11th Biennial International 22q11.2 Conference

"Celebrating 20 Years of Education and Collaboration"

July 11 – 13, 2018

Whistler, British Columbia, Canada

Day 1 July 11th

7:00 AM *Registration Opens – Harmony Foyer*

8:00 AM *Welcome from the 22q11.2 Society – Harmony Ballroom*
Peter Scambler and Donna McDonald-McGinn

8:10 AM *Welcome from the Local Arrangements Committee – Harmony Ballroom*
Anne Bassett, Jacob Vorstman and Pooja Panwar

8:15 AM *Official Meeting Opens – Harmony Ballroom*

8:20 AM ***2018 Angelo DiGeorge Memorial Medal of Honor Presentation***
2016 Recipient Ann Swillen *– Presenting*

Session I: ***Detection - Care - Collaboration***
Chairs: Peter Scambler and Donna McDonald-McGinn

Invited Speaker:
Bedside to Bench and Back Again – A Caregiver's Tale

8:30 AM **1** ***Anne Bassett***
University of Toronto
Toronto, ON, Canada

Submitted Papers: Detection

8:45 AM **2** ***Donna McDonald-McGinn***
22q and Two – 22q11.2 Deletion and Coexisting Conditions

8:55 AM **3** ***Margaret Harr***
Screening for 22q11.2 Deletions and Duplications in a Large Biobank Data-Set at a Tertiary Medical Center Uncovers New and Undiagnosed Cases

9:05 AM **4** ***Zachary Demko***
Analytical Validation of a SNP-Based Non-Invasive Prenatal Test to Detect the Fetal 22q11.2 Deletion in a Cohort of Maternal Plasma Samples

9:15 AM **5** ***Melissa Maisenbacher***
Detection of Mothers at Risk for the 22q11.2 Deletion by NIPT Highlights Lack of Maternal and Fetal Confirmatory Testing

9:25 AM **Q&A**

Submitted Papers: Care

9:40 AM **6** ***Alice Bailey***
Multidisciplinary Care for Patients with Chromosome 22q11.2 CNVs

9:45 AM **7** ***Emily Gallagher***
Multidisciplinary Care Utilization in Patients with 22q11.2 Deletion Syndrome at Seattle Children's Hospital

9:50 AM **8** ***Scott Hickey***
The Impact of Interdisciplinary Team Care on Adherence to Clinical Care Guidelines in Children with 22q11.2DS

9:55 AM **9** ***Caren Kelman***
Psychosocial Needs Necessitating Social Work Intervention for Patients and Families Affected by the 22q11.2 Deletion and Duplication Syndromes

10:00 AM **Q&A**

Submitted Papers: Collaboration

10:10 AM **10** ***McGinn, MJ****
Current Care Practices For 22q11.2 Deletion and Duplication Syndromes across the Americas: Towards Establishing A Formal Network

10:16 AM **11** ***Chiaki Kitamura***
Exploring Support Needs of Individuals and Families Affected by 22q11.2DS in Japan

10:20 AM **12** ***Christine Loock***
Quality Improvement and Research Collaboration Opportunities in British Columbia and Canada Using Data Linkages for Patients and Families Living with 22q11.2DS

10:25 AM **Q&A**

10:30 AM ***Coffee Break – Harmony Foyer***

Session II: ***On the Road to Improving Care via Novel Interventions***

Chairs: Anne Bassett and Ann Swillen

Invited Speaker:
TBX1 and 22q11.2DS: Transcriptional Mechanisms and Phenotypic Rescue

11:00 AM **13** ***Antonio Baldini***
Institute of Genetics and Biophysics, National Research Council, University Federico II
Naples, Italy

Submitted Papers: Working Towards a Cure

11:30 AM **14** ***Vittorio Sebastiano***
In Vitro Modeling of 22q11 Endodermal Anomalies Using Human Pluripotent Stem Cells: Understanding the Disease to Develop a Cure

11:40 AM **15** ***Katja Weinacht***
Regenerative Thymic Tissues as Curative Cell Therapy for Children with 22q11DS and Severe T Cell Immunodeficiency

11:50 AM **Q&A**

Invited Speaker:
Intervention and Treatment Affecting Brain and Behavior

12:05 PM **16** ***Elizabeth Illingworth***
Institute of Genetics and Biophysics, National Research Council
Naples, Italy

