# MEETING OVERVIEW

Room	P9	P10	P11
	MONDAY June 20		
10:30-12:30	Executive Committee Meeting (invitation only) @ QIMR Berghofer		
9:00-17:00	International Society of Twin Studies Satellite Meeting @ QIMR Berghofer		
18:00-21:00	BGA Welcome Function @ S	tokehouse Q in South Bank	
	BGA Scientific Sessions @ th	ne Brisbane Convention and	Exhibition Center
	TUESDAY June 21		
8:45- 9:00	Conference Opening and Acknowledgement of Country		
9:00-10:30	Plenary Talks: David Evans & Naomi Wray		
11:00-12:30			Papers: CHILDREN Chair: Thalia Eley
13:30-15:00	Symposium: AGENCY Chair: Eric Turkheimer		Papers: ALCOHOL Chair: Rohan Palmer
15:30-17:00	Papers: ADHD Chair: Valerie Knopik	Papers: FITNESS Chair: Tinca Polderman	Papers: DEPRESSION Chair: Nick Martin
17:30-21:00	Poster Session @ QIMR Ber	ghofer	
	WEDNESDAY June 22		
9:00-10:30	Plenary Talks: Dale Nyholt &	Peter Visscher	
11:00-12:30	Symposium: CAUSATION Chair: Michael Neale		Papers: CANNABIS Chair: Nathan Gillespie
12:30-13:30	Business Meeting (during lunch; BGA members only)		
13:30-15:00	Symposium: SNPS Chair: Matt Keller		Papers: ENERGY Chair: Kathryn Lemery
15:30-17:00	Papers: GWAS Chair: Sarah Medland	Papers: EDUCATION Chair: Paul Lichtenstein	Papers: BMI Chair: Jaakko Kaprio
	Free evening		
	THURSDAY June 23		
9:00-10:00	Plenary Talk: Jonathan Flint		
10:30-12:00	Symposium: AGGRESSION Chair: Meike Bartels	Papers: COGNITION Chair: Tim Bates	Papers: NEURO Chair: Bill Kremen
13:00-14:30	Symposium: AGGRESSION Chair: Meike Bartels	Papers: COGNITION II Chair: Will Coventry	Papers: DRUGS Chair: Elizabeth Prom
14:45-15:30	Papers: METHODS Chair: Ben Neale	Papers: SLEEP Chair: John Hewitt	Papers: BG Chair: Danielle Dick
16:00-18:00	Executive Committee Meeting (invitation only)		
18:00-21:00	Reception & BGA Banquet @ the Brisbane City Hall Presidential Address: Jaakko Kaprio		

# **MEETING INFORMATION**

# June 20-23, 2016

# **Opening Reception**

June 20, 18:00-21:00

Stokehouse Q in South Bank

Sidon Street, South Bank QLD 4101

## **Conference Sessions**

June 21-23, 9:00-17:00

Brisbane Convention and Exhibition Center, Plaza Level, Rooms P9, P10 & P11

Corner of Merivale Street & Glenelg Street, South Brisbane QLD 4101

## **Poster Session**

June 21, 18:00-21:00

QIMR Berghofer

300 Herston Road, Herston QLD 4006

# **Conference Reception, Banquet & Awards Ceremony**

June 23, 18:00-21:00

Brisbane City Hall

64 Adelaide St, Brisbane QLD 4000

# **Award Eligibility**

T: Thompson award eligible

R: Rowe award eligible

#### **Local Host**

Sarah Medland, QIMR Berghofer

medlandse@gmail.com

# **Online Program**

https://genepi.qimr.edu.au/events/bga2016/program.html#

The BGA respectfully acknowledges the Traditional Owners and Custodians of the Country on which we meet.

## **MONDAY June 20**

# **Executive Committee Meeting**

10:30 QIMR Level 6 of Central Building, Meeting Room 1

## **Welcome Reception**

18:00 Stokehouse Q in South Bank

# **TUESDAY June 21**

# P9-10 Acknowledgement of Country and Opening

8:45 Welcome to the 2015 BGA Meeting and to Brisbane, Australia

QIMR Indigenous Research Manager: Gregory Pratt, BGA President: Jaakko Kaprio; BGA President-Elect: Hermine Maes; BGA Local Host: Sarah Medland

# P9-10 Plenary Session:

## Sponsored by Illumina

9:00 New Opportunities For Structural Equation Modelling In The Post Gwas Era

David Evans, University of Queensland Diamantina Institute

9:45 Prospects For Prediction Of Risk For Psychiatric Disorders

Naomi Wray, Queensland Brain Institute, University of Queensland

#### 10:30 Coffee Break

## P9-10 Symposium: WELLBEING

Chair: Meike Bartels

11:00 The First Robust Genetic Associations With Subjective Well-Being

Meike Bartels, Bart Baselmans, Jonathan Beauchamp, Daniel Benjamin, David Cesarini, Jan-Emmanuel De Neve, Mark Fontana, Richard Karlsson Linner, Philipp Koellinger, Bob Krueger, Fleur Meddens, Michel Nivard, Aysu Okbay, Cornelius Rietveld, Patrick Turley

