

T21

June 8-9-10 2021

Virtual Conference

Trisomy Research Society



RESEARCH
SOCIETY

www.t21rs2021.com

SCIENTIFIC PROGRAM



Committees

Executive Committee

Andre Strydom
(President)

María Martínez de Lagran
(Secretary)

Yannick Vermeiren
(Treasurer)

Elizabeth Head
Eugene Yu
Mara Dierssen
Jean Delabar

Sandra Guidi
Anne-Sophie Rebillat
William Mobley

Elizabeth Fisher
María Carmona Iragui
Alberto Costa

Program Committee

Elizabeth Head
(Chair)

Anita Bhattacharyya
Brian Skotko
Tao Ma

Yann Herault
Mara Dierssen
Kelly Sullivan

Floriana Costanzo
María Carmona Iragui

Organizing Committee

Jorge Busciglio
(Chair)

Mara Dierssen

Andre Strydom

William Mobley

Sponsors

Main Sponsors



Funding Members



We acknowledge the support of the University of California Irvine Special Events & Protocol Office for making possible The 1st T21RS Virtual Conference!

Amanda Sivgals, Director

Allison Mabbot, Associate Director

T21 June 8-9-10 2021
Virtual Conference
21 Trisomy Research Society

Plenary Speakers



Dr. Ben Handen



Dr. Marie Claude Potier



Dr. Stephanie Sherman

Speakers



Dr. Andy Aschenbrenner



Dr. Isabel Barroeta



Dr. Priya Chandan



Dr. Joaquin Espinosa



Dr. Lisi Flores-Aguilar



Dr. Sandra Guidi

Speakers



Dr. Elizabeth Head



Dr. James Hendrix



Dr. Hampus Hillerstrom



Dr. Matthew Janicki



Dr. Maria Martinez de
Lagran Cabredo



Dr. Eleanor Molloy



Dr. Elliott Mufson



Dr. Maria del Carmen
Ortega



Dr. Victoria Puig

Speakers



Dr. Ruma Raha-Chowdhury



Dr. Kenneth Rockwood



Dr. Fedal Saini



Dr. Johnathan Santoro



Dr. Stephanie Santoro



Dr. Andre Strydom



Dr. Michael A Yassa



Dr. Shahid Zaman

Scientific Program

7

TUESDAY, JUNE 8 2021 Biomarkers and Neuropathology in Down síndrome

- 4:00 pm CET/7:00 am PST **WELCOME**
Andre Strydom (UK), Jorge Busciglio (Chair USA) and Elizabeth Head (USA)
- 4:15 pm CET/7:15 am PST **T21RS GENERAL ASSEMBLY**
Andre Strydom (UK) and María Martínez (Spain)
- 5:00 pm CET/8:00 am PST **Break**
- 5:20 pm CET/8:20 am PST **PLENARY LECTURE**
ABC-DS: Progress update and recent findings.
Ben Handen (USA)
- 6:05 pm CET/9:05 am PST **Break**
- 6:25 pm CET/9:25 am PST **SYMPOSIUM SESSION 1**
Molecular and cellular pathology in Down syndrome brain with aging: Neuropathological studies.
Chair: *Lotta Granholm (USA)*
- Tau cortical neuron expression profiling in demented and nondemented cases with Down syndrome.**
Elliott Mufson (USA)
- The role of innate immune and iron-related putative biomarker proteins in Alzheimer's disease pathology in Down syndrome.**
Ruma Raha-Chowdhury (UK)
- Lewy body pathology in Down syndrome brain post mortem.**
Isabel Barroeta (Spain)
- Live discussion**
- 7:10 pm CET/10:10 am PST **Break**
- 7:30 pm CET/10:30 am PST **TRAINEE BLITZ**
- 8:15 pm CET/11:15 am PST **CLOSE OF DAY 1**