Submitted Papers: Targeted Therapy

12:35 PM **17** ***Doron Gothelf***
A Meta-Analysis of Psychiatric Treatments in 22q11DS

12:40 PM **18** ***Therese Van Amelsvoort***
Gaba and Glutamate in Patients with 22q11.2DS and Healthy Volunteers and the Relation with Cognition: A Randomized Double-Blind 7Tesla Pharmacological MRS Study

12:50 PM **19** ***Marco Armando***
Omega-3 Polyunsaturated Fatty Acids Improve Neurocognitive Functions and Reduce the Conversion Rate to Psychosis in Patients with 22q11.2DS

1:00 PM **20** ***Daniel Meechan***
A Developmental/Molecular Mechanism and Targeted Therapy for Cognitive Disruption in 22q11.2DS

1:10 PM **Q&A**

1:30 PM ***Group Photo followed by Luncheon and Poster Viewing – Harmony Foyer***

Session III: The Classics (per DiGeorge) – Immune, Cardiac, and Endocrine

Chairs: Antonio Baldini and Kathleen Sullivan

Invited Speaker:
Immunology as a Window into Understanding 22q11.2 Related Issues

2:15 PM **21** ***Kathleen Sullivan***
Children's Hospital of Philadelphia and the Perelman School of Medicine at the University of Pennsylvania
Philadelphia, PA, USA

Submitted Papers: Thymus

2:45 PM **22** ***Beruh Dejene***
The Thymus in 22q11.2DS

2:55 PM **23** ***Terrence Crowley****
Variable Immune Deficiency Related to Deletion Size in Chromosome 22q11.2DS

3:00 PM **24** ***Solveig Oskarsdottir***
Long Term Follow-Up of Patients with 22q11DS and Low Trecs in the Newborn Period

3:10 PM **25** ***Carmela Giancotta***
Autoimmunity and its Association with T Cells and B Cell Subsets in Patients with Del22q11.2 Syndrome

3:15 PM **26** ***Agostina Marolda***
Immunological Hallmarks of Hematological Autoimmunity in 22q11.2 Deletion Syndrome (22q11.2DS) Patients: a Multicentric Case-Control Study

3:20 PM **Q&A**

Submitted Papers: Heart

3:35 PM **27** ***Marta Unolt***
Left Pulmonary Artery in 22q11.2DS: Echocardiographic Findings in Humans and Expression of Tbx1 and Knockout Mice

3:45 PM **28** ***Peter Scambler***
Tbx1 Is Required for Vagal Innervation of the Heart

3:55 PM **29** ***Glen Iannucci****
TBX1 Mutation as a Cause of Non-Syndromic Familial Vascular Rings

4:00 PM **30** ***Damien Heine-Suñer***
Vitamin A Supplementation in the Diet, but Not Deficiency, Modulates the Incidence of Congenital Heart Defects in a 22q11DS Mouse Model

4:10 PM **Q&A**

4:20 PM ***Poster Session with Authors (Odd #) and Afternoon Tea – Harmony Foyer***

Session IV: The Classics and More

Chairs: Nicole Sarles-Philip and Solveig Oskarsdottir

Submitted Papers: Cardiac and Endocrine

5:15 PM **31** ***Stephanie Jeong****
22q11.2 Duplication: An Important Cause of Hypoplastic Left Heart Syndrome

5:25 PM **32** ***Spencer van Mil****
Late Mortality in a Genetic Subtype of Tetralogy of Fallot

5:35 PM **33** ***Michele Lambert***
Evaluation of Bleeding Risk with Cardiac Surgery in 22q11.2DS: A Case Control Study

5:45 PM **34** ***Lorraine Katz***
Association between Cardiac Surgery and Hypocalcemia in 22q11.2DS

5:55 PM **35** ***Erik Boot***
Endocrine Alterations in Adults with 22q11.2DS

6:05 PM	**36**	***Michiel Houben*** *Growth in Dutch Children with 22q11.2 Deletion Syndrome - Construction of Reference Growth Charts and Analysis of Determinants of Growth*
6:15 PM		**Q&A**
6:30 PM		***Adjourn Day 1***
8:00 PM		***Poolside and Ping Pong Reception – Harmony Terrace***

