thomas Werge^{4,10}, Anders Børghlum^{3,4}, Benjamin M Neale^{1,2}, Barbara Franke^{11,12,13}

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 Haan^{1,2}, Laura E. Hegemann^{3,4}, Natàlia Pujol Gualdo¹, Katri Pärna¹, Siim Kurvits¹, Alexandra Havdahl³, Elizabeth C. Corfield^{3,4}, Triin Laisk¹, Kadri Kõiv¹, Helga Ask^{3,5}, **Kelli Lehto**¹

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 Procopio¹, Engin Keser¹, Margherita Malanchini^{2,1}, Kaili Rimfeld^{3,1}, 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 Huang¹, 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-Sandin¹, 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 ϵ 4 Status on Cognitive Ability Trajectories in the Louisville Twin Study

Alyssa C Kam¹, Christopher R Beam¹, Eric N Turkheimer², Deborah Finkel^{3,4}, Evan J Giangrande^{5,6}, Emily E Andrews², Sophie A Bell², Kristin Higdon⁷, Cevelle Barna⁷, Sarah Deans⁷, Ariel King⁷, Kendra Sikes⁷, Lesa Ryan⁷, Deborah W Davis^{7,8}

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. Friedman^{1,3}, Chandra A. Reynolds^{1,3}

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 Gustavson^{2,3}, Robin P. Corley², Sally-Ann Rhea², Sally J. Wadsworth², Naomi P. Friedman^{2,3}, Chandra A. Reynolds^{2,3}

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 Fuente^{1,2}, Elliot M Tucker-Drob^{1,2}

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. Balbona¹, 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 Foote¹, Jonny P Flint^{2,3,4}, John D Fisk⁵, Tobias K Karakach⁶, Andrew Rutenber⁷, Nicholas G Martin⁸, Michelle K Lupton⁸, Simon R Cox², Michelle Luciano³, Kenneth Rockwood⁵, Andrew D Grotzinger^{1,9}

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 Gustavson^{1,2}, Sally J Wadsworth¹, Chandra A Reynolds^{1,2}

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 Rousset¹, Anouk den Braber^{2,3}, 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. Penichet¹, Christopher R. Beam¹, Sophie A. Bell², Eric Turkheimer², Ebrahim Zandi³, Deborah Finkel^{4,5}, Ceville Barna⁶, Ariel King⁶, Kendra L Sikes⁶, Sarah Deans⁶, Lesa Ryan⁶, Deborah W. Davis^{6,7}

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. ⁴Center 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

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Bodine M.A. Gonggrijp^{1,2}, Steve G.A. van de Weijer¹, Catrien C.J.H. Bijleveld^{1,3}, Dorret I. Boomsma^{2,4}, Jenny van Dongen^{2,4}

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-Mendoza^{1,2}, Eleni Friligkou^{1,2}, Adam P. Mecca^{1,3}, Christopher H. van Dyck^{1,3,4}, Gita A. Pathak^{1,2}, Renato Polimanti^{1,2,5}

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 Schoeler¹, 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. Ori^{1,2}, 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 Johnson¹, Eleni Friligkou^{2,3}, Sarah MC Colbert⁴, Gita A Pathak^{2,3}, Brenda Cabrera-Mendoza^{2,3}, Frank R Wendt^{5,6}, Drew Helmer⁷, Elizabeth Hauser⁸, Matthew C Keller^{9,10}, Renato Polimanti^{2,3}, James F Wilson^{11,12}

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 Corfield^{1,2}, Amy Shakeshaft^{3,4}, Ole A Andreassen^{5,6}, Helga Ask^{2,7}, Alexandra Havdahl^{2,1,7}, Laurie J Hannigan^{2,1}

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 Bragantini^{2,1}, Adrian Dahl Askelund^{2,1}, Helga Ask^{1,4}, Alexandra Havdahl^{1,2,4}

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 Owen^{1,2}, Peter Holmans¹, Marianne van den Bree^{1,2}

