

19th Immunology of Diabetes Congress

Tuesday, May 23 – Saturday, May 27, 2023

Paris, France

<https://www.idsparis2023.com/>

TUESDAY, MAY 23, 2023	
8:30 – 10:00 AM (90')	T1D and the immune system - landscape of emerging therapies Industry session sponsored by Provention Lucienne Chatenoud (Institut Necker, Paris) Mark Atkinson (University of Florida, Gainesville) Jay Skyler (University of Miami)
10:00 – 10:30 AM	Break
10:30 AM – 12:00 PM (90')	Upscaling islet autoantibody screening strategies for prevention – Chair: Ezio Bonifacio Industry session sponsored by RSR Assay requirements from a broad screening in childhood perspective: Ezio Bonifacio (TUD, Dresden) Adapting assays to screening needs – what is possible?: Shu Chen (RSR Ltd, Cardiff) ASK study in Colorado: Marian Rewers (Barbara Davis Center, Aurora) Fr1da study in Germany – a European perspective: Anette Ziegler (Helmholtz Centre, Munich) Round table discussion: Peter Achenbach (Helmholtz Centre, Munich), Vito Lampasona (San Raffaele Hospital, Milan), Chantal Mathieu (KU Leuven), Marian Rewers (Barbara Davis Center, Aurora), Elnaz Atabakhsh (C-Path, Tucson), Maria Craig (UNSW, Sydney)
12:00 – 1:00 PM	Lunch
1:00 – 1:15 PM (15')	Welcome address Carmella Evans-Molina, IDS president
1:15 – 2:00 PM (45')	Immunology of diabetes: past, present and future - Chairs: Chantal Mathieu, Anne Koralova A patient perspective: Jeannette Soderberg (JDRF), Coralie Alabert/Coco and Podie (patient advocate, content creator) – 15+5' A scientist perspective: Jean-François Bach (Institut Necker, Paris) – 15+5'
2:00 – 2:40 PM (40')	Plenary 1 – presented by Thomas Kay Putting together the pieces of the nPOD puzzle: Mark Atkinson (University of Florida, Gainesville) – 30+10'
2:40 – 4:00 PM (80')	Lessons from other diseases – Chairs: Giovanna Bossi, Len Harrison Lessons from monogenic autoimmune disorders: Frédéric Rieux-Lauca (Imagine Institute, Paris) – 20+5' Lessons from monozygotic twins: Burkhard Becher (University of Zurich) – 20+5' T-cell exhaustion/stemness in chronic viral infections and cancer: Benjamin Youngblood (St. Jude, Memphis) – 20+5'
4:00 – 4:45 PM	Break
4:45 – 7:00 PM (135')	Microbiome, metabolome and immunity - Chairs: Agnès Lehuen, Mario Galgani

