

6th

INTERNATIONAL
CONFERENCE

Denver, CO

June 17-20, 2026



Insights from Across the Lifespan



Program

www.t2irs2026.com

t2irs2026@bcocongresos.com

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• Welcome •

Dear colleagues and members of the T21RS, as president and president elect, and on behalf of the Organizing Committee, it is with great pleasure that we invite you to participate in the **6th International Conference of the Trisomy 21 Research Society**. The conference will be held in Denver, Colorado from June 17th to June 20th, 2026.

The mission of T21RS is to improve the quality of life for people with Down syndrome and their families through the application of basic and applied research, to stimulate translational research and to implement new scientific knowledge. This conference will be a unique event, offering us the opportunity to meet in person and discuss the most important challenges and progress in Down syndrome research, as well as its future, together.

This meeting will bring together researchers, clinicians, industry leaders, families and patient organizations to shape the future of Down syndrome research. The international community of researchers on Down syndrome will include early-carrier scientists, and we are honored to host distinguished speakers for our plenary lectures. The conference will feature Science and Society and industrial sessions, round tables, blitz presentations, and pre-meeting satellites. During our gala dinner, we will present awards for outstanding Ph.D. theses.

Our **Local Organizing Committee** led by Dr. Lotta Granholm, along with the **Scientific Program Committee**, chaired by Dr. Kelly Sullivan have worked together to provide an outstanding scientific program. This conference promises to be an informative and inspiring gathering.

We look forward to seeing you all in Denver!

Renata Bartesaghu
President University
of Bologna
Italy

Anita Bhattacharyya
President Elect T21 RS
University of Wisconsin
Madison

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LINDA CRNIC INSTITUTE
for DOWN SYNDROME

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• Venues •

- 1** **Denver Art Museum**
Gala Dinner (June 20)
0,7 miles from the Grand Hyatt Denver



- 2** **Grand Hyatt Denver**
Meeting venue
1750 Welton St,
Denver, CO 80202, USA



- 3** **Tivoli Station Auraria Campus Store**
Welcome Reception (June 17)
900 Auraria Pkwy 205,
Denver, CO 80204, USA



- 4** **St Cajetan's**
Auraria Campus
Satellite Meeting (June 16)
101 Lawrence Way,
Denver, CO 80204 USA



• Organizing Committee •



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Huntington Potter
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Christina Coughlan
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Kelly Sullivan
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• Organizing Committee •



Noah Johnson
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Youllee Kim
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Lotta Granholm
**University of Colorado /
CU Anschutz**
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Chair of the T21RS 2026 Denver

• Local Organizing Committee •



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• Local Organizing Committee •



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Youllee Kim
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Bryn Gelaro
***Vice President of Research &
Medical Care of Global Down
Syndrome Foundation***



Michelle Sie Whitten
***President & CEO of Global
Down Syndrome Foundation***



• Programme Committee •



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Anschutz Medical Campus**
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Trinity College Dublin
Ireland



William Mobley
University of California
USA



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**Bambino Gesù Children's
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(USP)**
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**The Lundquist Institute
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**Cincinnati Children's
Hospital Medical Center**
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UK



Patrick Lao
Columbia University
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Weihong Song
Wenzhou Medical University
China

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Texas A&M University
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Education and training
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Italy
Chair of Education and training committee

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UK
Chair of Preclinical Committee



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Brian Skotko
Massachusetts General Hospital
USA
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Eugenio Barone
Sapienza University of Rome
Italy
Chair of Sponsorship & Membership Committee



Kelly Sullivan
University of Colorado Anschutz
Medical Campus
USA
Chair Program Committee

• General information •



Conference Venues

The 6th International Conference of the Trisomy 21 Research Society takes place in **St. Cajetan's, Auraria Campus** (June 16) and **Grand Hyatt Denver** (June 17 to June 20) in Denver, USA.



Registration

Registrations have been managed by Bco Congressos.

- The **registration desk** will be located on the 38th floor of the Grand Hyatt Denver.

- Your **badge** will be given to you at the registration desk. Badge is always required in the venue.

- **Registration fee includes:** Scientific sessions, posters, exhibition area, final program, coffees during breaks and lunches.

Registration desk opening hours:

- 16 June - 11:30 AM - 12:00 PM
(St. Cajetan's at Auraria Campus for the Satellite Meeting)
- 17 June - 08:00 AM - 6:00 PM
- 18 and 19 June - 08:00 AM - 7:00 PM
- 20 June - 08:00 AM - 4:00 PM



Badges

At the Conference, a badge will be provided on-site with your registration documents. Participants are always requested to wear their badge inside the venue and at all social events organized within the context of the Conference.

If your badge is lost, a new badge will be printed.



Meeting rooms

The **meeting rooms** where the sessions of the conference will be held are:

- Room 1 Capitol Ballroom (plenary room).
- Room 2 Crystal A (breakout room).
- Room 3 Crystal B/C. (breakout room).

Abstracts accepted as poster will be displayed in the Poster Area, between the 2nd and the 38th floor.



Exhibition

The exhibition will be located **between the 2nd and the 38th floor** at the Grand Hyatt Denver.



Certificate of attendance

A certificate of attendance will be sent to all participants, by the Technical Secretariat, via e-mail after the Conference.



Disclaimer

All best endeavors will be made to present the program as published.

However, TR21RS 2026 Conference and its agents reserve the right to alter or cancel, without prior notice, any arrangements, timetables, plans or other items relating directly or indirectly to the Conference, for any cause beyond its reasonable control.

TR21RS 2026 Conference and its agents are not liable for any loss or inconvenience caused as a result of such cancellation. Delegates are advised to take out their own travel insurance and to extend their policy to cover personal possessions as the conference does not cover individuals against cancellation of bookings or theft or damage to belongings.