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. Medland^{4,5}, Lucía Colodro-Conde^{4,5}, 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 Lockhart¹, Megan Skelton¹, Matthew Hotopf^{2,3}, Genevieve Morneau-Vaillancourt^{1,4}, Elisavet Palaiologou¹, Robert Plomin¹, Tom A. McAdams^{1,5}, Thalia C. Eley^{1,6}

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

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 Xie¹, Avshalom Caspi^{1,2,3}, HonaLee Harrington¹, Renate M Houts¹, Terrie E Moffitt^{1,2,3}

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 Fraemke¹, Jan-Henrik Walter¹, Kathryn Paige Harden², Margherita Malanchini³, Elliot Max Tucker-Drob^{2,4}, 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 deSteiguer¹, Trey Smith², Joshua Goode², Yayouk Willems³, Elliot M Tucker-Drob^{1,4}, Laurel Raffington³, Colter Mitchell², K. Paige Harden^{1,4}

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 Eilertsen¹, Nikolai Haahjem Eftedal¹, Rosa Cheesman¹, Ziada Ayorech¹, Joakim Coleman Ebeltoft¹, Hans Fredrik Sunde², Anneli Tandberg¹, Fartein Torvik^{1,2}, Eivind Ystrom^{1,3,4}

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. ⁴Department 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 Bright¹, Yasmin I Ahmadzadeh¹, Olakunle Oginni^{1,2}, Essi Viding³, Eivind Ystrøm^{4,5}, Tom A McAdams^{1,4}

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 Ystrom^{4,5}, Tom McAdams^{1,4}

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 Yu¹, 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 Ferdinand¹, Margherita Malanchini^{2,3}, Robert Plomin³, Kaili Rimfeld^{1,3}

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

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 Davies^{1,2}, Sang-Hyuck Lee^{1,2}, Jonathan R.I. Coleman^{1,2}, Raquel Iniesta³, Thalia C. Eley^{1,2}, Gerome Breen^{1,2}

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 Mitchell¹, Nicholas G Martin¹, Sarah E Medland¹, Naomi R Wray^{2,3}

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

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 Bergen¹, 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. Lapato^{1,2,3}, Madhurbain Singh^{1,2}, 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 Chatzinakos^{3,7}, Roseann E Peterson^{7,3,1}, Aoxing Liu^{6,8}, Molly Sacks⁹, Georgios Voloudakis^{10,11}, Andrea Ganna⁸, Jonathan Sebat¹², David L Braff¹², Mihaela Aslan^{13,14}, Panos Roussos^{10,11}, Philip D Harvey^{15,16}, 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, James 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. Barr^{3,4,5,6}, Chris Chatzinakos^{3,4,1,7}, Rachel L. Kember^{8,9}, Sandra Sanchez-Roige^{10,11,12}, Elizabeth C. Prom-Wormley^{13,1}, Tim B. Bigdeli^{3,4,6}, Hermine H. M. Maes^{1,2,7}, Michael C. Neale^{1,7,2}, Roseann E. Peterson^{3,4,1,7}

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 Davis^{1,2}, Zeal Jinwala¹, Kyra Feuer¹, Sylvanus Toikumo¹, Emily E Hartwell^{1,2}, Roseann E Peterson³, Alexander S Hatoum⁴, Henry R Kranzler^{1,2}, **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 Breunig^{1,2}, Jeremy M Lawrence^{1,2}, Isabelle F Foote¹, Andrew D Grotzinger^{1,2}

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 Pettersen^{1,3,5}, Elizabeth C. Corfield^{2,3}, Rosa Cheesman⁴, Leonard Frach⁶, Ludvig Daae Bjørndal⁴, Helga Ask^{3,4}, Eivind Ystrom^{3,4}, Beate St Pourcain^{7,8,9}, Alexandra Havdahl^{2,3,4}, Laurie J. Hannigan^{2,3,7}

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 Rimfeld^{1,2}, Margherita Malancini^{1,3}, 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 Nurture and Youth Antisocial Behavior? A Cross-Lagged Twin Differences Study **