Scientific Program

WEDNESDAY, JUNE 9 2021
Behavioral and Clinical Studies in Down syndrome

4:00 pm CET/7:00 am PST **PLENARY LECTURE**
The role of endo-lysosomal dysfunction in Down syndrome.
Marie Claude Potier (Paris)

4:45 pm CET/7:45 am PST **Break**

5:05 pm CET/8:05 am PST **SYMPOSIUM SESSION 2**
Neural correlates of intellectual disability.
Chair: *Victoria Puig (Spain)*

Prefrontal-hippocampal neural dynamics as predictors of cognitive impairment and rescue in Down syndrome.
Victoria Puig (Spain)

Electrocortical correlates of auditory processing in Down syndrome.
Fedal Saini (UK)

Multimodal MRI biomarkers for Alzheimer disease in Down syndrome.
Michael Yassa (USA)

Live discussion

5:50 pm CET/8:50 am PST **Break**

6:10 pm CET/9:10 am PST **SCIENCE AND SOCIETY**
Opening words
Maria Carmona (Spain) and Anne-Sophie Rebillat (France)

Community engaged research: the down syndrome community informing research.
James Hendrix (USA)

Cultural program, drama piece.
Proposed by Sujay Ghosh (India)

Community engaged research: centering self-advocates.
Priya Chandan (USA)

Scientific Program

9

WEDNESDAY, JUNE 9 2021 Behavioral and Clinical Studies in Down syndrome

Research and the voice of caregivers – Results of surveys and focus groups.

Hampus Hillerstrom (USA)

Longitudinal data outcomes on adults with down syndrome and dementia supported in group homes.

Matthew Janicki (USA)

Live discussion and closing remarks.

Maria Carmona (Spain) and Anne-Sophie Rebillat (France)

7:10 pm CET/10:10 am PST Break

7:30 pm CET/10:30 am PST SYMPOSIUM SESSION 3

Down syndrome regression disorder: Clinical characteristics and differential diagnosis.

Chair: *Johnathan Santoro (USA)*

Are we underestimating the presence and treatment of mental illness in people with Down syndrome?

Maria del Carmen Ortega (Spain)

Regression in down syndrome: multi-center data on clinical phenotypes.

Stephanie Santoro (USA)

Down syndrome regression disorder: neuroimmunologic phenomenon and responses to immunomodulatory therapy.

Johnathan Santoro (USA)

Live discussion

8:15 pm CET/11:15 am PST CLOSE OF DAY 2

T21 June 8-9-10 2021

Virtual Conference

21 Trisomy Research Society

Scientific Program

THURSDAY, JUNE 10 2021
Inflammation in Down syndrome and Future Clinical Trials

4:00 pm CET/7:00 am PST

PLENARY LECTURE

Medical vulnerability of individuals with down syndrome to severe COVID-19: data from the Trisomy 21 Research Society COVID-19 survey.

Stephanie Sherman (USA)

4:45 pm CET/7:45 am PST

Break

5:05 pm CET/8:05 am PST

SYMPOSIUM SESSION 4

Brain and systemic inflammation in individuals with Down syndrome.

Chair: *Lisi Flores-Aguilar (Canada)*

Neuroinflammation across the lifespan of individuals with Down syndrome.

Lisi Flores-Aguilar (Canada)

Interferon hyperactivity in Down syndrome: causes, consequences, and therapeutic opportunities

Joaquin Espinosa (USA)

Systemic inflammation in children with Down syndrome.

Eleanor Molloy (Ireland)

Live discussion

5:50 pm CET/8:50 am PST

Break

6:10 pm CET/9:10 am PST

SYMPOSIUM SESSION 5

Clinical trials to prevent Alzheimer's disease in Down syndrome: state-of-the-art in clinical outcome measures.

Chair: *Andre Strydom (UK)*

CAMCOG-DS-II: development and validation of a clinical and research tool for diagnosis and neuropsychological assessment in people with Down syndrome with suspected dementia.