Social Program

Welcome Reception

Date and Time: Wednesday June 17, 7:00 PM.

Place: Tivoli Turnhalle, Auraria Campus.

Admission: Included in the registration fee. Badge must be worn visibly at all times.

Gala Dinner

Gala Dinner is only available to participants who purchased a ticket.

Date and time: Saturday June 20, 5:45 PM.

Place: Denver Art Museum.

• Keynote Authors •



Mary McCarron

Professor Mary McCarron, PhD RNID RGN BNS FAAN FTCD, is an internationally recognised leader in ageing, dementia and intellectual disability.



Leonard Abbeduto

Leonard Abbeduto, Ph.D., is a distinguished professor emeritus at the University of California, Davis.



Dr. Sonja Rasmussen

Sonja Rasmussen, MD, MS currently serves as Professor in the Department of Genetic Medicine and the Department of Gynecology and Obstetrics at Johns Hopkins School of Medicine.



Dr. Juan Fortea

Juan Fortea, MD, PhD, is a behavioral neurologist and Director of the Memory Unit at Hospital de la Santa Creu i Sant Pau in Barcelona. He is also the founding Director of the Alzheimer-Down Unit at the Catalan Down Syndrome Foundation and Hospital Sant Pau.

• Scientific Programme •

 Tuesday, 16 June 2026	
Satellite Meeting St Cajetan's – Auraria Campus	
12:00 PM – 12:10 PM	Welcome
12:10 PM – 12:20 PM	Preclinical Committee Resources updates
12:20 PM – 1:30 PM	Session One: Vaccines
1:30 PM – 2:00 PM	Break 1
2:00 PM – 3:00 PM	Session Two: Congenital Heart Defects
3:00 PM – 3:30 PM	Break 2
3:30 PM – 5:00 PM	Session Three: Infantile Spasms
5:00 PM – 5:10 PM	End and Acknowledgements



 **Satellite Meeting | St Cajetan's – Auraria Campus**

12:00 PM - 12:10 PM **Welcome**
Bernard Khor

12:10 PM - 12:20 PM **Preclinical Committee Resources updates**
Aaron Sathyanesan, Kristy Welshhans

12:20 PM - 1:30 PM **Session One: Vaccines**

12:20 PM - 12:40 PM **Staying Healthy with Down Syndrome – We'll Give it a Shot**
Noemi Spinazzi

12:40 PM - 1:00 PM **Pediatric vaccine administration for children with Down syndrome in U.S., UK, Brazil, and Italy**
Dannah Raz

1:00 PM - 1:30 PM **Discussion**
Noemi Spinazzi, Dannah Raz

 **1:30 PM - 2:00 PM Break 1**

2:00 PM - 3:00 PM **Session Two: Congenital Heart Defects**

2:00 PM - 2:20 PM **Increased dosage of DYRK1A leads to congenital heart defects in a mouse model of Down syndrome**
Eva Lana-Elola

2:20 PM - 2:40 PM **Modeling Congenital Heart Defects in human and mouse models of Down Syndrome**
Robin Canac

2:40 PM - 3:00 PM **Discussion**
Eva Lana-Elola, Robin Canac

 **15:00 PM - 15:30 PM Break 2**

3:30 PM - 5:00 PM **Session Three: Infantile Spasms**

3:30 PM - 3:50 PM **Clinical Overview of Infantile Spasms in Individuals with Down Syndrome**
Dan Kats

- 3:50 PM - 4:10 PM Infantile spasms in mouse models of Down syndrome: seizure susceptibility and potential mechanisms
Carl Stafstrom
- 4:10 PM - 4:30 PM Does First-Line Therapy Influence Outcomes in Trisomy 21 with Infantile Epileptic Spasms Syndrome? A Multi-Center North American Study
Anita Datta
- 4:30 PM - 5:00 PM Discussion
Dan Kats, Carl Stafstrom, Anita Datta



Wednesday, 17 June 2026

	Room 1 Capitol Ballroom	Room 2 Crystal A	Room 3 Crystal B/C
7:30 AM - 8:30 AM	Registration		
8:30 AM - 10:30 AM	Opening Session		
10:30 AM - 11:00 AM	Break		
11:00 AM - 1:00 PM	S1. Brain Development and Connectivity Across the Lifespan in Down Syndrome: Insights from Cellular Mechanisms, Mouse Models, and Advanced Human MRI	S2. Eating, drinking, and swallowing challenges in Down syndrome: From clinical perspectives to insights from animal models <i>Session Sponsored by Global Down Syndrome Foundation</i>	S3. The DS-Connect® Registry and the INCLUDE Collaboration for Down Syndrome Progress (CDP): Two Transformative Tools to Accelerate Participant-Centered Research
1:00 PM - 2:00 PM	Lunch and Networking		
2:00 PM - 3:00 PM	NDSS Charles J. Epstein Award for Early-Stage Investigators		
3:00 PM - 4:00 PM	T2IRS General Assembly		
4:00 PM - 6:00 PM	S21. The INCLUDE Data Coordinating Center: a discovery accelerator for Down syndrome research	S5. Lifelong bone health in Down syndrome: new research, new directions	S6. Innovative Engagement Methods and Communication Strategies for Promoting Down Syndrome Clinical Research Participation
7:00 PM - 10:00 PM	Welcome Reception - Tivoli Station Auraria Campus Store		

📍 Room 1 | Capitol Ballroom

8:30 AM - 10:30 AM Opening Session | Sponsored by Global Down Syndrome Foundation

8:30 AM - 8:35 AM Opening Renata Bartesaghi - President of Trisomy 21 Research Society
Renata Bartesaghi