Alaina M Di Dio¹, 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 Oro¹, Jenae M Neiderhiser², Misaki N Natsuaki³, Gordon T Harold⁴, Jody M Ganiban⁵, Daniel S Shaw⁶, Leslie D Leve^{1,7}

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. Hunter¹, 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 Neale^{1,3}

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 Voronin¹, 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 Huang^{1,2,3}, Vivek Appadurai^{4,5}, Thomas Werge^{5,6,7}, Andrew J. Schork^{4,5,8}, Andrew Dahl⁹, Na Cai^{1,2,3}

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 Ennis¹, Elliot M Tucker-Drob^{1,2}

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

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Daniel F Levey^{1,2}, Marco Galimberti¹, Joseph Deak¹, Priya Gupta¹, Kelly Harrington³, J. Michael Gaziano^{4,5}, Murray B Stein^{6,7}, 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 Funk^{1,2}, Aliyah Kassam¹, Celestine Lockhart¹, Elisavet Palaiologou¹, Megan Skelton¹, Genevieve Morneau-Vaillancourt^{1,3}, **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 Coleman^{1,2}, 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 Martin**³, 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 Kwong¹, 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. Geijsen^{1,2}, Meike Bartels^{1,2}

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 Dongen^{1,5}

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 Bartels^{1,2}, Dirk HM Pelt^{1,2}, Margot P van de Weijer³

¹Department of Biological Psychology, Vrije Universiteit Amsterdam, Amsterdam, Netherlands.

²Amsterdam Public Health Research Institute, Amsterdam University Medical Centre University 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 Pahlen¹, Anqing Zheng¹, Tina T Vo², Nicholas D Bowman³, Robin P Corley¹, Sally J Wadsworth¹, Chandra A Reynolds^{1,2,4}

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 Galimberti^{1,2}, Daniel F. Levey^{1,2}, Joseph D. Deak^{1,2}, Keyrun Adhikari^{1,2}, Cassie Overstreet^{1,2}, Priya Gupta^{1,2}, Rachana Nitin³, Hang Zhou^{1,2}, Nicole J. Lake⁴, Kelly M. Harrington^{5,6}, Luc Djousse^{6,7}, Lea K. Davis³, J. Michael Gaziano^{6,8}, Murray B. Stein^{9,10}, **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 Bruellman¹, Shandell Pahlen^{2,3}, Jarrod M Ellingson^{4,2}, Robin P Corley², Sally J Wadsworth², Ilana Bennett^{3,1}, Chandra A Reynolds^{2,1,3}

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 Rader^{1,2}, Katerina Zorina-Lichtenwalter², Daniel E Gustavson^{1,2}, Tor D Wager³, Naomi P Friedman^{1,2}

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. Pilgrim¹, Elina Sillanpää², Chandra Reynolds^{3,4,5}, Margaret Gatz^{6,7}, 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-Troubat¹, Dinka Smajlagić^{2,1}, Xuanyu Lyu¹, Rosa Cheesman², Perline Demange², Espen Moen Eilertsen², Fartein Ask Torvik³, Laurie Hannigan³, Eivind Ystrom^{2,4}, Alexandra Havdahl^{2,5,6,7}, 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 Carroll¹, 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 Sasia^{1,2,3}, James J. Li^{1,2,3}

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 Seay¹, Miglena Y Ivanova^{1,2}, 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 Starr¹, Quan Zhou², Margherita Malanchini^{2,3}, 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 Allegrini^{3,2}, Rosa Cheesman⁴, Angelica Ronald⁵, Essi Viding³, Thalia C Eley², Kaili Rimfeld^{6,2}, Robert Plomin², Margherita Malanchini^{1,2}

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 Verhoeff¹, Simone van den Bedem¹, Brad Verhulst², Simon E Fisher^{1,3}, **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

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 Plomin¹, 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. Maes^{5,2}, Michael C. Neale^{6,2,4}

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

¹Department of Psychology, University of Texas at Austin, Austin, TX, USA. ²Population Research Center, University of Texas at Austin, Austin, TX, 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-Drob^{1,2}