Shahid Zaman (UK)

Scientific Program

11

THURSDAY, JUNE 10 2021 Inflammation in Down syndrome and Future Clinical Trials

The H21/ Life-DSR cognitive test battery – identification of a trial outcome measure for early intervention in Down syndrome and Alzheimer disease using longitudinal data across cohorts.

Andy Aschenbrenner (USA)

Novel endpoints in Down syndrome and Alzheimer disease: Using goal attainment scaling to measure patient-centered outcomes.

Rockwood (USA)

Live discussion

6:55 pm CET/9:55 am PST **Break**

7:15 pm CET/10:15 am PST **T21RS SOCIETY AWARDS**

Annette Karmiloff-Smith and Michael Harpold Dissertation Awards

Stephanie Sherman (USA)

Trainee Blitz Awards

7:45 pm CET/10:45 am PST **CLOSING**

Andre Strydom (UK), Jorge Busciglio (USA), Elizabeth Head (USA) and William Mobley (USA)

Trainee Blitz

Altered developmental morphology of human iPSC-derived Down syndrome neurons and primary mouse hippocampal neurons overexpressing DSCAM

Manasi Agrawal, Kristy Welshhans

Trisomy 21 as a risk factor for severe COVID-19: interplay between immunosenescence, obesity and comorbidities

Paula Araya, Jessica Shaw, Katherine Waugh, Keith Smith, Ross Granrath, Belinda Enriquez Estrada, Kayleigh Worek, Matthew Galbraith, Kohl Kinning, Kelly Sullivan, Kimberly Jordan, Angela Rachubinski, Joaquin Espinosa

Mitovesicles are a newly identified population of extracellular vesicles of mitochondrial origin altered in vivo in Down syndrome brains

Pasquale D'Acunzo, Efrat Levy

Temporal dynamics of intrinsic brain network functional connectivity during progression of Alzheimer's disease in Down syndrome

Natalie Diprospero, Elizabeth Head, Michael Yassa

Postnatal development of oxygen consumption and sleep-wake cycle in Ts65Dn mice

Eduardo Dominguez, Pilar Hernández-Barrera

From defective engrams to memory pathology in Down syndrome

Mr. Álvaro Fernández Blanco, Alfonsa Zamora-Moratalla, Mara Dierssen

Forebrain-specific Sonic hedgehog overexpression improves cognitive function in a Down syndrome mouse model and normal littermates

Postdoc Fellow Feng Gao, Donna Klinedinst, Roger Reeves

Caregiver knowledge of sleep apnea in subjects with Down syndrome

Phd Sandra Gimenez Badia, Ignacio Tapia, Christopher Hartnick, Andrea Kelly, Anne-Sophie Rebillat, Ricardo Osorio, Sally Shott, Quan Ni, Levedowski, Brian Skotko, Nicole White, Juan Fortea, Hampus Hillerstrom, James Hendrix

Understanding etiology of chromosome 21 Nondisjunction and Down syndrome Birth through Gene X Environment model

Pinku Halder

Trainee Blitz

13

Hippocampal circuit-specific perturbations of GABAergic inhibition and their relationship to Down syndrome

Saad Hannan, Hannah Lee, Eva Lana-Elola, Victor Tybulewicz, Elizabeth M C Fisher, Trevor G Smart

The Ts66Yah Phenotype: consequences of the absence of Ts65Dn non-orthologous Mmu17 Genes

Elise Kane, Lauren Bishop, Jeroen Pennings, Diana Bianchi, **Faycal Guedj**

Increasing activation of the sonic hedgehog pathway normalizes dysregulation of Olig2 and Nkx2.2 in Trisomic iPSCs During pre-OPC Differentiation

Jenny Klein, Zhen Li, Ella Zeldich, Tarik Haydar

Aberrant protein O-GlcNAcylation ties metabolic alterations with the development of AD hallmarks in Down syndrome