8:35 AM - 8:39 AM Opening Lotta Granholm-Bentley - Chair Local Organizing Committee
Lotta Granholm-Bentley

8:39 AM - 8:43 AM Dr. Joaquin Espinosa - Organizing Committee Member
Joaquin Espinosa

8:43 AM - 8:46 AM Opening Jared Polis - Governor of Colorado
Jared Polis

8:46 AM - 8:49 AM Opening Michelle Sie Whitten - President & CEO, Global Down Syndrome Foundation
Michelle Sie Whitten


8:49 AM - 8:53 AM Opening Diana DeGette - United States Representative, Colorado Congressional District 1
Diana DeGette

8:53 AM - 8:56 AM Photo

8:56 AM - 9:00 AM Introduction to Award & Awardee
Marco Emili

9:00 AM - 9:17 AM Annette Karmiloff-Smith and Michael Harpold
Dissertation Award: 'Unlocking the role of miR-802 in the molecular mechanisms underlying metabolic alterations in Down syndrome neuropathology'
Lucrezia Romana Rolfi

9:17 AM - 9:19 AM Introduction Dr. Louis Valay
Marco Emili

- 9:19 AM - 9:34 AM Annette Karmiloff-Smith and Michael Harpold
Dissertation Award: 'Understanding the role of endothelial cells in the development of cerebral amyloid angiopathy in Alzheimer's disease and Down syndrome'
Louis Valay
- 9:34 AM - 9:39 AM Panel discussion and Q&A
Marco Emili
- 9:39 AM - 9:42 AM Introduction Global Down Syndrome Foundation Panel
Kelly Sullivan
- 9:42 AM - 9:45 AM Introduction of participants Global Down Syndrome Foundation Panel
Bryn Gelaro
- 9:45 AM - 10:20 AM Global Family/ Self-Advocate Panel 
- 10:20 AM - 10:25 AM Closing NIH
Melissa Parisi

 10:30 AM - 11:00 AM Break

- 11:00 AM - 11:00 AM S1. Brain Development and Connectivity Across the Lifespan in Down Syndrome: Insights from Cellular Mechanisms, Mouse Models, and Advanced Human MRI**
- Introduction
Fedal Saini
- 11:00 AM - 11:30 AM Lasting effects on TcMAC21 cortical function from fetal alterations to neurogenesis.
Tarik Haydar
- 11:30 AM - 12:00 PM Early Volumetric and Microstructural Alterations in Down Syndrome Revealed by In Vivo Fetal and Neonatal Brain MRI
Shahid Zaman

12:00 PM - 12:30 PM Probing grey matter microstructure with diffusion MRI to study preclinical Alzheimer's disease in adults with Down syndrome
Fedal Saini

12:30 PM - 1:00 PM Cerebellar Maturation: Structural Connectivity of the Cerebellum and its Relationship to Cognitive functioning in Adults with Down Syndrome
Marie-Joelle Beaudoin

 1:00 PM - 2:00 PM Lunch and Networking

2:00 PM - 3:00 PM NDSS Charles J. Epstein Award for Early-Stage Investigators

2:00 PM - 2:10 PM Introduction
Kandi Pickard

2:10 PM - 3:00 PM The abnormal megakaryopoiesis underlying Down syndrome myeloproliferative disorders
Kaoru Takasaki

3:00 PM - 4:00 PM T2IRS General Assembly

4:00 PM - 6:00 PM S21. The INCLUDE Data Coordinating Center: a discovery accelerator for Down syndrome research

Introduction
Joaquin Espinosa

4:00 PM - 4:30 PM The INCLUDE Data Coordinating Center: overview, current opportunities, and future perspectives.
Huiqing Li

4:30 PM - 5:00 PM Management of multidimensional datasets for effective sharing and analysis
Robert Carroll

5:00 PM - 5:30 PM A live demonstration of the INCLUDE Data Hub
Jean-Philippe Thibert

5:30 PM - 6:00 PM The Experimental Models of Down Syndrome
Researcher Portal
Matthew Galbraith

📍 Room 2 | Crystal A

11:00 AM - 1:00 PM



S2. Eating, drinking, and swallowing challenges in Down syndrome: From clinical perspectives to insights from animal models
Session Sponsored by Global Down Syndrome Foundation

11:00 AM - 11:05 AM Introduction
Tiffany Glass

11:05 AM - 11:30 AM Feeding and Swallowing in Children with Down Syndrome: How Clinical Research is Shaping Care
Arwen Jackson

11:30 AM - 11:55 AM Unraveling dysphagia-related features of Down syndrome through engineered mouse models: spanning transcriptomic to behavioral levels
Y. Eugene Yu

11:55 AM - 12:20 PM Experimental paradigms to evaluate oromotor interventions and outcomes in mouse models of down syndrome
Gaurav Singhal

12:20 PM - 12:45 PM From development to degeneration: oromotor function phenotypes across the lifespan in Down syndrome models.
Tiffany Glass

12:45 PM - 1:00 PM Panel Discussion Q&A

🕒 1:00 PM - 2:00 PM Lunch and Networking

4:00 PM - 6:00 PM **S5. Lifelong bone health in Down syndrome: new research, new directions**

4:00 PM - 4:05 PM Symposium Introduction
Larry Suva

- 4:05 PM - 4:35 PM Low Bone mass and Bone Health in Down syndrome
Dana Gaddy
- 4:35 PM- 5:05 PM Musculoskeletal improvement by Low Intensity Vibration in Down syndrome: A path forward?
Gabriel M. Pagnotti
- 5:05 PM- 5:35 PM Fractures in Ts21: Can they heal?
Catrina Silveira
- 5:35 PM - 6:00 PM Panel discussion