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 Thompson¹, Baptiste Couvy-Duchesne², Rafael Geurgas¹, Saul Newman³, Robbee Wedow¹, Felix C Tropf^{1,3}

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 Vazquez¹, 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 Ramos¹, 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 Geurgas¹, Felix C. Tropf^{1,2}

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. Heymans^{4,2}, Martijn Huisman^{4,5,2}, Christiaan H. Vinkers^{3,6,7,2}, René Pool¹, Brenda W.J.H. Penninx^{3,7,2}, Meike Bartels^{1,2}

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 Data Science, 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. Shewark¹, 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 Wootton¹, 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 Wootton^{2,4,5,3}, Fartein A Torvik^{1,6}, Rebecca B Lawn⁷, Helga Ask^{3,8}, Elizabeth C Corfield^{2,3}, Maria C Magnus⁶, Ted Reichborn-Kjennerud^{3,9}, Per M Magnus⁶, Ole A Andreassen^{10,11}, Camilla Stoltenberg^{12,13}, George Davey Smith⁴, Neil M Davies^{14,15,16}, Alexandra Havdahl^{2,3,4,8}, Laurie J Hannigan^{2,3,4}

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 Hegemann^{1,3,5}, Laurie J Hannigan^{1,2,5,6}, Kristin Gustavson^{3,7}, Ingunn O Lund^{1,2,3}, Pia Jensen^{1,2,3}, Ole A Andreassen^{8,9}, Alexandra Havdahl^{1,5,4}, Eivind Ystrom^{1,2,4}, Ragnhild E Brandlistuen², Helga Ask^{1,2,4}

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 Birkenæs¹, Pravesh Parekh¹, Ole Andreassen^{1,2}, Alexandra Havdahl^{3,4,5}, Ida Elken Sønderby^{1,6,7}

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^{1,6,7}, 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. Allegrini^{1,4}, Jean-Baptiste Pingault^{1,4}

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 Rayner¹, 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 Purneso¹, 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 Zhou¹, Wangjingyi Liao¹, Andrea Allegrini², Kaili Rimfeld^{3,4}, Robert Plomin⁴, Margherita Malanchini^{1,4}

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 Bignardi¹, Else Eising¹, Laura W. Wesseldijk^{2,3,4}, Barbara Molz¹, Ernest Mas-Herrero^{5,6,7}, Robert J. Zatorre⁸, Miriam A. Mosing^{4,2,9,10}, Fredrik Ullén^{4,2}, Simon E Fisher^{1,11}

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 Ladanyi^{3,1}, Else Eising⁴, Yasmina Mekki¹, Rachana Nitin⁵, Catherine T Bush⁶, Daniel E Gustavson⁷, Manuel Anglada-Tort⁸, Hope S Lancaster⁹, Miriam A Mosing^{10,11}, Fredrik Ullén¹⁰, Cyrille L Magne², Simon E Fisher^{4,12}, Nori Jacoby¹³, Reyna L Gordon^{1,14,15}

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 Henechowitz^{1,2}, Peyton L. Coleman^{3,4}, Rachana Nitin³, Yasmina N Mekki^{3,5}, Daniel Felsky^{2,6}, Reyna L Gordon^{3,7,8}

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 Wesseldijk^{1,2,3}, Fredrik Ullén^{4,2}, **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. Henechowitz^{4,5}, David J. Baker⁶, Giacomo Bignardi^{7,8}, Robert Karlsson⁹, Reyna L. Gordon^{10,11,12,13}, Miriam A. Mosing^{1,3,9,14}, Fredrik Ullén^{1,3}, Simon Fisher^{7,15}

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 Cheesman¹, 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 Ystrom^{1,5}

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 Universiteit 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 Hootegem¹, 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 Ghirardi¹, Tobias Wolfram², Mirko Ruks², Felix Tropf^{3,4}

