

nPOD Annual Meeting Agenda

MEETING GOAL

Previous Annual nPOD Meetings have received much in the way of positive feedback. This year's meeting aims at continuing that tradition, with emphasis on furthering our collaborative research efforts to new levels and engaging you in this process. To learn about how collaborations work, we have one of the country's experts on the topic of "**The Science of Team Science**" giving a lecture on multidisciplinary, international collaborations, their impact in the biomedical field, and how Team Science works. We hope participants will find this format intellectually stimulating and rewarding, and that you will all go home with new information, new ideas, and new friends and collaborators.

The meeting is structured in four major types of interaction formats:

Working group sessions

These sessions will allow to further develop the evolution of the nPOD research model, based on super-structured working groups focused on key topics in T1D research, including the concept of real time data sharing within the new nPOD DataShare program. Key topics of these sessions include:

- Updates and plans from established and newly formed working groups
- Analysis of how the groups operate, discussion for improvements, needs, challenges and opportunities

Cutting Edge Seminars

- Presentations from nPOD investigators, to review and discuss progress and findings from nPOD supported projects, or present new projects
- Presentations from experts on additional scientific topics of interest to nPOD
- Open discussions following each session

Abstracts

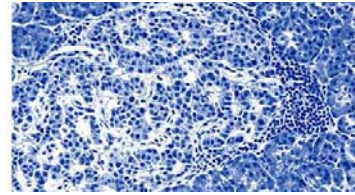
- Abstract presentations from nPOD investigators
- Poster session for in-depth discussions

Informal interactions

- Ample breaks and evening events for informal discussions
- Social gathering and recreational activities for unwinding, get to know people and make friends
- Free time the afternoon of Tuesday, February 24, 2015

Guiding questions throughout the conference:

- What are the new questions that can be asked?
- How do the results diverge from conventional wisdom?
- Is there another sample set that could be used to inform these results?
- What other experiments inside or outside of nPOD should be performed to extend results/analysis
- Opportunities to work together to better advance science



Sunday, February 22, 2015		
Time	Function	Location
2:00 – 6:30 PM	Registration	Hotel Lobby
3:00 – 5:30 PM Session 1	Working Group Meetings: nPOD-V (Led by Alberto Pugliese)	South Terrace
	nPOD-Matrix (Led by Tom Wight)	Executive Board Room 1
	nPOD-TCell (Led by Maki Nakayama & John Kappler)	Executive Board Room 3
6:00 – 6:45 PM	Opening Reception (Hors d'oeuvres)	King Charles
6:45 – 7:30 PM Session 2	Opening Keynote Speaker Introduction – Alberto Pugliese Noshir Contractor <i>“The Science of Team Science”</i>	King Charles
7:30 PM	DINNER (On your own, many local choices)	

Monday, February 23, 2015		
Time	Function	Location
7:00 AM	Registration	5 th Floor Foyer
7:00 – 8:00 AM	BREAKFAST	South Terrace
8:00 – 8:15 AM Session 3	Welcome & Introductions Mark Atkinson, Alberto Pugliese Derek Rapp, JDRF CEO	King Charles
8:15 – 9:00 AM Session 4	Opening Plenary Ezio Bonifacio <i>“Emerging Views on Type 1 Pathogenesis”</i>	King Charles
9:00 – 10:30 AM Session 5	Cutting Edge Seminar I: Mechanisms of β Cell Stress/Dysfunction Co-Chairs: Raghu Mirmira & Richard Insel [3 talks: 25 min each] Clayton Mathews <i>“Beta cell stress in the type 1 diabetic pancreas”</i> Yuval Dor <i>“Postnatal growth and failure of beta cells”</i> Jerry Nadler <i>“The 12-lipoxygenase pathway as a novel target to reduce inflammatory beta cell stress”</i>	King Charles
10:30 – 11:00 AM	BREAK	
11:00 – 11:30 AM Session 6	Mechanisms of β Cell Stress/Dysfunction Discussion Discussion leaders: Raghu Mirmira & Richard Insel	King Charles