11:18 Large-Scale GWAS Meta-Analyses Identify Novel Genetic Loci Robustly Associated With Neuroticism And Depression

Aysu Okbay, Bart Baselmans, Jan-Emmanuel De Neve, Patrick Turley, Michel Nivard, Mark Fontana, Fleur Meddens, Richard Karlsson Linnar, Cornelius Rietveld Bob Krueger, Jonathan Beauchamp, Philipp Koellinger, Daniel Benjamin, Meike Bartels, David Cesarini

11:36 Novel Genetic Loci For Neuroticism And Depression Identified Using Subjective Well-Being As A Proxy-Phenotype

Philipp Koellinger, Aysu Okbay, Bart Baselmans, Jan-Emmanuel De Neve, Patrick Turley, Michel Nivard, Mark Fontana, Fleur Meddens, Richard Karlsson Linner, Cornelius Rietveld, Bob Krueger, Jonathan Beauchamp, Daniel Benjamin, Meike Bartels, David Cesarini

11:54 Biological Insights From A Genome Wide Association Study Of Subjective-Wellbeing, Depression, And Neuroticism

Fleur Meddens, Aysu Okbay, Bart Baselmans, Jan-Emmanuel De Neve, Patrick Turley, Michel Nivard, Mark Fontana, Richard Karlsson Linner, Cornelius Rietveld, Bob Krueger, Jonathan Beauchamp, Philipp Koellinger, Daniel Benjamin, Meike Bartels, David Cesarini

12:12 Multivariate GWAS With Life Satisfaction And Positive Affect

Bart Baselmans, Michel Nivard, Patrick Turley, Aysu Okbay, Mark Fontana, Fleur Meddens, Richard Karlsson Linner, Jan-Emmanuel De Neve, Cornelius Rietveld, Bob Krueger, Jonathan Beauchamp, Philipp Koellinger, David Cesarini, Daniel Benjamin, Meike Bartels

## P11 Paper Session: CHILDREN

Chair: Thalia Eley

11:00 Therapygenetics: Using Polygenic Risk Scores For Differential Susceptibility To Predict Response To Psychological Therapy In Child Anxiety Disorders

Thalia Eley, Rob Keers, Jonathan Coleman, Kathryn Lester, Susanna Roberts, Gerome Breen, Mikael Thastum, Susan Bogels, Silvia Schneider, Einar Heiervang, Richard Meiser-Stedman, Meike Nauta, Cathy Creswell, Kerstin Thirlwall, Ronald Rapee, Jennifer Hudson, Cathryn Lewis, Robert Plomin

11:15 Differences In Maternal And Paternal Ratings Of Psychopathology And The Genetic Epidemiology In 12,000 7-Year Old Twin Pairs

Laura Wesseldijk, Iryna Fedko, Meike Bartels, Michel Nivard, Jouke-Jan Hottenga, Catherina van Beijsterveldt, Dorret Boomsma, Christel Middeldorp

Shared Genetic Influences Do Not Explain The Association Between Parent-Child Relationship Quality

And Offspring Internalizing Symptoms: Results From A Children-Of-Twins Study

Laurie Hannigan, Tom McAdams, Jenae Neiderhiser, Thalia Eley

Whats Parenthood Got To Do With It? The Effect Of Parenthood On Mothers And Fathers Physical And Psychological Health, Moderated By Age, Number Of Children, And SES

Diana Dinescu, Eric Turkheimer

The Nature Of Nurture: Education-Associated Single Nucleotide Polymorphisms Explain Variation In Childrens Home Environments And In Their Associations With Child Outcomes

Eva Krapohl, Paul O'Relly, Robert Plomin

#### 12:30 Lunch

# P9-10 Symposium: AGENCY

Chair: Eric Turkheimer

13:30 Introduction

Erik Turkheimer

13:48 The Folk Psychology Of Freedom And The Science Of Human Agency

Dominic Murphy

14:06 Using Psychiatric Disorder To Decompose The Structure Of Agency

Philip Gerrans

14:24 The Clash Between Genetic Causation And Agency In Lay Understanding

Paul Griffiths

14:42 Discussing Genetic Risk In Mental Health Contexts

Sarah Medland

## P11 Paper Session: ALCOHOL

Chair: Rohan Palmer

13:30 Estimation And Characterization Of The SNP-Heritability Of Alcohol Dependence In Subjects Of European And African Ancestry

Rohan Palmer, Leslie Brick, John McGeary, Valerie Knopik

13:45 Friends Alcohol Use Influences At Different Stages Of The Drinking Career: Evidence For Gene-Environment Correlation