Chiara Lanzillotta, Ilaria Zuliani, Fabio Di Domenico

Sleep apnea may be a modifiable target in the development of cerebrovascular disease and cortical amyloid in older adults with Down syndrome

Patrick Lao, Molly Zimmerman, Jose Gutierrez, David Keator, Kay Igwe, Krystal Laing, Dejanja Cotton-Samuel, Mithra Sathishkumar, Fahmida Moni, Howard Andrew, Sharon Krinsky-McHale, Elizabeth Head, Joseph Lee, Florence Lai, Michael Yassa, Diana Rosas, Wayne Silverman, Ira Lott, Nicole Schupf, Adam Brickman

Identification of cell cycle defects and inter-individual variability in iPSCs and NSCs derived from Individuals with Down syndrome: Paving the way to personalized prenatal therapy

Sarah Lee, Samuel D. Morris, Diana Bianchi, Faycal Guedj

Integrated development and modulatory effects of egcg on brain, bones and cognition in the TS65DN Down Syndrome mouse model.

Sergi Llambrich Ferré, Rubèn González, Jorge Roldán, Julia Albaigès, Jens Wouters, Willy Gsell, Mara Dierssen, James Sharpe, Neus Martínez-Abadías, Greetje Vande Velde

Preclinical modelling in the mouse of altered neuroinflammation in Alzheimer's disease – Down syndrome

Paige Mumford, Suzanna Noy, Victor Tybulewicz, Elizabeth Fisher, Soyon Hong, Frances Wiseman

T21 June 8-9-10 2021

Virtual Conference

21 Trisomy Research Society

Trainee Blitz

Polymorphisms in maternal RNF212 and PRDM9 alters recombination pattern during meiosis I and results in nondisjunction within oocytes

Upamanyu Pal

The association between physical activity and dementia-related symptoms in Down syndrome

Sarah Pape, Asaad Baksh, Andre Strydom

A Whole Genome CRISPR Screen for enhancers and suppressors of trisomy 21 cell growth

John Replogle, Janine LeBlanc-Straceski, Angelika Amon

Systematic behavioral screen of 21st chromosome gene overexpression in *c. elegans*

Sophia Sanchez, Briana Syed, Caymee Bigham, Sofia Smith, Sarah Nordquist, Katherine Perks, Jon Pierce

Evaluating working memory outcome measures for children with Down syndrome

Emily Schworer, Anna Esbensen, Deborah Fidler, Dean Beebe, Adam Carle, Susan Wiley

Investigation of hippocampal ripples and parvalbumin-positive interneurons in a segmental Down syndrome model, the Dp1Tyb mouse

Nathanael Shing, Pishan Chang, Daniel Bush, Victor Tybulewicz, Matthew C Walker, Elizabeth M C Fisher

Single-Cell RNA-sequencing identifies cell type-specific molecular changes in down syndrome hippocampus

Cesar Sierra, Ilario De Toma, Mara Dierssen

Altered skeletal development in DS mouse models is influenced by age, sex, and the content of dosage-sensitive genes

Jared Thomas, Kourtney Sloan, Joseph M Wallace, Randall J Roper

Trisomy 21 leads to immune hyperresponsiveness and differential ciliary function in response to influenza infection

Samantha Thomas, Kambez Benam

Trainee Blitz

15

The Ts65Dn Down syndrome mouse model presents developmental pulmonary deficits

Birger Tielemans, Sergi Llambrich Ferre, M Fopke Marain, Erik Verbeken, Jeroen Vanoirbeek, Neus Martinez-Abadias, Greetje Vande Velde

The effects of CSTB duplication on APP/amyloid- β pathology and cathepsin activity in a mouse model

Yixing Wu, Heather Whittaker, Suzanna Noy, Karen Cleverley, Veronique Brault, Yann Herault, Elizabeth Fisher, Frances Wiseman

Long-term consequences of early-in-life genetic and pharmacological interventions In Down Syndrome mice

Fellow Ilias Ziogas, Martina Parrini, Ilaria Colombi, Andrea Contestabile, Laura Cancedda

Excessive dendritic inhibition in the prefrontal cortex of Ts65Dn mice persist throughout development into adulthood.