📍 Room 3 | Crystal B/C

- 11:00 AM - 1:00 PM S3.The DS-Connect® Registry and the INCLUDE Collaboration for Down Syndrome Progress (CDP): Two Transformative Tools to Accelerate Participant-Centered Research**
- 11:00 AM - 11:10 AM Introduction
Melissa Parisi
- 11:10 AM - 11:30 AM DS-Connect overview
Angela Rachubinski
- 11:30 AM - 11:50 AM Researcher perspective applying DS-Connect in practice
Anna Esbensen
- 11:50 AM - 12:10 PM INCLUDE Collaboration for Down Syndrome Progress (CDP) overview
Rosser Tracie
- 12:10 PM - 12:30 PM Researcher perspective engaged in CDP
Philip Lupo
- 12:30 PM - 1:00 PM Panel Discussion Q&A

🕒 1:00 PM - 2:00 PM Lunch and Networking



4:00 PM - 6:00 PM

S6. Innovative Engagement Methods and Communication Strategies for Promoting Down Syndrome Clinical Research Participation

4:00 PM - 4:10 PM

Introduction

Amy Bodde

4:10 PM - 4:30 PM

Leveraging Open-Source Software and AI to Enhance Research Communication and Results Sharing with Individuals with Down Syndrome and Families

Brian Helsel

4:30 PM - 4:50 PM

Engaging with Racially Minoritized People in the Down Syndrome Community in Basic Science Research

Edward Evans

4:50 PM - 5:10 PM

Bridging gaps, building voices: Research and outreach in India's Down syndrome community

Sujay Ghosh

5:10 PM - 5:30 PM

Engaging families and self-advocates in intervention design and research outreach

Amy Bodde

5:30 PM - 5:50 PM

Engaging families and self-advocates in intervention design and research outreach

Katie Morrison

5:50 PM - 6:00 PM

Panel discussion

 **Thursday, 18 June 2026**

	Room 1 Capitol Ballroom	Room 2 Crystal A	Room 3 Crystal B/C
8:30 AM - 9:30 AM	Global Down Syndrome Foundation Plenary Lecture: Dr. Leonard Abbeduto		
9:30 AM - 11:30 AM	S7. Amyloid-lowering Immunotherapies for Down Syndrome-related Alzheimer's disease: Neuropathological Insights and Vascular Safety in Clinical Trials	S8. Research advances toward the treatment of obstructive sleep apnea in people with Down syndrome	S9. Transforming health outcomes for Down syndrome using Population Level Data
11:30 AM - 12:00 PM	Morning Break Thursday		
12:00 PM - 1:00 PM	Nanosymposium 1	Nanosymposium 2	Nanosymposium 3
1:00 PM - 2:00 PM	Lunch and Networking Thursday		
2:00 PM - 4:00 PM	S10. Metabolic dysfunction and associated liver abnormalities in individuals with Down syndrome	S11. Executive Function in Down Syndrome Across the Lifespan: From Mechanisms to Modifiers of Alzheimer's Disease Risk	S12. Therapeutic Developments Session
4:00 PM - 6:00 PM	Posters and Happy Hour 1		
6:00 PM - 7:00 PM	Lejeune Plenary Lecture: Dr. Mary McCarron		



Room 1 | Capitol Ballroom

8:30 AM - 9:30 AM Global Down Syndrome Foundation Plenary Lecture: Dr. Leonard Abbeduto

Introduction Plenary Lecture Dr. Leonard Abbeduto
Anna Esbensen

8:30 AM - 9:30 AM Assessing Treatment efficacy in Down Syndrome Research: Comments on Outcome Measures and Study Design
Leonard Abbeduto

9:30 AM - 11:30 AM S7. Amyloid-lowering Immunotherapies for Down Syndrome-related Alzheimer's disease: Neuropathological Insights and Vascular Safety in Clinical Trials

9:30 AM - 9:35 AM Introduction
Isabel Barroeta

9:40 AM - 10:00 AM Neuropathology of the blood-brain barrier across the AD continuum in Down syndrome: implications for amyloid lowering therapies
Lisi Flores Aguilar

10:00 AM - 10:20 AM Biomarkers and vascular burden in DS: tools to inform safety and clinical trial readiness
Donna M Wilcock

10:20 AM - 10:40 AM Clinical perspectives and case reports: understanding safety and indications of anti-amyloid therapies in DS.
Lucia Maure Blesa

10:40 AM - 11:00 AM Amyloid-immunotherapy clinical trials in Down syndrome: design, safety considerations, and lessons for the field.
Michael Rafii

 11:30 AM - 12:00 AM Break

12:30 PM - 1:00 PM Nanosymposium 1

Introduction Nanosymposium 1
Soula Danopoulos

12:00 PM - 12:15 PM FOXF1 links failed Hedgehog signaling-dependent heterochronic control of developmental timing to birth defects in Down Syndrome
Ivan Moskowitz

12:15 PM - 12:30 PM SIM2 at the Crossroads: Driving Mitochondrial Dysfunction and Metabolic Imbalance in Down Syndrome?
Harpreet Kaur

12:30 PM - 12:45 PM Dissecting gene expression variation across multimorbidity profiles in people with Down syndrome
Lucas Gillenwater

12:45 PM - 13:00 PM Cortical organoid model of Down syndrome shows disrupted neuronal signaling attributed to dysregulated inhibitory tone
Elizabeth Kharitonova



1:00 PM - 2:00 PM Lunch and Networking

2:00 PM - 4:00 PM S10. Metabolic dysfunction and associated liver abnormalities in individuals with Down syndrome

2:00 PM - 2:10 PM Introduction
Lauren Dunn

2:10 PM - 2:30 PM Investigating Hepatic Comorbidities in Down Syndrome: Pathophysiological Insights and New Avenues from the Mouse Models
Yann Herault