Arielle Deutsch, Wendy Slutske

Genetic Influences On Negative And Positive Reinforcement Drinking Motives In College Students

Jeanne Savage, Bradley Webb, Alexis Edwards, Kenneth Kendler, Danielle Dick

14:15 Genetic Analyses On Binge Drinking Subtypes

Megan Cooke, Bradley Webb, Alexis Edwards, Kenneth Kendler, Danielle Dick

14:30 Behavioral Sequelae Of High Alcohol Intake Have Independent Effects On Mortality But Quantity Of Alcohol Does Not

John B Whitfield, Grant W Montgomery, Pamela AF Madden, Andrew C Heath, Nicholas G Martin

## 15:00 Coffee Break

# P9 Paper Session: ADHD

Chair: Valerie Knopik

15:30 Sex-Specific Genome-Wide Common Variant Analyses Of Attention Deficit Hyperactivity Disorder Joanna Martin, Raymond Walters, Ditte Demontis, Manuel Mattheisen, Hong Lee, Michael O'Donovan, Elise Robinson, Barbara Franke, Anders Borglum, Stephen Faraone, Anita Thapar, Benjamin Neale

Familial Liability Of ADHD And Epilepsy: A Nationwide Cohort Study

T Isabell Brikell, Ralf Kuja-Halkola, Brian D'Onofrio, Paul Lichtenstein, Henrik Larsson

16:00 Integrating Gwas Of ADHD And Continuous ADHD-Related Traits

Raymond Walters, Manuel Mattheisen, Ditte Demontis, Mark Daly, Anders Borglum, Stephen Faraone, Christel Middeldorp, Dorret Boomsma, Benjamin Neale

Does The Environment Have An Enduring Effect On ADHD? A Longitudinal Study Of Monozygotic Twin Differences In Children

Luisa Livingstone, William Coventry, Robin Corley, Erik Willcutt, Stefan Samuelsson, Richard Olson, Brian Byrne

16:30 Within-Family Effects Of Smoking During Pregnancy On ADHD: The Importance Of Phenotype Valerie Knopik, Kristine Marceau, Cinnamon Bidwell, Hollis Karoly, Allison Evans, Alexandre Todorov, Rohan Palmer, Andrew Heath

## P10 Paper Session: FITNESS

Chair: Tinca Polderman

15:30 Genetic Risk For Psychiatric Disorders And Reproductive Fitness In The General Population

15:45 GWAS Meta Analysis Of Lifetime Number Of Sexual Partners

Brooke Huibregtse, Michael Stallings

Facial Averageness And Genetic Quality: Testing Heritability, Genetic Correlation With Attractiveness, And The Paternal Age Effect

Brendan Zietsch, Anthony Lee, Dorian Mitchem, Margaret Wright, Nick Martin, Matthew Keller

16:15 The Role Of Genes And Environment In Degree Of Partner Self-Similarity

James Sherlock, Karin Verweij, Sean Murphy, Andrew Heath, Nicholas Martin, Brendan Zietsch

16:30 Genome-Wide Association Study Of 6,939 Individuals Identifies Five Novel Loci And Suggests That Prenatal Exposure To Testosterone Is Not A Major Determinant Of Individual Differences In 2D:4D Finger Ratio

Nicole Warrington, Gibran Hemani, Pirro Hysi, Massimo Mangino, George McMahon, Martha Hickey, Dieter Wolke, Grant Montgomery, Craig Pennell, Tim Spector, Nicholas Martin, Sarah Medland, David Evans

# P11 Paper Session: DEPRESSION

Chair: Nick Martin

15:30 Neuroticism And Its Genetic Overlap With Subjective Wellbeing And Related Constructs

Michelle Luciano, Bart Baselmans, Saskia Hagenaars, Gail Davies, Sarah Harris, Dorret Boomsma, Ian J. Deary, Alexander Weiss, Meike Bartels

15:45 Shared Genetics Of Depression And Fatigue

T Elizabeth Corfield, Nicholas Martin, Dale Nyholt

16:00 Intergenerational Transmission Of Depression: A Genetically Informed Analysis Of A Swedish Population Sample

Tom McAdams, Thalia Eley, Henrik Larsson, Paul Lichtenstein

16:15 Exploring Heterogeneity In Major Depression

Divya Mehta, Maciej Trzaskowski, Robert Maier, Naomi Wray

16:30 Genome-Wide Analysis Of Over 106,000 Individuals Identifies 9 Neuroticism-Associated Loci