Javier Zorrilla De San Martin, Pau Nebot, Thomas Gener, Maria Victoria Puig, Marie-Claude Potier, Alberto Bacci

T21 June 8-9-10 2021

Virtual Conference

21 Trisomy Research Society



Posters

Progressive worsening of balance, gait and motor coordination along the Alzheimer's disease continuum in Down syndrome.

Miren Altuna Azkargorta, Laura Videla, Isabel Barroeta, Susana Fernández, Bessy Benejam, Concepción Padilla, María Carmona-Iragui, Jordi Pegueroles, Diana Garzón, María Florencia Iulita, Rafael Blesa, Alberto Lleó, Juan Fortea

One-carbon pathway and cognitive skills in children with Down syndrome

Francesca Antonaros, Beatrice Vione

Adaptive skills and executive function in youth with Down syndrome

Dr. Julia B. Barrón-Martínez, Judith Salvador-Cruz

Early detection of reduced airway passages to prevent obstructive sleep apnea in Down Syndrome

Luis Echeverry Quiceno, Neus Martínez-Abadías, Laura Maréchal, Juan Fortea, Sara Giménez, Xavier Sevillano, Yann Heuzé

Using organotypic brain slice cultures to assess microglia inflammasome activity in response to amyloid- β , in a mouse model of Down syndrome

Cliona Farrell, Ms Paige Mumford, Dervis Salih, Christina Toomey, Elizabeth Fisher, Frances Wiseman

Volumetric analysis of the subplate remnant in term, preterm and neonates with Down syndrome scanned at term-equivalent age.

Abi Gartner, Prachi Patkee, Ana Baburamani, Olatz Ojinaga Alfageme, Jonathan O'Muircheartaigh, Mary Rutherford

Focusing on the embryonic and neonatal time periods: Transcriptome, pathway, and behavioral analyses in the three most common mouse models of Down Syndrome

Faycal Guedj, Elise Kane, Sabina Khantsis, Jeroen Pennings, Diana Bianchi

Investigating neuroinflammation and the role of complement dysregulation in Alzheimer's disease associated with Down Syndrome

Rhian Llewellyn, Frances Wiseman, Carlo Sala Frigerio

Posters

17

Mechanisms underlying cognitive impairment in the Dp(10)2Yey mouse model of Down Syndrome

Phillip Muza, Pishan Chang, Daniel Bush, Steven J West, Marta Perez-Gonzalez, Tara Canonica, Suzanna Noy, Loukia Katsouri, Frances Wiseman, Neil Burgess, Trevor Smart, Mark Good, Victor L.J. Tybulewicz, Matthew Walker, Elizabeth M.C. Fisher

Assessment of cerebral white matter microstructure in neonates with Down Syndrome.

Olatz Ojinaga Alfageme, Prachi A. Patkee, Ana A. Baburamani, Ralica Dimitrova, Maximilian Pietsch, Johanna Kangas, Grainne McAlonan, Emily K. Farran, Michael SC Thomas, Mary A. Rutherford

Proteomics study of peripheral blood mononuclear Cells in Down syndrome children

Sara Pagnotta, Chiara Lanzillotta, Viviana Greco, Diletta Valentini, Marzia Perluigi

Understanding the mechanisms underlying altered neural dynamics in the Dp1Tyb mouse model of Down Syndrome

Marta Perez-Gonzalez, Pi-Shan Chang, Phillip Muza, Daniel Bush, Suzanna Noy, Loukia Katsouri, Steven J. West, Victor L.J. Tybulewicz, Matthew C. Walker, Elizabeth M.C. Fisher

Effects of treatment with the DYRK1A Inhibitor CX-4945 on Down syndrome phenotypes in Ts65Dn mice

Faith Prochaska, Laura Hawley, Randall J. Roper, Charles R. Goodlett

Trisomy 21 accelerates neural differentiation of iPSCs

Kendra Prutton, John Marentette, James Roede

Nutritional supplements, nutritional habits and biochemical markers in a T21 Brazilian population of infants and children.

