

MDC'18 18TH MANCHESTER DYSMORPHOLOGY
CONFERENCE · 5-8 NOVEMBER 2018

DIAN DONNAI



18th Manchester Dysmorphology Conference

5 – 8th November 2018

Conference Organisers

Jill Clayton-Smith

Sofia Douzgou

Siddharth Banka

 **MDC'18**

PROGRAMME

MONDAY 5TH NOVEMBER

From 3.00 pm **Registration – Ballroom entrance**

Ballroom

Chairs JULIE MCGAUGHRAN and HELEN STUART

- 5:30pm (A1) Further delineation of the MECP2 duplication syndrome phenotype in 59 French male patients, with a particular focus on morphological and neurological features
Salima El Chehadeh
- 5:45pm (A2) TCF20 loss-of-function mutations associated with intellectual disability - a study of 19 patients identified by whole exome sequencing through the DDD Study
Shane McKee
- 6:00pm (A3) Type 1 interferonopathy due to germline STAT2 gain-of-function mutation
Tracy Briggs
- 6:15pm (A4) Delineation of phenotypes associated with TBL1XR1 mutations
Diana Johnson
- 6:30pm (A5) De novo missense variants in TUBA1A – whole exome sequencing in a mixed neurodevelopmental cohort expands the genotypic and phenotypic spectrum
Abhijit Dixit
- 6:45pm (A6) PCYT2 mutations cause an early-onset complex hereditary spastic paraplegia syndrome highlighting the importance of the Kennedy pathway
John McDermott

7:00pm (A7) Further delineation of the Aarskog-Scott syndrome phenotype in a series of 79 male patients with a FGD1 mutation: recommendations for diagnosis and management
Annick Toutain

7:15pm **SUPPER - The Whitworth Suite**

8:15pm Unknowns' session

Chairs JILL CLAYTON-SMITH and SOFIA DOUZGOU

TUESDAY 6TH NOVEMBER

Ballroom

Chairs MOHNISH SURI and ALAIN VERLOES

- 9:00am (B1) Delineating the clinical spectrum due to heterozygous TRAF7 missense mutations: A series of 24 cases
Jeanne Amiel
- 9:15am (B2) From Amelia to Polymelia
Bruno Reversade
- 9:30am (B3) Non-syndromic craniosynostosis: mutations in PRRX1, SIX1 and SMAD6
Andrew Wilkie
- 9:45am (B4) Germline loss-of-function mutations in EPHB4 cause a second form of capillary malformation-arteriovenous malformation (CM-AVM2) deregulating RAS-MAPK signaling
Nicole Revencu
- 10:00am (B5) Unraveling the genetic architecture of bladder exstrophy epispadias complex
William Newman
- 10:15am (B6) The genetics of Hirschsprung disease: transethnic analyses of isolated cases and new candidate gene for syndromic cases.
Stanislas Lyonnet
- 10:30am **COFFEE - The Whitworth Suite**

Ballroom

Chairs LAURENCE FAIVRE and LUCY RAYMOND

- 11:00am (C1) Prioritising genes of interest from whole genome sequences to maximise diagnostic yield in developmental disorders in the 100,000 Genomes Project
Richard Scott
- 11:15am (C2) NIPT as first screening of trisomies 13, 18 and 21 in a genetic center in Belgium: retrospective study of 12 060 tests
Colombine Meunier
- 11:30am (C3) Accurate molecular detection and functional validation of PI3K-AKT-MTOR pathway in focal malformations of cortical development: novel genetic insights
Ghayda Mirzaa
- 11:45am (C4) The landscape of pathogenic copy number variations in healthy, reproducing females. Results from 1 year genome-wide noninvasive prenatal testing
Koenraad Devriendt
- 12:00pm (C5) The DDD study – Delivering Discovery & Diagnosis in rare disease
Helen Firth
- 12:15pm (C6) What Have We Learned from The First 2,500 Diagnostic Exomes in Saudi Arabia?
Fowzan Alkuraya
- 12:30pm **LUNCH - The Whitworth Suite**
- 1:30pm **POSTER VIEWING (ODD NUMBERS)**

Ballroom

Chairs TJITSKE KLEEFSTRA and SIDDHARTH BANKA

- 3:00pm (D1) Examination of the landscape of histone lysine methylases and demethylases in human developmental disorders leads to identification of novel syndromes
Victor Faundes
- 3:15pm (D2) Phenotypic spectrum of novel intellectual disability syndrome due to de novo variants in KMT2E
Anne O'Donnell-Luria
- 3:30pm (D3) Further delineation of the phenotypic spectrum of the KAT6B gene
Ruta Marcinkute
- 3:45pm (D4) Missense mutations disrupting the ATPase domain of CHD3 cause a novel neurodevelopmental syndrome with intellectual disability, macrocephaly and impaired speech and language
Sandra Whalen
- 4:00pm (D5) A recurrent de novo missense variant in SMARCB1 causes severe intellectual disability and hydrocephalus due to choroid plexus hyperplasia
Trine Prescott
- 4:15pm (D6) Constitutive HIST1H1E variants and an emerging phenotype characterised by a distinctive facial gestalt and an intellectual disability
Kate Tatton-Brown
- 4:30pm (D7) De novo germline variants in Histone 3 Family 3A (H3F3A) and Histone 3 Family 3B (H3F3B) cause a severe neurodegenerative disorder and functional effects unique from their somatic mutations
Elizabeth Bhoj

4:45pm (D8) Gain of function DNMT3A mutations cause microcephalic dwarfism and hypermethylation of Polycomb-regulated regions
Andrew Jackson