Time	Monday, February 23, 2015 (continued) Function	Location
11:30 AM – 12:30 PM Session 7	<p>Oral Abstracts I – β Cell Biology/β Cells in T1D</p> <p>Chair: Yuval Dor [Each Abstract (15 min) = 10 min talk + 5 min Q&A]</p> <p>Lars Krogvold <i>“Gene expression differences in laser-captured human islets between newly diagnosed type 1 diabetic patients from the DiViD study and non-diabetic control from nPOD”</i></p> <p>Charmaine Simeonovic <i>“Intracellular heparin sulfate (HS) is a more sensitive marker of beta cell demise during T1D progression than insulin or heparin sulfate proteoglycan (HSPG) core protein”</i></p> <p>Harini Chakravarthy <i>“Generation of insulin producing β-cells in vivo from adult islet α-cells”</i></p> <p>Mihaela Stefan <i>“Epigenetic modifications induced by interferon-alpha in human islets modulate expression at type 1 diabetes associated loci”</i></p>	King Charles
12:30 – 1:30 PM	LUNCH	South Terrace
1:30 – 1:45 PM	GROUP PHOTO	Beach
1:45 – 3:15 PM Session 8	<p>Cutting Edge Seminar II: Immunology / Pancreas Pathology</p> <p>Co-Chairs: Manuela Battaglia & David Serreze [3 talks: 25 min each]</p> <p>Ken Coppieters <i>“IL-21/IL-21R and GLP-1R staining on pancreas tissues from (pre-)T1D, T2D and control donors”</i></p> <p>Teresa Rodriguez-Calvo <i>“Increased immune cell infiltration of the exocrine pancreas, food for thought”</i></p> <p>Bart Roep <i>“The scent of a frazzled beta cell”</i></p>	King Charles

Time	Monday, February 23, 2015 (continued) Function	Location
3:15 – 3:45 PM Session 9	Immunology /Pancreas Pathology Discussion Discussion leaders: Manuela Battaglia & David Serreze	King Charles
3:45 – 5:00 PM Session 10	<p align="center">Oral Abstracts II – Etiopathogenesis</p> <p align="center">Co-Chairs: Stephen Rich & Dale Greiner [Each Abstract (15 min) = 10 min talk + 5 min Q&A]</p> <p align="center">Ben Giepmans <i>“Nanotomy of human Islets of langerhans and identification of viruses”</i></p> <p align="center">Marika Bogdani <i>“Altered extracellular matrix in pancreatic islets of autoantibody-positive donors”</i></p> <p align="center">Jutta Laiho <i>“Detection of enteroviruses and correlation with inflammation markers and transglutaminase-2-specific IgA deposition in duodenum samples of nPOD donors”</i></p> <p align="center">Linda Yip <i>“Gene expression profiling of the pancreas to identify candidate genes involved in the pathogenesis of type 1 diabetes”</i></p> <p align="center">Laura Nigi <i>“Pancreatic characterization of inflammatory molecules in human T1D”</i></p>	King Charles
5:00 – 6:00 PM Session 11	<p align="center">nPOD-V Working Group Report</p>	King Charles
7:00 – 9:00 PM Session 12	<p align="center">DINNER & AWARDS CEREMONY Graeme Bell</p> <p align="center"><i>“Not all type 1 diabetes patients are created equal”</i></p>	Beach Pavilion

Tuesday, February 24, 2015

Time	Function	Location
7:00 – 8:00 AM	BREAKFAST	South Terrace
8:00 – 10:00 AM Session 13	<p align="center">Cutting Edge Seminar III: Etiopathogenesis and Natural History</p> <p align="center">Co-Chairs: Matthias von Herrath & Ezio Bonifacio [4 talks: 25 min each]</p> <p align="center">Richard Oram <i>“Clinical and scientific relevance of persistent C-peptide in type 1 diabetes”</i></p> <p align="center">Stephen Rich <i>“From GWAS to genes and beyond in type 1 diabetes”</i></p> <p align="center">Olle Korsgren <i>“Lessons learned from biopsies from subjects with recent onset Type 1 Diabetes”</i></p> <p align="center">Noel Morgan <i>“Hallmarks of disease in human islet cells in type 1 diabetes”</i></p>	King Charles
10:00 – 10:30 AM	BREAK	
10:30 – 11:00 AM Session 14	<p align="center">Etiopathogenesis and Natural History General Discussion</p> <p align="center">Discussion leaders: Matthias von Herrath & Ezio Bonifacio</p>	King Charles
11:00 AM – 12:00 PM Session 15	<p align="center">Oral Abstracts III – Immunology</p> <p align="center">Co-Chairs: Garry Fathman & John Cambier [Each Abstract (15 min) = 10 min talk + 5 min Q&A]</p> <p align="center">Marcela Brissova <i>“Functional and molecular analysis of pancreatic islets from a 12-year-old female with 3 years of type 1 diabetes”</i></p> <p align="center">Abby Willcox <i>“Differential architecture and germinal center formation in pancreatic lymph nodes from donors with recent onset and longstanding type 1 diabetes”</i></p> <p align="center">Shiva Reddy <i>“Up-regulation of markers of pro-inflammatory cytokine-beta cell stress axis during type 1 diabetes”</i></p> <p align="center">Shannon Walleit <i>“The intestinal epithelial interface in type-1 diabetes – where miscommunication begins”</i></p>	King Charles