Júlia Maria Radigonda, Andrea Morgato De Mello Miyasaki, Erica Rodrigues Coelho, Estefania Gastaldello Moreira

Polymorphisms in chromosome segregation apparatus candidates SYCP3 and MAD2L1 predispose women to Down syndrome childbirth.

Anirban Ray, Sujay Ghosh

T21 June 8-9-10 2021

Virtual Conference

21 Trisomy Research Society

Posters

Long-Term cannabinoid Type-1 receptor inhibition restores specific neurological phenotypes in the TS65DN mouse Model of Down syndrome.

Anna Vazquez Oliver, Silvia Pérez-García, Nieves Pizarro, Lydia Garcia-Serrano, Gabriela Bordeanu, Pier-Vincenzo Piazza, Rafael de la Torre, Rafael Maldonado, Andrés Ozaita

Astrocytes modulate learning and memory in Down syndrome

Alfonsa Zamora-Moratalla, Mara Dierssen

Index of Authors

A

Agrawal, Manasi
Albaigès, Julia
Altuna Azkargorta, Miren
Amon, Angelika

B

Baburamani, Ana
Bacci, Alberto
Baksh, Asaad
Barroeta, Isabel
Barrón-Martínez, Julia B.
Beebe, Dean
Benam, Kambez
Benejam, Bessy
Bianchi, Diana

C

Cancedda, Laura
Canonica, Tara
Carle, Adam
Carmona-Iragui, María
Chang, Pishan

D

D'Acunzo, Pasquale
De Toma, Ilario
Di Domenico, Fabio
Dierssen, Mara

E

Echeverry Quiceno, Luis
Enriquez Estrada, Belinda

F

Farran, Emily K.
Farrell, Cliona
Fernández, Susana
Fernández Blanco, Álvaro
Fidler, Deborah
Fisher, Elizabeth
Fortea, Juan

Andrew, Howard
Antonaros, Francesca
Araya, Paula

Bigham, Caymee
Bishop, Lauren
Blesa, Rafael
Bordeanu, Gabriela
Brault, Veronique
Brickman, Adam
Burgess, Neil
Bush, Daniel

Chang, Pi-Shan
Cleverley, Karen
Colombi, Ilaria
Contestabile, Andrea
Cotton-Samuel, Dejana

Dimitrova, Ralica
Diprospero, Natalie
Dominguez, Eduardo
de la Torre, Rafael

Esbensen, Anna
Espinosa, Joaquin

Index of Authors

G

Galbraith, Matthew
Gao, Feng
Garcia-Serrano, Lydia
Gartner, Abi
Garzón, Diana
Gastaldello Moreira, Estefania
Gener, Thomas
Ghosh, Sujay
Giménez, Sara

H

Halder, Pinku
Hannan, Saad
Hartnick, Christopher
Hawley, Laura
Haydar, Tarik
Head, Elizabeth

I

Igwe, Kay

J

Jordan, Kimberly

K

Kane, Elise
Kangas, Johanna
Katsouri, Loukia
Keator, David
Kelly, Andrea

L

Lai, Florence
Laing, Krystal
Lana-Elola, Eva
Lanzillotta, Chiara
Lao, Patrick
LeBlanc-Straceski, Janine
Lee, Hannah
Lee, Joseph
Lee, Sarah

Gimenez Badia, Sandra
González, Rubèn
Good, Mark
Goodlett, Charles R.
Granrath, Ross
Greco, Viviana
Gsell, Willy
Guedj, Faycal
Gutierrez, Jose