Nick Martin, on behalf of the Neuroticism GWAS Consortium

18:00	Poster Session: Sponsored by QIMR Berghofer
1	Marital Status And Quality Moderate Specific And Non-Specific Genetic Influences On Alcohol Consumption
2	Jessica Salvatore, Kenneth Kendler  Polygonia Dialy Spare Analysis Of Cigaretta Smaking And Span Has
	Polygenic Risk Score Analysis Of Cigarette Smoking And Snus Use
3	Penelope Lind, Daniel Benjamin, David Cesarini, Magnus Johannesson, Patrik Magnusson, Sarah Medland
R	A Developmental Prediction Of Smoking Behaviors From Polygenic Risk Scores
4	Bridget Carey, Irene Elkins, William Iacono, Margaret Keys, Matthew McGue
_	Polygenic Risk Scores For Cigarettes Smoked Per Day Do Not Generalize To A Native American Population
	Jacqueline Otto, Ian Gizer, Chris Bizon, Kirk Wilhelmsen, Cindy Ehlers
5	Maternal Smoking During Pregnancy And Offspring Behavior I: A Propensity Score Approach
	Rohan Palmer, Cinnamon Bidwell, Andrew Heath, Leslie Brick, Pamela Madden, Valerie Knopik
6	Maternal Smoking During Pregnancy And Offspring Behavior II: A Propensity Score Approach
_	Valerie Knopik, Cinnamon Bidwell, Rohan Palmer, Leslie Brick, Pamela Madden, Andrew Heath
7 R	Cannabis And Depression: A Twin Model Approach To Co-Morbidity
	Milana Smolkina, Katherine Morley, Arpana Agrawal, Elliot Nelson, Dixie Stratham, Nicholas Martin, Michael Lynskey
8 R	Genome-Wide Prediction Of Behavioral Disinhibition From Multiple Proxy-Phenotypes
	Kathryn Schafer, Jaime Derringer
9 R	Association Between The Oxytocin Receptor Gene (Oxtr) And Childhood Aggression
	Holly Poore, Devon LoParo, Irwin Waldman
10	
11	The Nature Of Covariance Between Temperament Traits And Behavior Problems In Russian Adolescents
	Georgy Vasin, Marina Lobaskova, Elena Gindina, Sergey Malykh
12	The Effect Of Stability And Change Of Genetic And Environmental Influences On Internalizing And Externalizing Problems Among Japanese Twins Aged 2 To 7 Years
	Mami Tanaka, Masumi Sugawara
13	Is Poor Control Of Fixational Eye Movements An Endophenotype For ADHD Traits?
	Erik Pettersson
14 R	The Familial Co-Aggregation Of Autistic Spectrum Disorder (ASD) And ADHD: A Register-Based Cohort Study
	Laura Ghirardi, Isabell Brikell, Ralf Kuja-Halkola, Philip Asherson,, Barbara Franke, Paul Lichtenstein, Henrik Larsson
15 R	Maltreatment-Associated Neurodevelopmental Problems: Environment And Genetics
	Lisa Dinkler, Sebastian Lundstrom, Ruchika Gajwani, Paul Lichtenstein, Christopher Gillberg, Helen Minnis
16	Family Cohesion Moderates Genetic And Environmental Influences On Prosocial Behavior In Adolescent Twins
	Yoon-Mi Hur, Brett Haberstick, Hoe-Uk Jeong, Matthew McGue, Mark Runco, Andrew Smollen, Jeanette Taylor
17 R	Putting The Diathesis In Diathesis-Stress: Personality, Social Stress, And Depression
	Jason Scicchitano, Jaime Derringer
18	Self-Control And Academic Performance: A Multivariate Genetic Analysis  Yusuke Takahashi, Shinji Yamagata, Juko Ando
19	Do Executive Functioning And Impulsivity Predict Overlapping Variation In Problem Behaviors?
R	Alexander Hatoum, Daniel Gustavson, Soo Rhee, Robin Corley, John Hewitt, Naomi Friedman
	Heritability Of Neuroanatomical Properties Supporting Executive Function
1	
21	Harry Smolker  Genetic And Environmental Actiology Of The Relationships Retween Intelligence And Executive
21	Genetic And Environmental Aetiology Of The Relationships Between Intelligence And Executive Functions
	Ivan Voronin, Victoria Ismatullina, Ilia Zakharov, Aleksandra Belova, Anna Budakova
22 R	Genetic Overlap Between Executive Functioning And School Readiness In 4-Year-Old Twin Pairs
n	Lauren Micalizzi, Jody Ganiban, Kimberly Saudino