2:30 PM - 2:50 PM Metabolic deficits in Down syndrome mouse models
Will Wong

- 2:50 PM - 3:10 PM SIM2 Regulation of Mitochondrial Turnover and Function in Down Syndrome
Weston Porter
- 3:10 PM - 3:30 PM Altered Hepatic Metabolism in Down Syndrome
Lauren Dunn
- 3:30 PM - 4:00 PM Panel discussion
- 6:00 PM - 7:00 PM Lejeune Plenary Lecture: Dr. Mary McCarron**
- Introduction Plenary Lecture Dr. Mary McCarron
Kelly Sullivan
- 6:00 PM - 7:00 PM Two Lives, Seven Decades, One Lifespan Story: Rethinking Down Syndrome
Mary McCarron

 Room 2 | Crystal A

- 9:30 AM - 11:30 AM S8. Research advances toward the treatment of obstructive sleep apnea in people with Down syndrome**
- 9:30 AM - 9:35 AM Introduction
Brian Skotko
- 9:35 AM - 10:00 AM Pharmacotherapy for OSA in Children with Down Syndrome
Daniel Combs
- 10:00 AM - 10:20 AM Sticking With It: Enhancing PAP Therapy Engagement
Kevin Gipson
Gregory Young
- 10:20 AM - 10:40 AM Home Sleep Apnea Testing in Children and Youth with Down Syndrome
Ignacio Tapia

10:40 AM - 11:00 AM Update in Pediatric Hypoglossal nerve Implantation: What we know and what is new and upcoming
Brian Skotko

11:00 AM - 11:30 AM Panel Discussion Q&A

☕ 11:30 AM - 12:00 AM Break

12:00 PM - 1:00 PM Nanosymposium 2
Introduction Nanosymposium 2
Bruna Zampieri

12:00 PM - 12:15 PM Human APOE4 knock-in modulates behavioral phenotypes of Dp16 mice
Noah Johnson

12:15 PM - 12:30 PM Proteome Profile Of Alzheimer-Like Phenotypes in the Brain of Young and Old Individuals With Down Syndrome: Focus on Bach1/Nrf2 Axis
Marzia Perluigi

12:30 PM - 12:45 PM Examining the Calcineurin-NFAT Axis in the Pathology of Alzheimer Disease in the General Population and People with Down Syndrome
Jacob Dohl

12:45 PM - 13:00 PM Levetiracetam prevents Aβ42 production through SV2A-dependent modulation of APP processing in Alzheimer's Disease (AD) models: Hope for putting off Down Syndrome associated AD
Jeffrey Savas

2:00 PM - 4:00 PM S11. Executive Function in Down Syndrome Across the Lifespan: From Mechanisms to Modifiers of Alzheimer's Disease Risk

2:00 PM - 2:10 PM Introduction
Stephen D. Ginsberg

- 2:10 PM - 2:30 PM Early Intervention to Enhance Executive Functions in Children with Down Syndrome: The EXPO Project
Silvia Lanfranchi
- 2:30 PM - 2:50 PM Smart-Kages, Smarter Questions: Probing Executive Dysfunction in a Mouse Model of Down Syndrome
Loukia Katsouri
- 2:50 PM - 3:10 PM Excitatory Neuron Expression Profiles Dysregulated in Down Syndrome and Alzheimer's Disease Underlie Memory and Executive Function Deficits
Melissa Alldred
- 3:10 PM - 3:30 PM Physical Activity and Social Engagement as Modifiers of the Alzheimer's Pathology-Executive Function Relationship in Down Syndrome
Christy Hom
- 3:30 PM - 4:00 PM Panel discussion

 Room 3 | Crystal B/C

- 9:30 AM - 11:30 AM S9. Transforming health outcomes for Down syndrome using Population Level Data**
- 9:30 AM - 9:40 AM Introduction
Salina Tewolde
- 9:40 AM - 10:00 AM Mortality outcomes in Down syndrome using Machine Learning
Salina Tewolde
- 10:00 AM - 10:20 AM Down Syndrome and Psoriasis: An Investigation of Cardiometabolic Risk
Jillian Rork
- 10:20 AM - 10:40 AM Sex differences in multiple morbidity and risk of mortality in Down syndrome
Andre Strydom

10:40 AM - 11:00 AM Current state of population health and big data with Down syndrome
Eric Rubenstein

11:00 AM - 11:30 AM Panel discussion

☕ 11:30 AM - 12:00 AM Break

12:00 PM - 1:00 PM Nanosymposium 3
Introduction Nanosymposium 3
Matthew Galbraith

12:00 PM - 12:15 PM Hippocampal O-GlcNAcylation dynamics across age in Ts66Yah mice: implications for Down syndrome and future pharmacological strategies
Chiara Sette

12:15 PM - 12:30 PM Altered motor coordination and cerebellar circuit connectivity in mice carrying a nearcomplete human chromosome 21
Katie Hsiao

12:30 PM - 12:45 PM Targeting DYRK1A in Neurodegeneration: Mechanistic Insights into Leucettinib-21 Targets Using Chemical and Cellular Approaches
Mattias F. Lindberg

12:45 PM - 1:00 PM Synergistic effects of mild traumatic brain injury and trisomy 21: revealing latent vulnerabilities in the Dp16 mouse model
Mingxia Huang

🍴 1:00 PM - 2:00 PM Lunch and Networking

2:00 PM - 4:00 PM S12. Therapeutic Developments Session

First Panel: Treatment of cognitive deficits and regression in Down syndrome.
Renata Bartesaghi