5:00pm **End of session**

7:00pm **DINNER – COPPER FACE JACKS PUB (BASEMENT)**

WEDNESDAY 7TH NOVEMBER

Ballroom

Chairs GEERT MORTIER and BRUNO REVERSADE

- 9:00am (E1) Frontometaphyseal dysplasia: Expanding Phenotypic, Locus and Allelic Heterogeneity
Stephen Robertson
- 9:15am (E2) SLC10A7 mutations in human and mouse cause a skeletal dysplasia with amelogenesis imperfecta mediated by GAG biosynthesis defects
Valerie Cormier-Daire
- 9:30am (E3) A recurrent de novo heterozygous COG4 variant leads to Saul-Wilson syndrome, disruption of vesicular trafficking, perturbed Golgi structure and altered glycosylation of a secreted proteoglycan
Carlos Ferreira
- 9:45am (E4) SPONASTRIME Dysplasia is caused by biallelic mutations in TONSL
Melissa Lees
- 10:00am (E5) The Homozygous Variant c.797G>A/p.(Cys266Tyr) in PISD is Associated with a Spondyloepimetaphyseal Dysplasia with Large Epiphyses and Disturbed Mitochondrial Function
Kerstin Kutsche
- 10:15am (E6) Drug repurposing for rare diseases- MCDS therapy, a phase I/II trial of carbamazepine in patients with Metaphyseal Dysplasia Type Schmid as an example.
Michael Wright
- 10:30am **COFFEE- The Whitworth Suite**

Ballroom

Chairs DANIELA PILZ and ANITA RAUCH

11:00am (F1) Eyes in a Dish: Modelling Eye Malformations Using Optic Vesicle Organoid Culture
David FitzPatrick

11:20am (F2) RAB18 Micro syndrome mechanism
Eamonn Sheridan

11:35am (F3) Deep exploration of a CDKN1C mutation causing a mixture of Beckwith-Wiedemann and IMAGE syndromes revealed a novel transcript associated with developmental delay
Siren Berland

11:45am (F4) Non-penetrance of a frameshifting SHANK3 deletion is associated with compensatory mechanisms in both alleles
Gunnar Houge

11:55am (F5) A targeted therapeutic for Proteus syndrome - preliminary results
Leslie Biesecker

12:10Pm (F6) Targeted therapy in patients with PIK3CA-related overgrowth syndrome
Guillaume Canaud

12:30pm **LUNCH - The Whitworth Suite**

1:30pm **POSTER VIEWING (EVEN NUMBERS)**

Ballroom

Chairs DIAN DONNAI and GIJS SANTEN

- 3:00pm (G1) Next Generation Phenotyping using DeepGestalt in Clinic and Research
Karen Gripp
- 3:25pm (G2) Computer-assisted Image Analysis in Exome Diagnostics
Peter Krawitz
- 3:50pm (G3) Clinical Phenotyping of Bohring-Opitz Syndrome Using a Registry and Facial Photographs
Wen Hann-Tan
- 4:00pm (G4) Characterization of Glycosylphosphatidylinositol Biosynthesis Defects by Clinical Features, Flow Cytometry, and Automated Image Analysis
Denise Horn
- 4:15pm (G5) Next generation phenotyping of 7,697 individuals with intellectual disability
Bert de Vries
- 4:30pm (G6) Nuclear factor one (NFI) deficiency – a new family of overlapping developmental disorders
Martin Zenker
- 4:45pm (G7) Back to the future-a clinical diagnosis is the key to a rapid answer in urgent genomic analysis
Jane Hurst
- 5:00pm **End of session**
- 7:00pm **CONFERENCE DINNER – Ballroom**

THURSDAY 8TH NOVEMBER

Ballroom

Chairs JULIA RANKIN and ANDREW FRY

- 9:00am (H1) Genetic studies of cases with Bohring Opitz , Bohring Opitz like and Crisponi syndrome associated with ASX11 and KLHL7 mutations
Ruth Newbury-Ecob
- 9:15am (H2) Gating-affecting mutations in KCNK4 cause a recognizable neurodevelopmental syndrome
Francesca Radio
- 9:30am (H3) Genetic variants in components of the NALCN-UNC80-UNC79 ion channel complex cause a broad clinical phenotype (NALCN channelopathies)
Dagmar Wieczorek
- 9:45am (H4) TMX2 gene variants cause primary microcephaly, cortical malformation and epileptic encephalopathy with abnormal Ca²⁺-dependent regulation of protein folding at the ER-mitochondria interface
Grazia Mancini
- 10:00am (H5) Loss of function mutations in the nuclear pore complex protein NUP188 causes a novel syndrome of neurodegeneration, cataracts and facial dysmorphisms
Sarah Sheppard
- 10:15am (H6) Are congenital Freys syndrome, MiTES and HSAN-8 different presentation of the same thing, or just different?
Geoff Woods
- 10:30am **COFFEE - The Whitworth Suite**

Ballroom

Chairs KERSTIN KUTSCHE and SAHAR MANSOUR

- 11:00am (11) De novo missense variants in RAC3 cause a novel neurodevelopmental syndrome with brain malformations
Tiong Yang Tan
- 11:15am (12) Mutations in the Rac-GEF and Spectrin Repeat Domains of TRIO produce Clinically Distinct Neuro-Behavioural Syndromes
Diana Baralle
- 11:30am (13) A clinical and molecular study of LZTR1-associated Noonan syndrome
Helen Stewart
- 11:45am (14) Recurrent de novo mutations in SLC25A24 cause Fontaine syndrome
Karin Witzl
- 12:00pm (15) Growth disrupting mutations in epigenetic regulatory molecules are associated with abnormalities of epigenetic aging
Emma Baple
- 12:15pm (16) DNA Polymerase epsilon deficiency causes IMAGE Syndrome with variable immunodeficiency
Jennie Murray
- 12:30pm **LUNCH - The Whitworth Suite**