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 Ebeltoft¹, 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 Smajlagic¹, Elizabeth C Corfield^{2,3}, Siobhan Connolly⁴, Hakon Hakonarson^{5,6}, Irwin Waldman⁷, Josephine Elia⁸, Elizabeth Heron⁴, Mona Bekkhus¹, Martin Tesli^{9,10}, Ted Reichborn-Kjennerud^{2,11}, Alexandra Havdahl^{1,2,3}, Jan Haavik^{12,13}, Stefan Johansson¹⁴, Tetyana Zayats^{1,15,16}

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 Badini¹, Neil Davies^{1,2}

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 Keller^{1,2}

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, Bristol, 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 Choi¹, 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 Tanksley^{1,2}, Holly Poore³, Diego Londono-Correa¹, Natasia S Courchesne-Krak⁴, Yuchen Ning⁵, Peter Barr⁶, Irwin D Waldman⁷, Sandra Sanchez-Roige^{8,9}, Travis T Mallard^{10,11,12}, Richard Karlsson Linnè¹³, Abraham A Palmer¹⁴, Danielle M Dick¹⁵, K. Paige Harden^{1,2}

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 Tubbs^{1,2,3}, Mariela Jennings⁴, Yingzhe Zhang⁵, Daniel E Gustavson⁶, Andrew D Grotzinger^{6,7}, Margaret L Westwater⁸, Camille M Williams^{9,10}, Lea K Davis^{11,12,13}, Armin Raznahan¹⁴, Elliot M Tucker-Drob^{9,10}, Karmel W Choi^{1,2,3}, Tian Ge^{1,2,3}, Jordan W Smoller^{1,2,3}, Abraham A Palmer^{4,15}, Sandra Sanchez-Roige^{4,11,15}

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-Correa¹, Camille M Williams¹, Vagheesh M Narasimhan², Kathryn Paige Harden^{1,3}

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 Linnér¹, 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. Institute 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 Hoyos¹, Fenja Schlag¹, Daniëlle Admiraal¹, cognitive working group for the EAGLE social behaviour project¹, Beate St Pourcain^{1,2,3}

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 Bartels^{1,2}, Conor V Dolan¹, Dorret I Boomsma^{1,2,3}

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

Analia K Howard^{1,2}, Daniel E Gustavson², Naomi P Friedman^{1,2}

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 Trevino¹, 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 Marceau¹, 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-Bachman¹, 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 Vanyukov^{3,4,5}, Isha Rane¹, Hermine HM Maes^{6,7,8}

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 Willoughby¹, 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 Malerbi¹, Yeongmi Jeong², Monica Weindling³, Andy Brubaker³, Jean Flanagan³, Brian M Donovan³, Robbee Wedow^{2,4}

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 Schwaba¹, Margaret L. Clapp Sullivan², Abdel Abdellaoui^{3,4}, Michel G. Nivard^{5,6,7}, Elliot M. Tucker-Drob^{2,8}

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 Vainik^{1,4}

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-Cohort 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 Kramer¹, 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 Alexander¹, 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 Jamil¹, Angel D Treviño¹, Kit K Elam², Kathryn Lemery-Chalfant¹, José 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, University 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 Brick¹, 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 Elam¹, Chung Jung Mun^{2,3}, 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. Saunders¹, 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 Grotzinger^{1,2}

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 Liao¹, Engin Kaser², Andrea Allegrini^{3,2}, Kaili Rimfeld^{4,2}, Robert Plomin², Margherita Malanchini^{1,2}

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 Lam^{3,4}, David Howard¹, Cathryn Lewis¹, LIU J Jun⁵

¹Social Genetic Developmental Psychiatry centre, King's College London, London, United Kingdom. ²Genome Institute of Singapore, 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 Ueland^{3,4}, Ole A Andreassen³, Dan J Stein^{1,5}, 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 Oginni¹, Frühling Rijdsdijk^{2,3}, 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-Geile¹, 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 Raimondo^{1,4}, Konrad Oexle³, Janik Goltermann⁵, Juliane Winkelmann³, Markus M Nöthen², Katrin Amunts^{1,6}, Thomas W Mühleisen^{1,6,7}, Sven Cichon^{1,7,8}, Simon B Eickhoff^{1,4}, Felix Hoffstaedter^{1,4}, Udo Dannlowski⁵, Kaustubh R Patil^{1,4}, Andreas J Forstner^{1,2}