Day 2 — July 12th

7:30 AM		***Registration Opens – Harmony Foyer***
8:00 AM		***20th Anniversary Special Service Award Presentation – Harmony Ballroom*** ***Peter Scambler and Anne Bassett*** *– Presenting*
Session V:		***Major Associated Systems*** ***Chairs: Bernice Morrow and Oksana Jackson***
		Invited Speaker: ***CRKL and Mammalian Structural Birth Defects***
8:10 AM	**37**	***Bernice Morrow*** *Albert Einstein College of Medicine* *New York, NY, USA*
		Submitted Papers: A Multisystem Condition
8:25 AM	**38**	***Modupe Adetunji **** *Immature Platelet Fraction is Elevated in Individuals with 22q11.2DS Even with Near Normal Platelet Counts*
8:35 AM	**39**	***Jelle Homans**** *Scoliosis in Association with the 22q11.2DS*
8:40 AM	**40**	***Jelle Homans**** *The Surgical Outcome of Scoliosis Surgery within the 22q11.2DS*

8:45 AM **41** ***Maria Mascarenhas***
Exploring the Gastrointestinal Phenotype in 22q11.2DS

8:55 AM **42** ***Anthony LaMantia***
A Neurodevelopmental Basis for Perinatal Feeding and Swallowing Disorders in 22q11.2

9:05 AM **43** ***Thomas Maynard***
Ranbp1 Haploinsufficiency Contributes to Cranial Neural Crest Anomalies in 22q11.2DS

9:15 AM **Q&A**

9:30 AM **44** ***Oksana Jackson***
Palatal Abnormalities in 22q11.2DS

9:40 AM **45** ***Brian Kellogg***
Revision Speech Surgery in Patients with 22q11.2DS: A Retrospective Review of Speech Outcomes

9:50 AM **46** ***Alexander de la Mar***
Comparison of Speech Outcome after Pharyngoplasty in 22q11.2DS: Cranial Based Pharyngeal Flap versus the Modified Honig Procedure

10:00 AM **47** ***Lisa Elden***
Anatomical Malformations of the Middle and Inner Ear in 22q11.2DS

10:05 AM **48** ***Lisa Elden***
A Cohort Study: Indications and Outcomes of Otolaryngologic Surgeries in Pediatric Patients with 22q11.2DS

10:15 AM **49** ***Christina Gonzalez-Gandolfi****
22q11.2 LCR22D-LCR22E Distal Deletion: Findings in One Illustrative Family

10:20 AM **Q&A**

10:30 AM ***Coffee Break – Harmony Foyer***

Session VI: *Speech, Language and Intellect*

Chairs: Elizabeth Illingworth and Cindy Solot

Invited Speaker:
Hippocampal-Prefrontal Miscommunication and Cognitive Deficits

11:00 AM **50** ***David Kupferschmidt***
National Institute of Health
Bethesda, MD, USA

Submitted Papers: Language, Cognition and Intellect

11:30 AM **51** ***Tessel Boerma****
Language Impairment in the 22q11.2DS

11:40 AM **52** ***Cindy Solot***
Are Language Scores an Early Predictor of Cognitive Decline?

11:50 AM **Q&A**

12:00 PM **53** ***Daniel McGinn****
Maternal Origin of Familial 22q11.2 Deletions Negatively Impacts FSIQ Scores

12:10 PM **54** ***Elemi Breetvelt***
A Normative Chart for Cognitive Development in 22q11DS: Implications for 22q11DS and Beyond

12:20 PM **55** ***Ania Fiksinski****
The Impact of Parental IQ on the Variable Penetrance of Intellectual Impairment in 22q11DS

12:30 PM **56** ***Ann Swillen***
Comparison of Cognitive Abilities and Social Responsiveness Skills in Children with 22q11.2DS and Children with Idiopathic Intellectual Disability

12:40 PM **Q&A**

Invited Speaker:
Towards Understanding the Neuronal Circuits of Psychosis in 22q11.2 Deletion Syndrome

12:50 PM **57** ***Stanislav Zakharenko***
St. Jude Children's Research Hospital
Memphis, TN, USA

1:20 PM **Q&A**

1:30 PM ***Luncheon and Poster Viewing – Harmony Foyer***

Session VII: Developmental Trajectories and Psychotic Illness

Chairs: Raquel Gur and Maude Schneider

Submitted Papers – The Developmental Continuum of 22q11.2DS

2:15 PM **58** ***Laurie Earls***
The Impact of the Aging Epitranscriptome on Neurophysiologic Phenotypes of 22q11.2DS