Second Panel: Treatment of Alzheimer's disease
in Down syndrome

Marie-claude Potier

- 2:00 PM - 2:15 PM New Frontiers: Early Industry Engagement in Rare Disease.
Jonathan Santoro
- 2:15 PM - 2:30 PM Phase 1 clinical trial of Leucettinib-21, a DYRK1A kinase inhibitor aiming at the treatment of Down syndrome, Alzheimer's disease, and Parkinson's disease
Laurent Meijer
- 2:30 PM - 2:45 PM Transcranial Direct Current Stimulation to Enhance Cognition and Behavior in Down Syndrome: A Randomized, Placebo-Controlled Proof-of-Concept Study on Language Outcomes
Floriana Costanzo
- 2:45 PM - 3:00 PM Alzheimer's Disease in Adults with Down Syndrome: Closing the Clinical Research Gap.
Jennifer Ann Zimmer
- 3:00 PM - 3:15 PM Valiltramiprosate Reduced ARIA Rates in Phase 3 Study of APOE4/4 Subjects with Early AD: Implications to Down syndrome
Patrick Kessler
- 3:15 PM - 3:30 PM Decoding Alzheimer's Progression and Neuroinflammation in Down Syndrome Through Ultra-Sensitive Biomarker Profiling.
Charlie Grieser
- 3:30 PM - 3:45 PM Accelerating impact with Thermo Fisher Olink proteomic solutions.
Jack Walsh
- 3:45 PM - 18:00 PM Final discussion and conclusions
Marie-claude Potier

 **Friday, 19 June 2026**

	Room 1 Capitol Ballroom	Room 2 Crystal A	Room 3 Crystal B/C
8:30 AM - 9:30 AM	Global Down Syndrome Foundation Plenary Lecture : Juan Fortea		
9:30 AM - 11:30 AM	<p>S13. Down Syndrome Regression Disorder: New Frontiers in Biomarkers, Phenotypes, and Clinical Trials</p> <p><i>Session Sponsored by Global Down Syndrome Foundation</i></p>	<p>S14. Microbiome insights in Down Syndrome</p>	<p>S15. Advancing Knowledge on lifestyle factors in the context of Gene Overdosage and Early-Life Obesity in Down Syndrome, the legacy of GO-DS21.</p>
11:30 AM - 12:00 PM	Morning Break Friday		
12:00 PM - 1:00 PM	Nanosymposium 4	Nanosymposium 5	Nanosymposium 6
1:00 PM - 2:00 PM	Lunch and Networking Friday		
2:00 PM - 4:00 PM	<p>S16. Immune dysregulation in people with Down syndrome: From mechanisms to clinical trials</p> <p><i>Session Sponsored by Global Down Syndrome Foundation</i></p>	<p>S17. Update on blood pressure regulation in Down syndrome - is it truly protective?</p>	<p>S18. Effective community engagement in older adults with Down syndrome: The ABC-DS experience</p>
4:00 PM - 6:00 PM	Posters and Happy Hour 2		
6:00 PM - 7:00 PM	IBRO Plenary Lecture: Dr. Sonja Rasmussen		

Room 1 | Capitol Ballroom

8:30 AM - 9:30 AM **Global Down Syndrome Foundation Plenary Lecture : Juan Fortea**

Introduction Plenary Lecture Dr. Juan Fortea
Patrick J. Lao

8:30 AM - 9:30 PM From Observational Cohorts to Therapeutic Trials in Down Syndrome–Associated Alzheimer’s Disease
Juan Fortea

9:30 AM - 11:30 AM **S13. Down Syndrome Regression Disorder: New Frontiers in Biomarkers, Phenotypes, and Clinical Trials**



Session Sponsored by Global Down Syndrome Foundation

9:30 AM - 9:35 AM Introduction
Jonathan Santoro

9:35 AM - 10:00 AM Catatonia Assessment and Intervention in DSRD
Cathy Franklin

10:00 AM - 10:30 AM Deep Phenotyping and Sub-Clusters in DSRD
Ryan Kammeyer

10:30 AM - 11:00 AM Data from the First Randomized Clinical Trial for DS Therapies
Jonathan Santoro

11:00 AM - 11:25 AM Multiomics analysis and Biosignatures of Dysregulated Autoimmunity in DSRD
Neetha Paul Eduthan

11:25 AM - 11:30 AM Q&A

 **11:30 AM - 12:00 AM Break**

12:00 PM - 1:00 PM Nanosymposium 4

Introduction Nanosymposium 4
Kelly Sullivan

12:00 PM - 12:15 PM Mechanisms of Inflammation Across the Lifespan in Individuals with Down Syndrome
Felipe ten Caten

12:15 PM - 12:30 PM Unmasking Trisomy 21-Related Transcriptomic Dysregulation & Enhanced Senescence Using a Mosaic Down Syndrome Model
Victoria Ashton

12:30 PM - 12:45 PM Brain Clocks as Multimodal Markers of Down syndrome Associated Alzheimer's Disease
Eimear McGlinchey

12:45 PM - 1:00 PM Cognitive Composites decline earlier in Down Syndrome compared to Neurotypical Adults on the Alzheimer's Disease biomarker timeline
Matthew Zammit

 **1:00 PM - 2:00 PM Lunch and Networking**

2:00 PM - 4:00 PM S16. Immune dysregulation in people with Down syndrome: From mechanisms to clinical trials



Session Sponsored by Global Down Syndrome Foundation

2:00 PM - 2:10 PM Introduction
Bernard Khor

2:10 PM - 2:30 PM Innate and adaptive immunity in individuals with Down syndrome
Dusan Bogunovic

2:30 PM - 2:50 PM TNF-IFN crosstalk in Down syndrome
Abigail Cozart

2:50 PM - 3:10 PM Immune aging and vaccine response in people with Down syndrome
Bernard Khor