18:00	Poster Session: Sponsored by QIMR Berghofer
	Perceived Loneliness As A Contextual Moderator Of The Etiology Of Cognitive Functioning
R	Dianna Phillips, Chandra Reynolds, for the IGEMS Consortium
24	Exposure To Freeway-Related Pollutants And Cortical Thinning In Adolescents
	Yaling Yang, Laura Baker, Eric Kan, Meredith Franklin, Diana Younan, Fred Lurmann, Jiu-Chiuan Chen
25	The Relationship Between Iq And Pm2.5. Findings From The U Of Southern California Twin Study
	Laura Baker, Catherine Tuvblad, Pan Wang, Diana Younan, Meredith Franklin, Fred Lurmann, Jun Wu, Jiu-Chiuan Chen
26	Genome-Wide Association Analysis Identifies Multiple Variants Associated With Cognitive Ability And Visual Perception
	Ozren Polasek, Ajka Relja, Ivana Kolcic, Caroline Hayward, Gordan Lauc, Igor Rudan, Zoran Djogas, Mirko Drenovac
	Visual Pattern Recognition Memory And Intelligence: Multivariate Twin Model
R	Ilia Zakharov, Victoria Ismatullina, Ivan Voronin, Sergey Malykh
28	Differential Etiology Of Reading Ability Based On Family History Of Reading Difficulties
	Sara Hart, Jeanette Taylor
29	Genetic And Environmental Factors Of The Relationship Between Temperament And Planning Ability In Adolescents
	Victoria Ismatullina, Ivan Voronin
R	Subjective Wellbeing And Longevity: A Replication Study In Discordant Twin Pairs
	Gretchen Saunders, Matthew McGue, Kaare Christensen, Irene Elkins
	The Developmental, Physiological, And Evolutionary Underpinnings Of Female Homosexuality
20	Severi Luoto
32	A Twin-Family Study Of Social Closeness Toward Nieces And Nephews
20	Nancy Segal, Sevim Mollova, William Marelich, Kathleen Preston
33	DNA Methylation Differences In A Racially Diverse Pregnant Population
0.4	Dana Lapato, Jerome Strauss, Tim York
34	Sex-Related Individual Differences In Dna Methylation In Monozygotic Twin Pairs
0.5	Mikio Watanabe, Chika Honda, Osaka Twin Research Group, Yoshinori Iwatani
35	Exploiting Cis And Trans Eqtl To Investigate Epistasis
	Gabriel Cuellar
36 R	- CPACOO
	Amanda Gentry, Kellie Archer
37	Examining Skin And Gut Microbiome Profiles In A Sample Of Siblings Reared Together Vs. Apart: Design And Feasibility Considerations
	Leslie Leve, William Cresko, Nicolae Morar, Brendan Bohannan
38	Are Epigenetic Factors Implicated In Chronic Widespread Pain?
	Andrea Burri, Zoya Marinova, Mark D. Robinson, Brigitte Kühnel, Gregory Livshits, Frances Williams
39	Genetic And Environmental Influences On The Behaviors In Adolescents -A Twin Study
	FU Yixiao, ZHU Wenfen, HOU Yixiao, DENG Wei, LI Tao
40	Twins Methods Quantitatively Explore The Impact Of Genetic To Children And Adolescents Brain Gray Matter Volume
	FU Yixiao

## **WEDNESDAY June 22**

## P9-10 Plenary Session:

## Sponsored by Illumina

9:00 Post-Gwas Approaches: What's Hot

Dale Nyholt, Queensland University of Technology

9:45 From Galton To The Genome: Estimation And Dissection Of Quantitative Trait Genetic Variation

Peter Visscher, Queensland Brain Institute, University of Queensland

#### 10:30 Coffee Break

## P9-10 Symposium: CAUSATION

Chair: Michael Neale

11:00 Causality In Twin Models

**Brad Verhulst** 

11:20 Umx Scripts For Twin Research

Timothy Bates, Hermine Maes, Michael Neale

11:40 Perspective On Causal Analysis Methods

Michael Neale

12:00 Mendelian Randomization In The Classical Twin Design

Camelia C. Minica, Conor V. Dolan, Dorret I Boomsma, Eco de Geus/ Michael C. Neale

# P11 Paper Session: CANNABIS

Chair: Nathan Gillespie

- Testing Genetic and Environmental Associations between Personality Disorders and Substance Use Nathan A Gillespie
- 11:15 Quasi-Causal Associations Between The Age Of Cannabis Initiation And Symptoms Of Substance Use
  Leah Richmond-Rakerd, Wendy Slutske, Michael Lynskey, Arpana Agrawal, Pamela Madden, Kathleen Bucholz, Andrew Heath,
  Nicholas Martin
- 11:30 The Association Between Marijuana Use And Depression

| T | Kerri Woodward, Madeline Fritz, Robin Corley, Naomi Friedman, John Hewitt, Soo Rhee

Whole Genome Sequence Study Of Cannabis Dependence: Associations With Regulatory Elements Identified By The Roadmap Epigenomics Project

lan Gizer, Chris Bizon, David Gilder, Kirk Wilhelmsen, Cindy Ehlers

12:00 Associations Between Childhood Trauma Exposure And Cannabis Involvement In An Adolescent Female Twin Sample

Julia Grant, Carolyn Sartor, Kimberly Werner, Michael Lynskey, Kathleen Bucholz, Pamela Madden, Andrew Heath, Arpana Agrawal

## 12:30 Business Meeting & Lunch

# P9-10 Symposium: SNPS

Chair: Matt Keller

13:30 Genes For Good: An Online Framework For Behavioral Genetic Research At Scale