Hendrix, James
Herault, Yann
Hernández-Barrera, Pilar
Heuzé, Yann
Hillerstrom, Hampus
Hong, Soyon

Iulita, María Florencia

Khantsis, Sabina
Kinning, Kohl
Klein, Jenny
Klinedinst, Donna
Krinsky-McHale, Sharon

Levedowski, Dan
Levy, Efrat
Li, Zhen
Llambrich Ferre, Sergi
Lleó, Alberto
Llewellyn, Rhian
Lott, Ira

Index of Authors

L

lanzillotta, Chiara

M

Maldonado, Rafael

Marain , Fopke

Maréchal , Laura

Marentette, John

Martinez-Abadias, Neus

McAlonan, Grainne

Moni, Fahmida

Morgato De Mello Miyasaki, Andrea

Morris, Samuel D.

Mumford, Paige

Muza, Phillip

N

Nebot, Pau

Ni, Quan

Nordquist, Sarah

Noy, Suzanna

O

Ojinaga Alfageme, Olatz

O'Muircheartaigh, Jonathan

Osorio, Ricardo

Ozaita, Andrés

P

Padilla, Concepción

Pagnotta, Sara

Pal, Upamanyu

Pape, Sarah

Parrini, Martina

Patkee, Prachi

Pegueroles, Jordi

Pennings, Jeroen

Pérez-García, Silvia

Perez-Gonzalez, Marta

Perez-Gonzalez, Marta

Perks, Katherine

Perluigi, Marzia

Piazza, Pier-Vincenzo

Pierce, Jon

Pietsch, Maximilian

Pizarro, Nieves

Potier, Marie-Claude

Prochaska, Faith

Prutton, Kendra

Puig, Maria Victoria

R

Rachubinski, Angela

Radigonda, Júlia Maria

Ray, Anirban

Rebillat, Anne-Sophie

Reeves, Roger

Replogle, John

Rodrigues Coelho, Erica

Roede, James

Roldán, Jorge

Roper, Randall J

Rosas, Diana

Rutherford , Mary

Index of Authors

S

Sala Frigerio, Carlo
Salih, Dervis
Salvador-Cruz, Judith
Sanchez, Sophia
Sathishkumar, Mithra
Schupf, Nicole
Schworer, Emily
Sevillano, Xavier
Sharpe, James
Shaw, Jessica
Shing, Nathanael
Shott, Sally

T

Tapia, Ignacio
Thomas, Jared
Thomas, Michael SC
Thomas, Samantha
Tielemans, Birger

V

Valentini, Diletta
Vande Velde, Greetje
Vanoirbeek, Jeroen
Vazquez Oliver, Anna

W

Walker, Matthew
Wallace, Joseph M
Waugh, Katherine
Welshhans, Kristy
West, Steven J
White, Nicole

Y

Yassa, Michael

Z

Zamora Moratalla, Alfonsa
Zeldich, Ella
Zimmerman, Molly
Ziogas, Ilias

Sierra, Cesar
Silverman, Wayne
Skotko, Brian
Sloan, Kourtney
Smart, Trevor
Smith, Keith
Smith, Sofia
Strydom, Andre
Sullivan, Kelly
Syed, Briana

Toomey, Christina
Tybulewicz, Victor

Verbeken, Erik
Videla, Laura
Vione, Beatrice

Whittaker, Heather
Wiley, Susan
Wiseman, Frances
Worek, Kayleigh
Wouters, Jens
Wu, Yixing

Zorrilla De San Martin, Javier
Zuliani, Ilaria

Organized by



Technical Secretariat

Bco
Congresos
Barceló
GRUPO

Bconnects
> *Hybrid & Virtual*
Barceló
GRUPO

BCO Congressos
Plaza de Europa, 17-19
08908 L'Hospitalet de Llobregat
Barcelona (Spain)
t21rs2021@bcocongresos.com