3:10 PM - 3:30 PM The interferonopathy of Down syndrome: mechanisms and clinical trials
Joaquin Espinosa

3:30 PM - 4:00 PM Panel discussion

6:00 PM - 7:00 PM IBRO Plenary Lecture: Dr. Sonja Rasmussen

Introduction Plenary Lecture Dr. Sonja Rasmussen
Lotta Granholm-Bentley

6:00 PM - 7:00 PM Down Syndrome Across the Lifespan: Health Conditions and Outcomes
Sonja Rasmussen

 Room 2 | Crystal A

9:30 AM - 11:30 AM S14. Microbiome insights in Down Syndrome

9:30 AM - 9:40 AM Introduction
Karen Rossmassler


9:40 AM - 10:00 AM Gut dysbiosis in Down syndrome
Herminia Diana Rosas

10:00AM - 10:20 AM Assessment of altered gut motility as related to the microbiome in a mouse model of DS
Jaime Belkind-Gerson

10:20 AM - 10:40 AM Altered Tonsillar Microbiome in Children with Down Syndrome and Obstructive Sleep Apnea
Elena Woods

10:40 AM - 11:00 AM Oral Dysbiosis in Down Syndrome in relation to molecular signatures of human health
Karen Rossmassler

11:00 AM - 11:30 AM Panel discussion

 11:30 AM - 12:00 AM Break

12:00 PM - 1:00 AM Nanosymposium 5

Introduction Nanosymposium 5
Brian Niemeyer

- 12:00 PM - 12:15 PM Heart rate variability as a biomarker of feeding-related issues in children with Down syndrome
Elizabeth Will
- 12:15 PM - 12:30 PM Delays in the Diagnosis and Blood Pressure Elevations in Moyamoya Vasculopathy in Children with Down Syndrome
Mariam Yousuf
- 12:30 PM - 12:45 PM Influence of Mental Age on Modified Checklist for Autism in Toddlers – Revised Scores for Young Children with Down Syndrome
Miranda Pinks
- 12:45 PM - 1:00 PM Serum and Cerebral Folate Are Normal in Down Syndrome Regression Disorder
Noemi Spinazzi

🍴 1:00 PM - 2:00 PM Lunch and Networking

- 2:00 PM - 4:00 PM **S17. Update on blood pressure regulation in Down syndrome - is it truly protective?**
- 2:00 PM - 02:10 PM Chair: Introduction to the session and panel coordinator
Cristina Perez-Tertero
- 2:10 PM - 02:30 PM Genetic contribution of chromosome 21 to blood pressure: lessons from mouse models
Cristina Perez-Tertero
- 2:30 PM - 02:50 PM Update on cardiovascular health and its risk factors in individuals with Down syndrome
Thessa Hilgenkamp
- 2:50 PM - 03:10 PM Blood pressure dysregulation in individuals with Down syndrome: is autonomic dysfunction the culprit?
Bo Fernhall
- 3:10 PM - 03:30 PM Secondary pathways to hypotension: looking outside the nervous system
Diego Real de Asua
- 3:30 PM - 4:00 PM Panel discussion

Room 3 | Crystal B/C

9:30 AM - 11:30 AM **S15. Advancing Knowledge on lifestyle factors in the context of Gene Overdosage and Early-Life Obesity in Down Syndrome, the legacy of GO-DS21.**

9:30 AM - 9:40 AM Introduction
Yann Herault

9:40 AM - 10:00 AM Quality of diet in individuals with Down syndrome
Maria Gomis

10:00 AM - 10:20 AM Obesity-associated transcriptomic alterations in iPSC-derived hypothalamic neurons in individuals with Down syndrome.
Pinku Halder

10:20 AM - 10:40 AM Exploring the Role of Genetic and Environmental Factors in Obesity and Metabolic Dysregulation in Down syndrome: Insights from Dyrk1A and Social Stress
Juan Luis Musoles Lleó

10:40 AM - 11:00 AM Implications for lifestyle interventions and guidelines to improve long-term health of people with Down syndrome
Andre Strydom

11:00 AM - 11:30 AM Panel discussion

 **11:30 AM - 12:00 AM Break**

12:00 PM - 1:00 PM **Nanosymposium 6**

Introduction Nanosymposium 6
Larry Suva

12:00 PM - 12:15 PM Education, employment and inclusion among young people with Down syndrome: findings from the 'My Life with Down Syndrome' study
Courtney Potts

- 12:15 PM - 12:30 PM Impact of Down Syndrome Regression Disorder on Caregiver Social Networks: A Cross-Sectional Study
Samuel Otey
- 12:30 PM - 12:45 PM Designing for Inclusion: The Construction Process of the Rede Buriti SD Observatory
Tiago Silva Da Silva
- 12:45 PM - 1:00 PM Epilepsy in Adults with Down syndrome: A Multicentre Clinical Study
Lucia Maure Blesa

🍴 1:00 PM - 2:00 PM Lunch and Networking

- 2:00 PM - 4:00 PM S18. Effective community engagement in older adults with Down syndrome: The ABCDS experience**
- 2:00 PM - 2:10 PM Introduction
Ann Cohen
- 2:10 PM - 2:30 PM The role of effective community partnerships in Down syndrome research
Ann Cohen
- 2:30 PM - 2:50 PM Engaging with Down syndrome community organizations to inform research practices
Jaime Perales Puchalt
- 2:50 PM - 3:10 PM Integration of community members with Down syndrome into the research team (copresented with team member with DS)
Lauren Ptomey
- 3:10 PM - 3:30 PM Utilizing story telling to encourage brain donation in Down Syndrome
Lilcelia Williams
- 3:30 PM - 4:00 PM Panel discussion