	<p>Microbiome imprinting of the immune system: Gerard Eberl (Pasteur Institute, Paris) – 20+5'</p> <p>Lipidome and metabolome in T1D: Tommi Suvitaival (Steno Diabetes Center, Copenhagen) – 20+5'</p> <p>Gut dysbiosis in T1D: Tommi Vatanen (University of Helsinki) – 20+5'</p> <p>Oral Abstract 1: Involvement of Macrophage iPLA2β-Derived Lipid Signals (iDLs) in the Emergence of Type 1 Diabetes: Sasanka Ramanadham (University of Alabama, Birmingham) – 10+3'</p> <p>Oral Abstract 2: Catestatin modulates nerve-immune related inflammation: Elke Muntjewerff (Uppsala University) – 10+3'</p> <p>Oral Abstract 3: Glucose determines unstable FoxP3 expression and favours the development of poorly functional Treg cells in recent-onset T1D children: Sara Bruzzaniti (University of Naples Federico II) – 10+3'</p> <p>Oral Abstract 4: LAG-3 serially regulates metabolic transition to glycolysis and cell cycle progression through modulation of 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3 (PFKFB3) in activated CD4+ T cells: Jon Piganelli (University of Pittsburgh) – 10+3'</p>
7:00 – 8:30 PM (90')	<p>Poster Session I</p> <p>1 E. Aiello, 2 L. Almenara-Fuentes, 3 E. Altindis, 4 N. Al-Sari, 5-6 A. Alshabeeb Akil, 7 A. Andersson Svärd, 8 W. Aniagyei, 9 S. Auddino, 10 S. Barry, 11 P. Basak, 12 C. Beam, 13 L. Bertrand, 14 M. Bettini, 15 R. Biradar, 16 S. Bissenova, 17 D. Boardman, 18 J. Boldison, 19 G. Boschi, 20 G. Bossi, 21 M. Brown, 22 Y. Bruggeman, 23 I. Buckle, 24 M. Budd, 25 M. Butrym, 26-27 A. Callebaut, 28 K. Cerosaletti, 29 L. Chakievská, 30 V. Chandra, 31 J. Chen, 32 M. Chen, 33 U. Christen, 34 G. Christoffersson, 35 S. Crawford, 36 R. Creusot, 37 H. Davidson, 38 T. Delong, 39 S. Dirschl, 40 G. Downes, 41 J. Dutz, 42 G. Ellis, 43-44-45 D. Faustman, 46 A. Fierabracci, 47 D. Funda, 48 A.M. Gazali, 49 L. Gomez-Munoz, 50 I. Gomez-Tourino, 51 M. Göransson, 52 A. Green, 53 C. Greenbaum, 54 G. Grieco.</p>
	Dinner on your own

WEDNESDAY, MAY 24, 2023		
8:20 – 9:00 AM (40')	Plenary 2: Eisenbarth Award Lecture – presented by Marian Rewers Len Harrison (Walter & Eliza Hall Institute, Melbourne) – 30+10'	
9:00 – 10:30 AM (90')	Immune and pancreas heterogeneity – Chairs: Lut Overbergh, Alberto Pugliese Immune heterogeneity – HANDEL-I: Todd Brusko (University of Florida, Gainesville) – 20+5' Pancreas heterogeneity – HANDEL-P: Marcela Brissova (Vanderbilt University, Nashville) – 20+5' Oral Abstract 5: Immunological Atlas of Pancreatic Lymph Nodes in Type 1 Diabetes: Gregory Golden (University of Pennsylvania) – 10+3' Oral Abstract 6: CD9 marks a human beta cell subpopulation with increased immunogenicity: Holger Russ (University of Florida, Gainesville) – 10+3' Oral Abstract 7: Characterization of beta cell subpopulations based on the expression of insulin, proinsulin and PC1/3 during the progression to type 1 diabetes: Paola Apaolaza (Helmholtz Centre, Munich) – 10+3'	
10:30 – 11:00 AM	Break	
11:00 – 12:45 PM (105')	Innovative interventions and preclinical development – Chairs: Maria Bettini, Todd Brusko Verapamil: Anath Shalev (University of Alabama, Birmingham) – 20+5' HLA Class II nanoparticles: Pere Santamaria (Parvus Therapeutics) – 20+5' CAR Treg therapies: Qizhi Tang (UCSF) – 20+5' Oral Abstract 8: Combination therapy of islet antigen-specific regulatory T cells and low-dose ortho-IL-2 suppresses the progression of type 1 diabetes: Li Zhang (IBRI, Indianapolis) – 10+3' Oral Abstract 9: Insulin B peptide-MHC class II-specific Chimeric Antigen Receptors Induce Antigen-Specific Activation and Suppression in NOD Tregs: Vivian Fung (University of British Columbia, Vancouver) – 10+3'	
12:45 – 1:45 PM	Lunch	