2:25 PM **59** ***Raquel Gur***
The International 22q11.2DS Brain Behavior Consortium: Challenges and Opportunities

2:35 PM **60** ***Ania Fiksinski****
Trajectories of Processing Speed and Risk for Psychotic Disorders in 22q11DS: A Longitudinal Study

2:45 PM **61** ***Maria Pontillo***
Neurocognitive Profile and Onset of Psychosis in Children, Adolescents and Young Adults with 22q11DS: A Longitudinal Study

2:55 PM **62** ***Wendy Kates***
Longitudinal Trajectories of Psychiatric Diagnoses and Predictors of Persistence in Youth with 22q11.2DS

3:05 PM **Q&A**

3:15 PM **63** ***Maude Schneider***
Longitudinal Evolution of Negative Symptoms in 22q11.2DS and Predictive Value for Transition to Psychosis

3:25 PM **64** ***Maude Schneider***
Visual Processing of Complex Social Scenes in 22q11.2DS: Relevance for Social Impairments?

3:35 PM **65** ***Raquel Gur***
The Evolution of Psychosis in 22q11.2 Deletion Syndrome: Risk and Resilience

3:45 PM **66** ***Kathryn McCabe***
A Pilot Study Characterizing the Social Impairment Phenotype of Children with 22q11.2DS and Children with Idiopathic Autism Spectrum Disorder

3:49 PM **67** ***Elfi Vergaelen****
Differences in Self-and Parent Reporting and the Relation with an At Risk State in Adolescents and Adults with 22q11.2DS

3:55 PM **Q&A**

4:05 PM **68** ***Therese van Amelsvoort***
Stress Reactivity, Cortisol Levels and Experience Sampling in Adults with 22q11.2DS

4:15 PM **69** ***Marco Armando***
Coping Strategies Mediate the Effect of Stressful Life Events on Schizotypal Traits and Psychotic Symptoms in 22q11.2 Deletion Syndrome

4:25 PM **70** ***Kathleen Angkustsiri***
Parenting, Anxiety and Adaptive Function in Children with Chromosome 22q11.2DS

4:35 PM **Q&A**

4:45 PM ***Poster Session with Authors (Even #) and Afternoon Tea – Harmony Foyer***

5:45 PM ***Concurrent Sessions***

I. ***Unknown/Difficult Cases – Audience Participation (2 slides/case)***
Limited Number – Please email (jeongsk@email.chop.edu) intent to present in advance and load during the break – Harmony Ballroom

II. ***Integrative Health – Caring for Oneself via Mindfulness, Massage, Aromatherapy, Yoga and Narrative Medicine***
Maria Mascarenhas, MJ McGinn, and Edward Moss *– Harmony Foyer*

6:30 PM ***Adjourn Day 2***

7:45 PM ***First Nations Procession Assembles – Four Seasons Entrance***

8:00 PM ***Procession Begins Promptly***

8:15 PM ***Cocktail Hour and Gala Dinner - Squamish and Lil'wat Cultural Centre***

Day 3 July 13th

7:30 AM ***Registration Opens – Harmony Foyer***

8:00 AM ***22q11.2 Society Website Update – Harmony Ballroom***
Joanne Loo

8:10 AM ***2018 Unsung Hero Award Presentation***
2016 Recipient Maria Kamper – *Presenting*

Session VIII: ***Genetics and Brain Expression***
Chairs: Laurie Earls and Loydie Jerome-Majewska

Invited Speaker:
Measuring and Predicting the Effect Size of Non-Recurrent CNVs on Cognitive and Behavioral Traits

8:20 AM **71** ***Sebastien Jacquemont***
University of Montreal
Montreal, Canada

Submitted Papers: Genetic Variants and Risk

8:50 AM **72** ***Elemi Breetvelt***
Burden of Rare Coding Variants in the 22q11.2 Deletion Region is Associated with Educational Attainment and Schizophrenia Risk in Two General Population Cohorts

8:55 AM **73** ***Marie De Borre****
Contribution of Rare Hemizygous Variants to Phenotypic Variability in 22q11.2DS

9:05 AM **74** ***Jhih-Rong Lin***
Integrated Genome-Wide Analyses of Rare Variants for Schizophrenia Risk in 22q11.2DS