Tuesday, February 24, 2015 (continued)		
Time	Function	Location
12:00 – 1:00 PM	LUNCH	South Terrace
1:00 – 2:30 PM Session 16	<p>Cutting Edge Seminar IV: β Cells</p> <p>Co-Chairs: Andrew Stewart & Olivier Blondel [3 talks: 25 min each]</p> <p>Jake Kushner <i>“Interrogating the regenerative capacity of human beta cells in patients with type 1 diabetes”</i></p> <p>Dieter Egli <i>“Understanding diabetes using stem cells”</i></p> <p>Peter Arvan <i>“What limits insulin production capacity?”</i></p>	King Charles
2:30 – 3:00 PM Session 17	<p>β Cells General Discussion</p> <p>Discussion leaders: Andrew Stewart & Olivier Blondel</p>	King Charles
3:00 – 6:00 PM	FREE TIME	
6:00 – 8:00 PM Session 18	<p>Poster Session</p> <p>(Light hors d'oeuvres)</p>	Del Prado
8:00 PM	DINNER (On your own, many local choices)	

Wednesday, February 25, 2015 (Half day)

Time	Function	Location
7:00 – 8:00 AM	BREAKFAST	South Terrace
8:00 – 9:15 AM Session 19	<p align="center">Oral Abstracts IV – Late Breaking Abstracts Co-Chairs: Leonard Shultz & Todd Brusko [Each Abstract (15 min) = 10 min talk + 5 min Q&A]</p> <p align="center">Sarah Richardson <i>"Low B-lymphocyte numbers within the insulitic lesion correlates with an elevated proportion of persisting β-cells and later onset of disease in patients with type 1 diabetes"</i></p> <p align="center">Malin Flodström-Tullberg <i>"The IFIH1 rs1990760 polymorphism regulates the human pancreatic islet anti-viral response to enterovirus infection"</i></p> <p align="center">Maki Nakayama <i>"Tracing T cell receptor sequences infiltrating pancreas tissues transplanted in patients having type 1 diabetes"</i></p> <p align="center">Sahil Virdi <i>"Assessment of memory T cells in nPOD pancreata with insulitis"</i></p> <p align="center">Martha Campbell-Thompson <i>"Three-Dimensional High-Resolution Imaging of Human Islets in Type 1 Diabetes"</i></p>	King Charles
9:15 – 9:45 AM	BREAK	
9:45 – 11:45 AM Session 20	<p align="center">Cutting Edge Seminar V: β Cells Co-Chairs: Martha Campbell-Thompson & Clayton Mathews [3 talks: 25 min each]</p> <p align="center">Marcela Brissova <i>"Human islet formation, plasticity and function from fetus to 10 years of age"</i></p> <p align="center">Andrew Stewart <i>"Novel approaches to induction of human beta cell proliferation for diabetes"</i></p> <p align="center">Ivan Gerling <i>"Molecular systems biology of laser-captured islets"</i></p> <p align="center">Fred Levine <i>"Islet-cell neogenesis in mouse and man"</i></p>	King Charles

Wednesday, February 25, 2015 (continued)

Time	Function	Location
11:45 AM – 12:15 PM Session 21	β Cells General Discussion Discussion Leaders: Martha Campbell-Thompson & Clayton Mathews	King Charles
12:15 – 12:30 PM Session 22	JDRF Perspective Richard Insel & Julia Greenstein	King Charles
12:30 – 12:45 PM Session 23	NIH HIRN Program Olivier Blondel	King Charles
12:45 – 1:00 PM Session 24	nPOD Closing Thoughts Mark Atkinson & Alberto Pugliese	King Charles

END OF MEETING