1:45 – 4:00 PM (135')	<p>Beta-cell protection – Chairs: Erica Cai, James Johnson</p> <p>Disease modeling using iPS islets: Timo Otonkoski (University of Helsinki) – 20+5'</p> <p>Regeneration vs carcinogenesis: Cristina Nostro (McEwen Stem Cell Institute, Toronto) – 20+5'</p> <p>Creating stealthy beta cells: Matthias Hebrok (UCSF, San Francisco) – 20+5'</p> <p>Oral Abstract 10: Enabling population-scale modeling of diabetes via automated derivation of iPSC-pancreatic organoids: Simi Ahmed (NYSCF, New York) – 10+3'</p> <p>Oral Abstract 11: Declines in Beta Cell Function and Glucose Responsiveness Are Independent of Insulitis During T1D Pathogenesis: Mollie Huber (University of Florida, Gainesville) – 10+3'</p> <p>Oral Abstract 12: CRISPR screen identify ER export cargo protein as β-cell stress mediator and autoimmunity: Isabela lessi (IBRI, Indianapolis) – 10+3'</p> <p>Oral Abstract 13: Exploring the beta cell secretome under interferon exposure: a role for soluble HLA-I isoforms during islet inflammation in type 1 diabetes? Javier Perez-Hernandez (INSERM Cochin Institute, Paris; University of Exeter) – 10+3'</p>	<p>Parallel session - Room 109</p> <p>2:00 – 3:30 PM Improving the design of clinical trials in T1D: analysis of data from the Trial Outcome Markers Initiative (TOMI) collaboration</p> <p><i>The Trial Outcome Marker Initiative (TOMI) brings together data from >10,000 individuals with new-onset T1D including 2,900 from 21 different trials. Analysis of metabolic and composite outcomes and their implications for designing trials for stage 3 T1D will be discussed</i></p>
4:00 – 4:30 PM	Break	
4:30 – 5:30 PM (60')	<p>Debate 1: type 1 diabetes endotypes: age and beyond – Chair: Laura Jacobsen</p> <p>It all comes to age: Ezio Bonifacio (TUD, Dresden) – 20+5'</p> <p>It is much more than age: Carla Greenbaum (Benaroya Research Institute, Seattle) – 20+5'</p>	
5:30 – 6:00 PM	<p>Poster Blast 1 – Chair: Fatoumata Samassa</p> <p>9 presentations, 3'/each</p> <p>J. DiLisio, J. Felton, W. Hagopian, L. Harrison, H. Hyoty, S. Hummel, E. Petropoulou, S. Tersey, Z. Zhou</p>	
6:00 – 7:30 PM (90')	<p>Poster Session II</p> <p>1 J. DiLisio, 2 J. Felton, 3 A. Griffith, 4 Y. Gu, 5 W. Hagopian, 6 S. Hamdan, 7-8 E. Hamilton-Williams, 9 S. Hanna, 10 L. Harrison, 11 L. Higdon, 12 H. Hipp, 13 M. Høj Jensen, 14 S. Hummel, 15 H. Hyoty, 16 T. Johannsmann, 17 M. Johnson, 18 K.W. Kim, 19 T. Kinnunen, 20 B. Krishnamurthy, 21 K. Lejon, 22 P. Lemaitre, 23 A. Lernmark, 24 S. Lewis, 25 A. Lind, 26 S.A. Long, 27-28 A. Long, 29 K. Lynch, 30 D. Maheshwari, 31 Z. Mahmood, 32 K.A. Mallitt, 33 P.J. Martens, 34 M. Martinic, 35 C. Mathews, 36 P.S. Misra, 37 G. Mortimer, 38 J. Navarre, 39 W. Nefida, 40 V. Neuman, 41 T. Nir, 42 S. Nishikido, 43 E. Noordeloos, 44 H. Oakey, 45 O.J. Ogunsile, 46 I. Olin, 47 C. Orvain, 48 R. Ott, 49 A. Parajuli, 50 J. Pearson, 51 L. Peters, 52 E. Petropoulou, 53 S. Tersey, 54 Z. Zhou.</p>	
	Dinner on your own	