Scott Vrieze

13:50 Challenges Of Scale In Genetic Analysis

Benjamin Neale

14:10 Multivariate Genetic Risk Scores Increase Risk Prediction Accuracy For A Wide Range Of Traits

T Robert Maier

14:30 Effects Of Assortative Mating On Estimates Of SNP Heritability

Matthew Keller, Teresa de Candia

## P11 Paper Session: ENERGY

Chair: Kathryn Lemery-Chalfant

13:30 Parental Reports Of Infant And Child Eating Behaviors Are Not Affected By Their Beliefs About Their Twins Zygosity

2016

Moritz Herle, Alison Fildes, Fruhling Rijsdijk, Clare Llewellyn

13:45 Gwas Of Bitter Taste Perception In Australian Adolescents

Liang-Dar Hwang, Danielle Reed, Paul Breslin, Gu Zhu, Nicholas Martin, Margaret Wright

14:00 Activity Level: More Than Simple Motor Activity

Alexis Frazier-Wood, Kimberly Saudino

14:15 Twins In Space: Mz Twins Discordant For Space Travel

Brinda Rana

14:30 Age-Moderation Of Genetic And Environmental Contributions To Cognitive Functioning In Mid- And Late-Life For Specific Cognitive Abilities

Shandell Pahlen, Matthew McGue

#### 15:00 Coffee Break

# P9 Paper Session: GWAS

Chair: Sarah Medland

15:30 Enigma-EEG: GWAS Of Brain Function

Dirk Smit, Steve Malone, Scott Burwell, Eco de Geus, Derrek Hibar, Paul Thompson, Dorret Boomsma, Nicholas Martin, Sarah Medland, Bernice Porjesz, William Iacono

15:45 A GWAS Of Cognitive Impairment As A Side Effect Of Cytotoxic Therapy

Geoffrey Beadle, David Duffy, Margaret Wright

16:00 First Results From The Enigma3 Cortical And DTI GWAS Meta-Analyses

Sarah Medland for the Enhancing Neuro Imaging Genetics through Meta-Analysis (ENIGMA) Consortium

16:15 Power Of Multivariate GWAS: Real Case Scenarios Using Brain Phenotypes From MRI

Baptiste Couvy-Duchesne, Lachlan Strike, Narelle Hansell, Nicholas Martin, Katie McMahon, Greig de Zubicaray, Paul Thompson, Margaret Wright

16:30 Investigating Genetic Aetiology Of Atopic Dermatitis In Uk Biobank

Lavinia Paternoster

# P10 Paper Session: EDUCATION

Chair: Paul Lichtenstein

15:30 Epigenetic Profiling Of Educational Attainment

Richard Karlsson Linner, Cornelius Rietveld, David Cesarini, Daniel Benjamin, Ian Deary, Philipp Koellinger, Riccardo Marioni

15:45 Predicting Educational Achievement From DNA

Saskia Selzam, Robert Plomin

16:00 Genetic Influence On Educational Attainment And Occupational Status During And After The Soviet Fra In Estonia

Kaili Rimfeld, Maciej Trzaskowski, Tonu Esko, Andres Metspalu, Robert Plomin

16:15 Getting Around The Limited-Availability Of Nuclear-Twin-Family Data: A Meta-Analysis Of The Genetic Architecture Of Educational Attainment With The Nuclear-Twin-Family Design

William Coventry, Connie Barroso, Sara Hart

16:30 Genes, Environments, And Gambling In The United States: 1962 Versus 2002

Wendy Slutske

P11	Paper Session: BMI Chair: Jaakko Kaprio
15:30	Parental Transmission Of The Body Mass Index (BMI) In Children And Adolescents: A Panel Study For Mexico
	Alma Sobrevilla
15:45	The Genome-Wide Influence On Human BMI Depends On Physical Activity, Life-Course, And Historical Period
	Guang Guo
16:00	Genetic Interactions May Partially Explain The Still-Missing Heritability Of Human Height And BMI
	Ronald de Vlaming, Cornelius Rietveld
16:15	Role Of Depressive Symptoms And Stressors In FTO Genetic And Epigenetic Variation In Association With Body Composition Through Childhood And Adolescence: A Pilot Study
	Sarah Cohen-Woods, Richard Saffery, Tracey Air, Rohan M. Telford, Lisa S. Olive, Julia M. Potter, Peter E. Hickman5, Walter P. Abhayaratna, Donald G. Byrne, Richard D. Telford
16:30	Using Mendelian Randomization To Investigate A Possible Causal Relationship Between Adiposity And Increased Bone Mineral Density At Different Skeletal Sites In Children
	John Kemp, Adrian Sayers, George Davey Smith, Jonathan Tobias, David Evans

## **THURSDAY June 23**

## P9-10 Plenary Session:

## Sponsored by the Ian Potter Foundation

9:00 Genome -Wide Association Of Multiple Complex Traits In Outbred Mice By Ultra Low-Coverage