9:15 AM **75** ***Maria Niarchou****
Genetic Risk for Schizophrenia and Development of Anxiety Disorders and Negative Symptoms in 22q11.2DS

9:25 AM **Q&A**

Submitted Papers: Neurologic Features

9:40 AM **76** ***Madeline Chadehumbe***
Neurologic Challenges in 22q11.2DS

9:50 AM **77** ***Christopher Eaton****
Epilepsy and Seizures in Young People with 22q11.2DS: Prevalence and Links with Neurodevelopmental Disorders

9:55 AM **78** ***Linda Campbell***
Emotion Dysregulation in 22q11.2 Deletion Syndrome

10:00 AM **79** ***Davide Vecchio****
Intellectual Disability, Autism Spectrum Disorder and Seizures Due to 22q11.2-q11.23 Microduplications: Clinical and Molecular Characterization of a New Neurodevelopmental Disorders Genetic Driver

10:05 AM **80** ***Jill Arganbright***
Sleep Patterns and Problems among Children with 22q11 Deletion Syndrome

10:10 AM **81** ***Hayley Moulding****
Sleep Problems and the Relationship with Psychiatric and Neurodevelopmental Difficulties in Young People with 22q11.2DS

10:20 AM **Q&A**

10:30 AM ***Coffee Break – Harmony Foyer***

Session IX: Movement Disorders

Chairs: Erik Boot and Doron Gothelf

Submitted Papers: Understanding Parkinson's and Motor Findings

11:00 AM **82** ***Erik Boot***
Parkinsonian Motor Features in Adults with 22q11.2DS

11:10 AM **83** ***Sinéad Morrison****
Using Objective Measures of Sensorimotor Control to Improve Our Understanding of Motor Difficulties and the Links with Other Neurodevelopmental Problems in 22q11.2DS

11:16 AM **84** ***Matthias Fischer***
Anxiety Phenotypes and Biomarkers for Parkinson's disease in 22q11.2DS

11:26 AM **85** ***Gabriela Repetto***
Analysis of Prodromal Manifestations of Parkinson's disease in Adults with 22q11.2DS

11:30 AM **Q&A**

Session X: Imaging

Chairs: Carrie Bearden and Jacob Vorstman

Submitted Papers: Viewing the Brain from Every Angle

11:40 AM **86** ***Carrie Bearden***
The Enigma 22q11.2DS Working Group: Insights into Neurodevelopment and Psychosis

11:50 AM **87** ***Therese Van Amelsvoort***
Frontal Dopamine D2/3 Receptor Binding in Adults with 22q11.2DS: A [18F] Fallypride Positron Emission Tomography Study

12:00 PM **88** ***Clodagh Murphy***
The Neuroanatomy of Autism Spectrum Disorder in 22q11.2DS

12:10 PM **89** ***Joanne Doherty***
Excitatory-Inhibitory Balance in 22q11.2DS: A Pilot Magnetic Resonance Spectroscopy and Magnetoencephalography Study

12:16 PM **90** ***Clodagh Murphy***
Developing Protocols to Enable MRI Brain Scanning in Infants and Young Children with 22q11.2DS

12:20 PM **Q&A**

Session XI: Looking Ahead

Chairs: Gabriella Repetto and Rosanna Weksberg

Submitted Papers: Adult Outcomes

12:30 PM **91** ***Tracy Heung****
Predictors of All-Cause Mortality in Adults with 22q11.2DS

12:40 PM **92** ***Anne Bassett***
Medical Multimorbidity in Adults with 22q11.2DS

12:50 PM **93** ***Joanne Loo****
Personalized Medical Information Cards for Adults with 22q11.2DS

1:00 PM **94** ***Doron Gothelf***
Education and Employment Trajectories from Childhood to Adulthood in Individuals with 22q11.2DS

1:10 PM **95** ***Paula Goldenberg***
Functional Outcomes in 27 Adults with 22q11.2DS

1:15 PM **96** ***Lisa Palmer***
Identifying Issues Related to Sexual Health in Adults with 22q11.2DS

1:25 PM **Q&A**

1:30 PM ***Luncheon and Poster Viewing – Harmony Foyer***

Session XII: The Future of Clinical and Genetic Research

Chairs: Joris Vermeesch and Christian Marshall

Invited Speaker:
Mechanisms of 22q11.2 Deletions and Duplications

2:15 PM **97** ***Joris Vermeesch***
KU Leuven
Leuven, Belgium

Submitted Papers: Structure, Function and Family

2:45 PM **98** ***Lisanne Vervoort****
Optical Mapping of 22q11.2 Low Copy Repeats Reveals Structural Hypervariability