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. Pasma^{1,2}, Blanche B. Schoonderbeek³, Odile A. van den Heuvel^{1,4}, **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 Kwong¹, 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 Smajlic^{1,2}, Noemie Valenza-Troubat¹, Xuanyu Lyu¹, Alexandra Havdahl^{3,4,2}, Tetyana Zayats^{5,6}, Christian M Page^{7,8}, 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 Miadich¹, 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. Li^{1,2,3}

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 Yu¹, 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 Patterson¹, 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 Wright¹, 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 Bartsch¹, Sierra Clifford¹, Gianna Rea-Sandin^{2,1}, 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 Kämppe^{3,4}, Jaana Suvisaari⁵, Markku Lähteenvuo³, Emilia Vartiainen³, Olli Pietiläinen^{6,2}, Aarno Palotie^{3,2}, Jordan W Smoller^{7,8}, Benjamin M Neale^{9,2}

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 Gidziela¹, 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 Stallings^{1,2}, Tamara L Wall⁵, Robin p Corley², Soo Hyun Rhee^{1,2}

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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 Madhavan¹, 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 Neale^{1,3}

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 Min¹, 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 Bartley¹, Christopher W Bartlett^{2,3}, Lee A Thompson⁴, Erik G Willcutt⁵, Stephen A Petrill¹

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

Amaia Carrión-Castillo^{1,2}, Marie Lallier^{1,2}, Manuel Carreiras^{1,2}

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. Kuijper¹, Abe D. Hofman^{2,3}, Bruno Sauce Silva¹, Elsje Van Bergen¹

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

Eirik H Kvalvik¹, 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 Peng¹, Espen M. Eilertsen¹, Rosa Cheesman¹, Cornelius A. Rietveld², Eivind Ystrom¹, Alexandra S. Havdahl^{1,3}

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 Sunde¹, Espen Moen Eilertsen², Fartein Ask Torvik^{1,2}

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 Zellers¹, Terhi Maczulskij², Elissar Al Kazzi¹, Antti Latvala^{1,3}, Jaakko Kaprio¹

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

Jessie Baldwin¹, Tom McAdams²

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

Silvia Barcellos¹, Titus Galama^{1,2}, **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 Odigie¹, Leonard Frach¹, Andrea Allegrini¹, Wikus Barkhuizen¹, Laura Hegemann^{2,3}, Laurie J Hannigan^{2,4,5}, Alexandra Havdahl^{2,3,5}, Jean-Baptiste Pingault^{1,6}

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

Jill A Rabinowitz¹, Justin C Strickland², Julia W Felton³, John J Meredith⁴, Renata B Cupertino⁴, Brion S Maher⁵, Abraham Palmer^{4,6}, Sandra Sanchez-Roige^{4,7}

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

Noah Berley¹, 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 Palaiologou¹, Joanna Bright¹, Gerome Breen¹, Elham Assary¹, Matthew Hotopf^{2,3}, Celestine Lockhart¹, Megan Skelton¹, Argyris Stringaris⁴, Thomas McGregor¹, Essi Viding⁵, Ewan Carr^{6,1}, Thalia C Eley¹

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(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-Willmes¹, Susanne Buecker², Michael P. Grosz³, Lianne P. de Vries⁴

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(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 Chen¹, Chang Liu², Leslie D Leve³, Daniel S Shaw⁴, Misaki N Natsuaki⁵, Jenae M Neiderhiser⁶, Jody M Ganiban¹

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(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 Askelund^{1,2,3}, Laura Hegemann^{1,2,3}, Alexandra Havdahl^{4,2,3}, Laurie Hannigan^{4,5}

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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