 **Saturday, 20 June 2026**

	Room 1 Capitol Ballroom	Room 2 Crystal A	Room 3 Crystal B/C
8:30 AM - 10:30 AM	S19. Aging with Down syndrome	S20. Unraveling Risk and Resilience: The Role of Co-Occurring Health Conditions in Down Syndrome-Associated Alzheimer's Disease	S4. Hearing and Vestibular Sequelae in Down Syndrome
10:30 AM - 11:00 AM	Morning Break Saturday		
11:00 AM - 11:05 AM	Opening Science and Society		
11:05 AM - 1:00 PM	Science and Society - Session A		
1:00 PM - 2:00 PM	Lunch and Networking Saturday		
2:00 PM - 4:00 PM	Science and Society - Session B		
5:45 PM - 9:30 PM	Gala Dinner - Denver Art Museum		

📍 Room 1 | Capitol Ballroom

8:30 AM - 10:30 AM S19. Aging with Down syndrome

8:30 AM - 8:40 AM Introduction
Micah Donovan

8:40 AM - 9:00 AM Metabolically induced stress alters the UPR and redox signaling, contributing to Alzheimer-related changes in Down syndrome models
Fabio Di Domenico

9:00 AM - 9:20 AM Unmasking trisomy 21-specific biological alterations by comparing isogenic trisomic and disomic cells from people with mosaic Down syndrome: A longitudinal study
Colleen Jackson-Cook

9:20 AM - 9:40 AM Multi-omics analysis of aging in Down syndrome: lessons from the Human Trisome Project
Micah Donovan

9:40 AM - 10:00 AM Modelling the effects of trisomy 21 on aging: insights from the Trisomy 21 Atlas
Ariel Timkovich

10:00 AM - 10:30 AM Panel discussion

☕ 10:30 AM - 11:00 AM Break

11:05 AM - 13:00 PM Science and Society - Session A

11:05 AM - 11:20 AM Buriti network: integrating horizons, engaging community and science for a better future
Luciene Covolan

11:20 AM - 11:40 AM How Advocacy and Research Just Added a Decade of Life—And Our Roadmap to the Next 10-Year Jump
Michelle Sie Whitten

- 11:40 AM - 12:00 PM Photo project. Photography Journey in Owing the Frame: Portraits and Voices of People with Down Syndrome
Youllee Kim
- 12:00 PM - 12:15 PM Pediatric and Adolescent Health Care Guidelines
Nicole Baumer
- 12:15 PM - 12:30 PM Why do some adults with Down syndrome not develop dementia? Clues from the brain
Lisi Flores Aguilar, Lucia Maure Blesa
- 12:30 PM - 12:50 PM Round Table: Mosaic Down syndrome: Lifespan Experiences, Resources, and Research
Brandy Hellard, Adde Hellard, Jennifer Katz, Claire-May Minett, Colleen Jackson-Cook

 **1:00 PM - 2:00 PM Lunch and Networking****2:00 PM - 4:00 PM Science and Society - Session B**

- 2:20 PM - 2:35 PM Transition from Pediatrics to Adult Medicine for Individuals with Down Syndrome
Angelo Carfi
- 2:35 PM - 2:45 PM When Autonomy Becomes a Community Asset: Experiences from Italy and Australia
Down syndrome Australia Trex21 Association (Italy)
- 2:45 PM - 3:00 PM Connecting Families and Research: How DS-Connect® and the INCLUDE Project Are Accelerating Discovery
Melissa Parisi
- 3:00 PM - 3:15 PM Strategies to improve participatory research in Down syndrome
Diego Real de Asua
- 3:35 PM - 3:55 PM Musical Performance
Sponsored by the Global Down Syndrome Foundation
Sujeet Desai

📍 Room 2 | Crystal A

08:30 AM - 10:30 PM S20. Unraveling Risk and Resilience: The Role of Co-Occurring Health Conditions in Down Syndrome-Associated Alzheimer's Disease

8:30 AM - 8:40 AM Introduction

Lauren Ptomey

8:40 AM - 9:00 AM Brain Insulin Resistance as a Marker of Accelerated Aging in Down Syndrome

Eugenio Barone

9:00 AM - 9:20 AM Congenital Heart Defects and Alzheimer's Pathology in Down Syndrome

Julianne Clina

9:20 AM - 9:40 AM Multimorbidity Profiles and Their Association with AD and Cerebrovascular Biomarkers in Down Syndrome

Patrick J. Lao

9:40 AM - 10:00 AM Menopause as a Modulator of Alzheimer's Disease Risk in Women with Down Syndrome

Elizabeth Andrews

10:00 AM - 10:30 AM Panel discussion

☕ 10:30 AM - 11:00 AM Break

📍 Room 3 | Crystal B/C

8:30 AM - 10:30 PM S4. Hearing and Vestibular Sequelae in Down Syndrome

8:30 AM - 8:33 AM Introduction to the session

Peter Steyger

- 8:33 AM - 8:58 AM Impact of Trisomy 21 on the Auditory and Vestibular Function of People Living with Down Syndrome
Heather Porter
- 8:58 AM - 9:23 AM Hearing and Vestibular Phenotypes in a Mouse Model of Down Syndrome.
Peter Steyger
- 9:23 AM - 9:48 AM Dyrk1a kinase triplication is the major cause of otitis media in Down syndrome
Eva Lana-Elola
- 9:48 AM - 10:13 AM Impact of Trisomy 21 on Auditory Function, Cognition, and Brain Structure in Children and Adults with Down Syndrome
Kumari Anshu
- 10:13 AM - 10:30 AM Q&A with all speakers on the podium as a panel session

 10:30 AM - 11:00 AM Break

Bco Congresos

Barceló
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Technical secretariat

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