2:55 PM **99** ***Beverly Emanuel***
Differences in the Frequency of Structural Variation May Affect the Prevalence of the 22q11.2 Deletion Syndrome Amongst Populations

3:05 PM **Q&A**

3:15 PM **100** ***Alexander Urban***
Haplotype Specific Analysis of Chromosome 22q Folding Patterns in 22q11.2DS

3:25 PM **101** ***Michelle Siu***
Elucidating Pathophysiology using Genome-Wide DNA Methylation Analysis

3:35 PM **102** ***Damien Heine-Suñer***
Recurrent de novo 22q11.2 LCR22D-LCR22D Deletion Originating from a Maternal 22q11.2 LCR22B-LCR22D Duplication within a Family

3:40 PM **103** ***Nicholas Delihas***
A Family of Long Non-Coding RNA Genes in 22q11.2 Shows a High Specificity in Chromosomal Location in Low Copy Repeats and These Genes Contain the Translocation Breakpoint Type A Sequence

3:45 PM **Q&A**

Invited Speaker:
The Future of Genomics – Impact on 22q11.2DS and Vice Versa

3:55 PM **104** ***Christian Marshall***
University of Toronto
Toronto, ON, Canada

4:25 PM **Q&A**

4:30 PM ***Afternoon Tea – Harmony Foyer***

Session XIII: ***Discoveries Every Minute***
Chairs: Damian Heine-Suñer and Sebastien Jacquemont

Invited Speaker:
CHD7 and Epigenetics

5:00 PM **105** ***Peter Scambler***
University College London and Great Ormond Street Institute of Child Health
London, UK

Late Breaking Submitted Papers

5:15 PM **106** ***Beata Nowakowska***
Alterations in TANGO2 on the Intact Chromosome 22q11.2 Allele as a Possible Cause of Sudden Death

5:25 PM **107** ***Loydie Jerome-Majewska***
A Novel Snap29 Mutant Mouse Line Models a Subset of Abnormalities found in CEDNIK and 22q11.2 Deletion Syndrome Patients

5:35 PM **108** ***Anne Bassett***
Schizophrenia-Relevant Collections of Genes from the Rest of the Genome Contribute to Schizophrenia Expression in 22q11.2DS

5:45 PM **109** ***Nigel Williams***
Schizophrenia Polygenic Risk Score Analysis in 22q11.2 Deletion Syndrome

5:55 PM **110** ***Jacob Vorstman***
The International 22q11DS Brain and Behavior Consortium: Polygenic Risk Score Analysis IQ, IQ-Decline and Subthreshold Psychosis

6:05 PM **Q&A**

6:20 PM ***Junior Investigator Award***
2016 Award Recipient Ania Fiksinski - *Presenting*

6:25 PM ***Closing Remarks and Announcement of Future Meeting***

6:30 PM ***Adjourn Meeting***

Poster Presentations:

**** - Indicates Junior Investigator*** ***+ - Indicates Top Scoring Poster***

- ***Odd numbered posters – authors present on Wednesday (July 11th)***
- ***Even numbered posters – authors present on Thursday (July 12th)***

111. ***Erica Schindewolf****
Prenatal Thymus Size Analysis Predicting T Cell Count in the First Year of Life

112. ***Russel Jelsema***
Non-Invasive Prenatal Testing for Fetal 22q11.2DS

113. ***Jessica Russo**+***
Impact of Assisted Reproductive Technology on Prevalence and Associated Features in 22q11.2DS

114. ***Jill Arganbright***
Caring for Children with 22q11.2DS: Current State of 22q Multidisciplinary Team Clinics

115. ***Michael Van Lue***
Use of A Single Access Data Portal to Analyze Demographic and Utilization Data of Patients with 22qDS Treated at a Tertiary-Care Pediatric Hospital from 2013-2017

116. ***Maria Kamper***
22q Coordination Portal and App

117. ***Daniela Schweitzer***
Care for Patients with 22q11.2DS within and Outside a Craniofacial Team

118. ***Courtney Hall***
Strategies for Delivering Coordinated Interdisciplinary Team Care to Patients with 22q11.2DS