THURSDAY, MAY 25, 2023		
8:20 – 9:00 AM (40')	Plenary 3 – presented by Roberto Mallone Stem-like autoimmune CD8+ T cells: Andrea Schietinger (Sloan Kettering, New York) – 30+10'	
9:00 – 10:15 AM (75')	Viruses and T1D – Chairs: Sarah Richardson, Mark Horwitz Oral Abstract 14: Residual insulin after anti-viral treatment with pleconaril and ribavirin in new onset type 1 diabetes - a phase 2, randomized, placebo-controlled, double blind, clinical trial: Knut Dahl-Jørgensen (University of Oslo) – 20+5' Oral Abstract 15: Viral antibodies and islet autoimmunity during the pandemic in young children genetically susceptible for type 1 diabetes: Marija Lugar (TUD, Dresden) – 10+3' Oral Abstract 16: A TYK2 inhibitor preserves antiviral defense against enterovirus in human intestinal epithelial cells while reducing MHC class I expression in beta cells: Malin Flodström-Tullberg (Karolinska Institutet, Stockholm) – 10+3' Oral Abstract 17: Enteroviruses detected in pancreas belong to Enterovirus B: Jutta Laiho (Tampere University) – 10+3'	Parallel session - Room 109 9:00-10:30 Editorial tips in academic publishing: Jennifer Sargent (Deputy Editor, Nature Medicine), Marta Koch (Editor-in-Chief, Lancet Diabetes Endocrinology)
10:15 – 10:45 AM	Break	
10:45 – 11:45 PM (60')	Fresh ideas from early researchers – Chairs: Alice Long, Teresa Rodriguez-Calvo Can studying rare, genetic forms of autoimmune diabetes untangle heterogeneity in T1D?: Matthew Johnson (University of Exeter) – 12+3' Bedside-inspired diabetes modeling - learn from monogenic diabetes to understand the pathogenic mechanisms of T1D: Tong Yue (ULB, Brussels) – 12+3' Do genes associated with C-peptide preservation in T1D influence success of TPIAT?: Taylor Triolo (Barbara Davis Center, Aurora) – 12+3' Islet prohormone processing defect as cause and consequence of beta cell failure and autoimmunity in T1D?: Yi-Chun Chen, University of British Columbia, Vancouver – 12+3'	
11:45 – 12:35 PM (50')	T-Cell Workshop session – Chairs: Sally Kent, Eddie James Introduction and updates: S. Kent, E. James	

	Oral Abstract 18: Redefining the autoimmune landscape in T1D: have we been looking at the wrong beta-cell antigens? Fatoumata Samassa (INSERM Cochin Institute, Paris) – 10+3' Oral Abstract 19: Discovery of novel human autoimmune beta cell antigens using ribosome profiling: Roberto Castro-Gutierrez (University of Florida, Gainesville) – 10+3' AIM assays- antigen agnostic flow cytometry assays for T cells subsets: Karen Cerosaletti (Benaroya Research Institute, Seattle) – 15+3'	
12:35 – 2:00 PM	Lunch	
2:00 – 2:30 PM (30')	IDS General Assembly	
2:30 – 4:30 PM (120')	Common themes in autoimmunity – Chairs: Jane Buckner, Remi Creusot Autoimmune heterogeneity and gene variants: Carola Vinuesa (Francis Crick Institute, London) – 20+5' Oral Abstract 20: Evaluating a Precision Medicine Approach Toward Anti-Thymocyte Globulin (ATG) Treatment in Type 1 Diabetes: Melanie Shapiro (University of Florida, Gainesville) – 10+3' Vitiligo: John Harris (Umass, Worcester) – 20+5' Immune and target cell cross-talk in autoimmune diseases: Decio Eizirik (ULB, Brussels) – 20+5' Drug repurposing in autoimmune diseases: Peter Lipsky (Ampel Biosolutions, Charlottesville) – 20+5'	
4:30 – 5:00 PM	Break	
5:00 – 6:30 PM (90')	Consortia roundtable, “pulling it all together”: 3 things we have learned / we expect to learn from other consortia – synergies and opportunities – Chairs: Manuela Battaglia, William Hagopian nPOD (A. Pugliese), INNODIA (C. Matthieu), TrialNet (K. Herold), ENDIA (J. Couper), GPPAD (A. Ziegler), TEDDY (J. Krischer).	
6:30 – 7:30 PM	Time on your own	
7:30 - Onward	IDS Gala Evening	