Jonathan Flint, UCLA

#### 10:00 Coffee Break

# P9 Symposium: AGGRESSION

Chair: Meike Bartels

10:30 A Cross-Cultural Comparison Of The Longitudinal Heritability Of Childhood Aggression

Robert Porsch, Christel Middeldorp, Stacey Cherny, Eva Krapohl, Catherina van Beijsterveldt, Anu Loukola, Tellervo Korhonen, Lea Pulkkinen, Robin Corley, Soo Rhee, Jaakko Kaprio, Richard Rose, John Hewitt, Pak Sham, Robert Plomin, Dorret

10:50 Aggression And Academic Achievement In Adolescence, Genetic And Environmental Effects And The Role Of Direct Versus Indirect Aggression

Eero Vuoksimaa, Richard Rose, Lea Pulkkinen, Jaakko Kaprio

11:10 Heritability Of Different Aggression Phenotypes In An Australian And A Dutch Cohort

Lucia Colodro Conde, Nicholas Martin, Peter Hatemi, Dorret Boomsma, Christel Middeldorp, Toos van Beijsterveldt, Meike Bartels, Sarah Medland

11:30 A Dynamic Systems Model Of Presynaptic Serotonergic Functioning: Further Validation, Additional Serotonin Genes And Association With Children's Behavioral Impulsivity

Charles Beekman, Kathryn Lemery-Chalfant, Sierra Clifford, Hill Goldsmith

# P10 Paper Session: COGNITION

Chair: Tim Bates

10:30 Socioeconomic Status And Genetic Influence On Cognitive Development: Evidence From Florida Jeremy Freese, David Figlio, Krzysztof Karbownik, Jeffrey Roth

10:45 A Study Of Gene Expression In The Ageing Human Brain

Adith Mohan, Anbupalam Thalamuthu, Cynthia Weickert, Karen Mather, Perminder Sachdev

11:00 Cognitive Resilience In Aging: Effects Of Gene Candidates And Education In A Nationally Representative Sample Of Older Adults

Thalida Arpawong, John McArdle, Carol Prescott

# P11 Paper Session: NEURO

Chair: William Kremen

10:30 Genetics Of Task-Evoked Pupil Response: A Novel Biomarker For MCI And Alzheimers Disease

William Kremen, Carol Franz, Eric Granholm, Richard Hauger, Michael Lyons, Matthew Panizzon

10:45 Can Mendelian Randomization Inform Drug Development Research For Neurobehavioural Conditions? A Study Of Alzheimers Disease

Marie-Jo Brion, Beben Benyamin, George Davey Smith, John McGrath, David Evans

Maternal Infection During Pregnancy And Risk For Offspring Autism: A Sibling-Comparison Study
Brian D'Onofrio, Quetzal Class, Martin Rickert, Anna Oberg, Ylva Ginsberg, Catarina Almqvist, Henrik Larsson, Paul

11:15 Trait-Specific Patterns Of Common Genetic Factors Influence Social Communication Difficulties And ADHD Symptoms During Development

Beate St Pourcain, Lindon J Eaves, David M Evans, Simon E Fisher, Gregory Carey, George Davey Smith

11:30 Are Neurodevelopmental Disorders Etiologically Linked With Mania And Depression? Evidence From A Twin Study

Mark Taylor, Sebastian Lundstrom, Paul Lichtenstein

# 12:30 Lunch

## P9 Symposium: AGGRESSION II

Chair: Meike Bartels

13:00 Gene-Based Analyses Of GWAS Data On Aggressive And Non-Aggressive Conduct Disorder Symptoms In Two Samples Of African- And European-Americans

Irwin Waldman, Devon LoParo, Joshua Weinstock, Fazil Aliev, Jessica Salvatore, Henry Kranzler, Lindsay Farrer, Danielle Dick,

13:20 Genome-Wide Pleiotropy Of Adult Aggression And Blood Plasma Metabolites

Fiona Hagenbeek, Michel Nivard, Rene Pool, Jenny van Dongen, Jouke-Jan Hottenga, Abdel Abdellaoui, Gonneke Willemsen, Jacqueline Vink, Lannie Ligthart, Amy Harms, Thomas Hankemeier, Meike Bartels, Dorret Boomsma

13:40 Epigenome-Wide Association Study Meta-Analysis Of Aggressive Behavior

Jenny van Dongen, Khadeeja Ismail, Rosa Mulder, Bart Baselmans, Michel Nivard, Rick Jansen, Lannie Ligthart, Miina Ollikainen, Eero Vuoksimaa, Henning Tiemeier, Jaakko Kaprio, Meike Bartels, Dorret Boomsma

14:00 Multivariate And Repeated Measure GWAS Of Aggression Phenotypes

Michel Nivard, Christel Middeldorp, Jouke-Jan Hottenga, Iryna Fedko, Erik Ehli, Gareth Davies, Catherina van Beijsterveldt, Meike Bartels, Dorret Boomsma