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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. Pahnke¹, Josefina B. Bernardo², Elsje van Bergen², Markus M. Nöthen¹, Andreas J. Forstner^{1,3}, Conor V. Dolan²

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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. Maes^{1,2,5}, Conor V. Dolan³, Michael C. Neale^{1,5,2,3}

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(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

Widandaralalage, 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

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

Emma V de Heus¹, Else Eising², Simon E Fisher^{2,3}, 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 Bergen^{1,2}, **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 Eising¹, Valerie Rebattu^{1,2}, Dorret I Boomsma^{3,4,5}, René Pool^{4,6}, Marie-Christine J Franken⁷, Simon E Fisher^{1,8}

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(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. Hurler, 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 Alten¹, Marina Aguiar Palma^{2,3}, Silvia Barcellos⁴, Leandro Carvalho⁴, Titus Galama^{2,4}

¹School of Economics and Business Economics, Vrije Universiteit, Amsterdam, Netherlands. ²School of Economics and Business Economics, Vrije Universiteit, Amsterdam, Netherlands. ³FGV Rio,

Fundação Getulio Vargas, Rio de Janeiro, 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 Zellers¹, 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-Flores^{1,2}, Bernadette Wendel³, Sergi Papiol^{1,4}, Kristina Adorjan^{1,5}, Monika Budde¹, Mojtaba Oraki Kohshour¹, Sabrina K. Schaupp¹, Eva C. Schulte^{1,6,7}, Fanny Senner^{1,8,9}, Peter Falkai⁸, Thomas G. Schulze^{1,10,11}, **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 Tang^{4,5}, Jolien Rietkerk^{1,2,3}, Vivek Appadurai⁶, Morten Dybdahl Krebs⁶, Andrew Joseph Schork^{6,7,8}, Thomas Werge^{6,9,10}, Verena Zuber^{4,5}, Kenneth Kendler¹¹, Na Cai^{1,2,3}

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(P2.06) Shared genetic liability between nausea and vomiting during pregnancy and mental health disorders

Jodie N Painter^{1,2,3}, Katrina G Grasby¹, Penelope A Lind^{1,2,3}, **Lucía Colodro-Conde***^{1,4}, Sarah E Medland*^{1,4}

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(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 Monson¹, Claire M A Haworth¹, Robyn E Wootton^{1,2,3,4}

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 Jangmo¹, Marit Haram^{1,2}, John R Shorter^{3,4,5}, Joëlle A Pasman^{6,7}, Joeri J Meijssen^{3,4}, Elisabeth C Corfield^{8,9}, Espen Hagen¹⁰, Oleksandr Frei^{10,11}, Ted Reichborn-Kjennerud^{1,8}, Alfonso Buil^{3,4}, Yu Li⁶, Patrick F Sullivan^{6,12}, Ole A Andreassen^{10,13}, Martin Tesli¹

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(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 Stänicke^{1,2}, Becky Mars^{4,5}, Laurie J. Hannigan^{1,3,4}, Helga Ask^{3,6}, Kim Stene-Larsen⁷, George Davey Smith⁸, Anne Reneflot⁷, Anne-Siri Øyen¹, Alexandra Havdahl^{1,3,6}, Robyn E. Wootton^{1,3,9}

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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 Li¹, 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 You¹, 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 Dongen^{2,1,3}, Dorret I Boomsma^{1,2,3}

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(P2.16) [R] Identifying metabolomic risk factors for psychiatric and neurodegenerative disorders: A metabolome-wide mendelian randomisation study

Lachlan Gilchrist^{1,2}, Sulev Koks^{2,3}, Cathryn M. Lewis^{1,4}, 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 Nivard^{1,2}, Meike Bartels^{1,2}

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(P2.18) Accelerated biological aging during the covid-19 pandemic - a TwinLife epigenetic change satellite study

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(P2.19) [R] Tracking School-Related Stressors in Accelerated Epigenetic Aging

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(P2.20) Epigenome-wide association study of APOE ε4 allele status in the Louisville Twins