119. ***Anne Lawlor***
Developing Integrated Care in the Context of Rare Chromosomal Conditions: 22q11.2DS – A Parent/Clinician Collaboration: The Irish Story

120. ***Sara Ruzzi****
Challenges in Providing Comprehensive Care for Patients with 22q11.2DS Living in Geographic/Cultural Isolates – A Case Report

121. ***Paula Goldenberg***
Use of Social Media Targeting Patients and Families Changes National and Global Health Care Outcomes for People with Chromosome 22 Conditions

122. ***Robert Smith**** ***+***
Can Maternal Diabetes Exacerbate Phenotypic Features in Patients with 22q11.2 Copy Number Variants?

123. ***Staci Kallish***
Hypoparathyroidism Presenting as Acute Cardiomyopathy in Undiagnosed 22q11.2 Deletion Syndrome

124. ***Priyal Patel***
Bleeding Phenotype in Children with 22q11DS – Preliminary Results from a Cross-Sectional Study

125. ***Lauren Madhoun***
Dysphagia in Young Children with 22q11.2DS

126. ***Daniela Schweitzer***
The Role of the Speech-Language Pathologist in Craniofacial Team Care for Patients with 22q11.2DS

127. ***Toko Hayakawa***
Language Home Environment of Young Children with 22q11.2DS

128. ***Adriane Baylis***
Vocal Output and Parent Input: A Lena Study of Speech in Young Children with 22q11.2DS

129. ***Adriane Baylis*** [+]
Velopharyngeal Structural and Muscle Variations in Children with 22q11.2DS

130. ***Christopher Hartnick***
Mobilization of the Carotid Arteries to Allow for Pharyngeal Flap in Children with 22q Anomalies and VPI

131. ***Abigail Haenssler***
Analysis of the Impact of Cranial Base Abnormalities on Cerebellar Volume and Velopharyngeal Variables Related to Speech in 22q11.2DS

132. ***Caitlin Cummings***
Phonetic and Phonological Analysis of Speech in Infants and Toddlers with 22q11.2DS

133. ***Leanne Magee***
Pre- and Post-Operative Speech and Psychosocial Functioning in Patients with 22q11.2DS Patients Presenting with Velopharyngeal Dysfunction

134. ***Meghan Boersma****
Surgical Correction of Velopharyngeal Dysfunction in Children with 22q11.2DS

135. ***Sabrina Kragness***
Age-Dependent Brain Expression Pattern of a Novel Micropeptide Encoded in the 22q11.2 Deletion Region

136. ***Donna Cutler-Landsman***
From Research to Practice--Optimizing the Learning Path for Students with 22q11.2DS

137. ***Sinéad Morrison****
Longitudinal Cognitive Development and Association with Prodromal Psychotic Symptoms in Adolescents with 22q11.2DS

138. ***William Parkinson***[+]
The Impact of Prepubescent and Adolescent Socialization on Adult Hippocampal Physiology

139. ***Ania Fiksinski***[* +]
Neurocognition and Adaptive Functioning in a Genetic High-Risk Model of Schizophrenia

140. ***Maria Pontillo*** [+]
Negative Psychotic Symptoms in 22q11.2 Deletion and their Association with the Neuropsychological Profile

141. ***Ana Francisco***
Brain Measures of Basic Auditory Processing in Adolescents and Adults with 22q11.2DS

142. ***Lily Van***[* +]
Treatment of Schizophrenia in 22q11.2DS

143. ***Yousuke Kumakura***
Meeting the Diverse Needs of Adolescents and Young Adults with 22q11.2DS

144. ***Samantha D'Arcy***[*]
Characterizing Cooking Habits and Confidence in Food Skills in Adults with 22q11.2DS

145. ***Erica Tindale***
How Do You Feel? A Parent's Perspective

146. ***Christine Loock***
Active Patient Involvement in Medical Education at the University of British Columbia: Partnering with 22q11.2DS Families

147. ***Julie Baskin***[*]
Mid-childhood adaptive function in individuals with 22q11.2 deletion syndrome is associated with immune-deficiency, but not oral/palatal or cardiac phenotypes

148. ***Sinéad Morrison***[*]
Vulnerable Periods for Cognitive Development in Individuals with 22q11.2 Deletion Syndrome and Relationship with Psychotic Disorder