## P10 Paper Session: COGNITION II

Chair: Will Coventry

13:00 White Matter Hyperintensities Have A Strong Genetic Influence

Perminder Sachdev, Anbupalam Thalamuthu, Karen Mather, David Ames, Margaret Wright, Wei Wen

13:15 Genetic And Environmental Influences On Verbal Ability In Older Adults: Findings From The Older Australian Twins Study

Teresa Lee, Anbu Thalamuthu, Jocelyn Bowden, David Ames, Margie Wright, Perminder Sachdev

13:30 Genetic Covariation Among Hippocampal Subfields

Narelle Hansell, Lachlan Strike, Katie McMahon, Nicholas Martin, Greig de Zubicaray, Paul Thompson, Margaret Wright

13:45 Testing Sex Moderated Genetic And Environmental Influences On Longitudinal Growth Of Literacy And Numeracy

Katrina Grasby, William Coventry

## P11 Paper Session: DRUGS

Chair: Elizabeth Prom-Wormley

13:00 A Whole Methylome Study In Brain And Blood Of Dba/2J(D2) Mice After Acute And Repeated Ethanol Injections

Shaunna Clark, Blair Costin, Robin Chan, Linying Xie, Jessica Jurmain, Gaurav Kumar, Andrey Shabalin, Ashutosh Pandey, Karolina Aberg, Michael Miles, Edwin van den Oord

The Speed Of Progression To Alcohol & Tobacco Dependence: A Genetically Informed Twin Design

Spencer Huggett, Alexander Hatoum, John Hewitt, Robin Corley, Michael Stallings

13:30 The Genetic And Environmental Contributions On Smoking Cessation In Young Adults

Elizabeth Prom-Wormley, Hermine Maes, Michael Neale, Kenneth Kendler, Judy L. Silberg, Lindon J. Eaves, Donna Miles, Lenn Murrelle, Soo Rhee, Robin Corley, John Hewitt, Susan Young, Matt McGue, Bill Iacono, Lisa Legrand, Di Samek, Martine Thomis, Gaston P. Beunen, Dorret Boomsma, Meike Bartels, Jacqueline Vink, Jaakko Kaprio, Richard Rose, Paul Lichtenstein, Victoria White, Nicholas G. Martin

13:45 Investigating The Familial Transmission Of Substance Use With A Children-Of-Twins Design

Jorien Treur, Dorret Boomsma, Gonneke Willemsen, Jacqueline Vink

14:00 Genetic Association Between Addictive Behaviours And Conduct Disorder

Karin Verweij, Abdel Abdellaoui, Lannie Ligthart, Camelia Minica, Jouke-Jan Hottenga, Dorret Boomsma, Jacqueline Vink

## 14:30 Coffee Break

## P9 Paper Session: METHODS

Chair: Ben Neale

14:45 Detecting Parent Of Origin Effects Using GREML Of Transmitted Genotypes

Charles Laurin, Gibran Hemani, David Evans

15:00 Simulation Results From Structural Equation Modeling With Genomic-Relatedness Matrices In Openmx

Robert Kirkpatrick, Michael Neale

15:15 LD Hub And MR-Base: Online Platforms For Preforming LD Score Regression And Mendelian Randomization Analysis Using GWAS Summary Data

Jie Zheng, Philip Haycock, Gibran Hemani, Benjamin Elsworth, Hashem Shihab, Charles Laurin, Mesut Erzurumluoglu, Laurence Howe, Kaitlin Wade, Nicole Warrington, Hilary Finucane, Alkes Price, Verneri Anttila, Lavinia Paternoster, Richard Martin, Caroline Relton, Tom Gaunt, George Davey Smith, Benjamin Neale, David Evans

#### P10 Paper Session: SLEEP

Chair: John Hewitt

14:45 Sleep Quality And Psychological Distress. Genetic And Environmental Relationships

Juan Ordonana, Juan Madrid-Valero, Jose Morosoli, Lucia Colodro, Eduvigis Carrillo, Jose Martinez-Selva

15:00 The Genetics Of Sleep Behaviour

Enda Byrne

15:15 Genetic And Environmental Associations Between Procrastination And Internalizing/Externalizing

T Problems

Daniel Gustavson, Alta du Pont, Soo Rhee, Robin Corley, John Hewitt, Naomi Friedman

## P11 Paper Session: BG

Chair: Danielle Dick

14:45 What Does Reproducibility Look Like In Behavioral Genetics?

Sara Hart, Callie Little, Christopher Schatschneider

15:00 Communicating Genetics

Simone Cross

15:15 Behavior Genetics: What's The Endgame?

Danielle Dick

# **Executive Committee Meeting**

16:00 Brisbane Convention and Exhibition Center P11

# Reception, Banquet, Presidential Address & Awards

18:00 Brisbane City Hall