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(P2.21) Gene-environment interaction study of adverse childhood experiences and DNA methylation age acceleration

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(P2.22) [R] Unraveling the relationship between creativity and mental health using a genetically informative sample

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(P2.23) The potential mediating role of brain volume in associations between smoking and psychiatric disorders

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(P2.24) Multi-polygenic Scores in Psychopathology: A Systematic Review

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(P2.25) Preliminary results from the ClozaGene study examining the experiences of 1021 Australians prescribed clozapine

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(P2.26) [R] Shared Genetic Liability across Clusters of Psychiatric and Non-Psychiatric Medical Illness

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(P2.27) [R] Using polygenic scores corrected for the general psychopathology factor to predict specific psychopathology

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(P2.28) The phenotypic and genetic architecture of a neurodevelopmental spectrum across childhood and adolescence

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(P2.29) Isolating the Genetics of Mania through Genomic Structural Equation Modelling.

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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

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(P2.31) [R] Executive function mediates the genetic associations between ADHD and comorbid psychiatric conditions

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(P2.32) The NIH Environmental influences on Child Health Outcomes (ECHO) Program: Publicly available data from the ECHO Cohort **

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(P2.33) The International Statistical Genetics Workshop

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(P2.34) International Statistical Genetics Workshop Online Content and Resources **

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(P2.35) Polygenic Scores for Social and Behavioral Traits: From Survey Questions to Public Perceptions **

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(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 Paul¹, Alexander S Hatoum¹, Alex P Miller², Kathleen K Bucholz², Ryan Bogdan¹

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(P2.37) [R] Alcohol Use Versus Alcohol Dependence: An Analysis of Longitudinal Twin Data from the Minnesota Center for Twin and Family Research

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(P2.38) [R] Examining ADHD Diagnosis and Cannabis Use Frequency: The Role of Family Environment in a Nationally-Representative Sample **

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(P2.39) [R] Genome-wide association meta-analysis of infant fussiness in the first year

Anja C Hollowell¹, Anna Gui², Laurie Hannigan^{3,4,5}, Elizabeth C Corfield^{3,4}, Morgan J Morgan⁶, Christel Middeldorp⁷, Beate St Pourcain^{8,5,9}, Tomoki Arichi¹⁰, Frank Dudbridge¹¹, Mark H Johnson^{1,12}, Alexandra K S Havdahl^{3,4,13}, Angelica Ronald⁶

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(P2.40) Mapping brain-personality associations with genetic correlations reveals polylocalised, replicable, and interpretable brain maps

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(P2.41) The phenotypic and genomic structure of normal and psychopathological personality in the GLAD+ COPING sample.

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(P2.42) [R] The association between metabolite concentrations and wellbeing in adults.

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(P2.43) Is Happiness Always a Personal(ity) Thing? A Quasi-Replication and Extension of Previous Well-Being Studies.

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(P2.44) Changes in BMI and cognitive functioning from childhood to midlife predict midlife physical function: The Louisville Twin Study

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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 **

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(P2.46) [R] Genetic and Environmental Influences on the Covariation Between Subjective Well-Being, Eudaimonic Well-Being, and Problematic Substance Use

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(P2.47) Dutch Stakeholder Perspectives on Genomic Research in Autism: a Pilot Exploration

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(P2.48) [R] A Qualitative Analysis on Perceptions of Sexual Orientation and Gender Identity Genetics Research **

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(P2.49) [R] Predicting political beliefs with polygenic scores for cognitive performance and educational attainment

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(P2.50) Genetic and Environmental Links between the Big Five Personality Traits and Socio-political Attitudes

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(P2.51) [R] Exploring the direction of effects between Quantifying Opinions of Sexual Orientation and Gender Identity Genetics Research **

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(P2.52) [R] The world as I see it: genetic and environmental influences on primal world beliefs studied in a Swedish twin sample

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(P2.53) Biobank Participants' Perspectives on Five Polygenic Scores for Social Traits **

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(P2.54) When More Genetic Information Biases Decision-Making in Embryo Selection **

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