FRIDAY, MAY 26, 2023	
8:20 – 9:00 AM (40')	Plenary 4 – presented by Sylvaine You Circulating vs tissue immune cells: Donna Farber (Columbia University, New York) – 30+10'
9:00 – 10:30 AM (90')	Blood omics – Chairs: Megan Levings, Carolin Daniel Precision profiling of islet specific CD4+ T cells: Tim Tree (King's College, London) – 20+5' CyTOF/RNAseq biomarkers in TrialNet/TEDDY at-risk subjects: Eoin McKinney (University of Cambridge) – 20+5' Oral Abstract 21: DNA methylation as a mediator of the maternal effect in type 1 diabetes: Randi Johnson (University of Colorado) – 10+3' Oral Abstract 22: Age-related gene expression trajectories that follow the temporal islet autoantibody incidence in early childhood: Ivo Zeller (Helmholtz, Munich) – 10+3' Oral Abstract 23: The identification of epigenetic and transcriptomic changes that contribute to T1D: Ying Wong (University of Adelaide) – 10+3'
10:30 – 11:00 AM	Break
11:00 – 12:15 PM (75')	Biomarker discovery – Chairs: Helena Reijonen, Dirk Homann Oral Abstract 24: A Hybrid Insulin Peptide Formed by fusion of Two C-peptide Fragments is a Potent Epitope in T1D: Rocky Baker (University of Colorado) – 10+3' Oral Abstract 25: Protein Modifications Alter Both Autoimmunity and Glucose Metabolism in T1D: Mark Mamula (Yale University) – 10+3' Oral Abstract 26: Smad7 drives T-cell resistance to TGF-β and development of type 1 diabetes: Mahmood Tarayrah (INSERM Cochin Institute, Paris) – 10+3' Oral Abstract 27: Circulating miRNAs afford early life prediction of T1D in children with increased HLA-conferred risk in the DIPP study: Alberto Pugliese (City of Hope, Duarte) – 10+3' Oral Abstract 28: Serological markers of exocrine pancreatic function and genetics differentiate controls from subjects at various stages of T1D: MacKenzie Williams (University of Florida, Gainesville) – 10+3'
12:15 – 1:15 PM (60')	Antibody Workshop session – Chairs: Peter Achenbach, Vito Lampasona
1:15 – 2:30 PM	Lunch
2:30 – 4:30 PM (120')	Trials with new results – Chairs: Emily Sims, Jay Skyler Coxsackievirus vaccination trial: Miguel Sanjuan (Provention) – 15+5' Baricitinib in new-onset T1D: John Wentworth (University of Melbourne) – 15+5' ActoBio Lactococcus lactis / Teplizumab: Chantal Mathieu (UZ Leuven) – 15+5' Teplizumab update & biomarkers in TN10 prevention trial: Kevan Herold (Yale University, New Haven) – 15+5' Low-dose IL-2, DIAB-IL2 trial: David Katzmann (Sorbonne University, Paris) – 15+5' Wrap-up: how good is good enough? Challenges and realities of T1D prevention/intervention: Anette Ziegler (Helmholtz, Munich) – 15+5'
4:30 – 5:00 PM	Break
5:00 – 6:00 PM (60')	Debate 2: Infectious triggers in T1D: myth or reality? – Chair: Maria Craig

	Myth: Bart Roep (LUMC, Leiden) – 20+5' Reality: Heikki Hyoty (University of Tampere) – 20+5'
6:00 – 6:30 PM (30')	Poster Blast 2 – Chair: Roberto Castro-Gutierrez 8 presentations, 3'/each M. Medina-Sepras, P. Monti, J. Pérez-Hernández, N. Rönkä, E. Templeman, M. Tran, C. Vinci, J. Zapardiel-Gonzalo
6:30 – 7:45 PM (75')	Poster Session III 1 M. Medina-Sepras, 2 P. Monti, 3 J. Pérez-Hernández, 4 T. Pieper, 5 M. Piotrowska, 6 J. Pöder, 7-8 A. Pugliese, 9 L. Quinn, 10 L. Rachdi, 11 M. Reiche, 12 M. Repic, 13 T. Rodriguez-Calvo, 14 N. Rönkä, 15 N. Sachdeva, 16 J. Sakowska, 17 G. Sassi, 18 M. Scherman, 19 A.M. Schroderus, 20 E. Sims, 21 A. Sioofy-Khojine, 22 M. Smith, 23 M. Smithmyer, 24 C. Speake, 25 I. Starskaia, 26 L.C. Stene, 27 D. Strasser, 28 R. Strollo, 29 A. Sutherland, 30 H. Swift, 31 E. Templeman, 32 L. Teyton, 33 M. Thelin, 34 R. Thomas, 35 A. Title, 36 M. Tran, 37 P. Trzonkowski, 38 J. Tsai, 39 J. Van Rampelbergh, 40 F. Vecchio, 41 C. Vinci, 42 C. Wardell, 43 B.J. Webb-Robertson, 44 A. Weiss, 45 J. Wenzlau, 46 T. White, 47 C. Williams, 48-49 G. Wodarcyk, 50 J. Ye, 51 B. Yesildag, 52 J. Zapardiel-Gonzalo, 53 E. Christakou, 54 B. Ehall, 55 M. Martino.
	Dinner on your own

SATURDAY, MAY 27, 2023	
8:20 – 9:00 AM	Plenary 5: G.F. Bottazzo Lecture – presented by C. Evans-Molina Polly Bingley (University of Bristol) – 30+10'
9:00 – 10:00 AM (60')	Insights from immune repertoire analysis – Chairs: Encarnita Mariotti-Ferrandiz, Luc Teyton Virus- and self-reactive T cells: Mark Davis (UCSF, San Francisco) – 20+5' Oral Abstract 29: Presence of virus-specific CD8 T cells in the pancreas of organ donors with and without type 1 diabetes: Maki Nakayama (Barbara Davis Center, Aurora) – 10+3' Oral Abstract 30: Molecular phenotypes measured by single cell sequencing in diabetogenic B cells: Catherine Nicholas (University of Colorado) – 10+3'
10:00 – 11:00 (60')	Population studies – Chairs: Megan Penno, Richard Oram Oral Abstract 31: Evolution of islet autoantibodies in the Environmental Determinants of Islet Autoimmunity (ENDIA) study: Jenny Couper (University of Adelaide) – 10+3' Oral Abstract 32: Genetic Screen For Risk of Stage 2 T1D: David Repaske (University of Virginia) – 10+3' Oral Abstract 33: Genetic risk score for T1D in patients with early-onset T1D - a potential application in newborn screening: Amber Luckett (University of Exeter) – 10+3' T1D in Qatar: Ammira Al-Shabeb Akil (Sira Medicine, Doha) – 10+3'
11:00 – 11:30 AM	Break
11:30 AM – 12:20 PM (50')	Late-breaking session – Chairs: Jamie Felton, David Klatzmann Oral Abstract 34: Effect of Ustekinumab on C-peptide in children and adolescents with early Type 1 diabetes - a randomised controlled trial: Danijela Tatovic (Cardiff University) – 15+3' Oral Abstract 35: Circulating insulin specific CD4 T cells are biomarkers of anti-islet autoimmunity in mouse and human: Siddhartha Sharma (Scripps Research Institute, La Jolla) – 10+3' Oral Abstract 36: A vascular-associated fibroblastic cell controls pancreatic islet autoimmunity: Luc Teyton (Scripps Research Institute, La Jolla) – 10+3'
12:20 – 13:00 PM (40')	Take-home messages Mark Atkinson (University of Florida, Gainesville), Colin Dayan (Cardiff University), Jessica Dunne (Novo Nordisk), Josh Vieth (JDRF)
13:00 – 13:15 PM (15')	Closing Comments & Farewell

Press and Media Coverage

For persons living with T1D:



<https://glucosetoujours.com/>

(available in French and English)



For scientists and clinicians:



thesugarscience

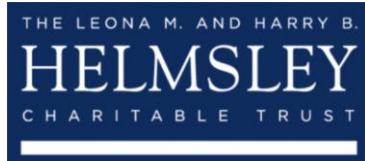
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