





nPOD Annual Meeting Agenda February 23 - 26, 2014 • One Ocean Resort • Atlantic Beach, FL

MEETING GOALS

While previous Annual nPOD Meetings have received much in the way of positive feedback, this year's meeting has been organized to not only continue in that tradition, but see it in a unique way designed to maximize discussion and see the potential for collaborative research efforts move to new levels. We hope participants will find this new format both intellectually stimulating and rewarding.

The goals of the 6th Annual JDRF nPOD meeting are:

- 1. In *plenary sessions*, we will review and discuss progress and findings from nPOD supported projects, including (but not limited to):
 - a. Data pertaining to the immunopathogenesis of human type 1 diabetes
 - b. New abnormalities/possible pathogenic mechanisms/therapeutic targets
- 2. In working group sessions, we seek to present 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. This concept will be illustrated by:
 - a. Providing a progress report from the nPOD-V group
 - b. Presentation of bioinformatic infrastructure (DataShare), alongside investigator discussion and feedback
 - c. Noting our desire for nPOD investigators to develop their own concepts and ideas, for analysis, as a collective action.
- 3. In *general sessions*, we will apply the nPOD approach to key research priority areas, by:
 - a. Reviewing status of knowledge via talks and discussions in each main area
 - b. Tasking small groups of investigators (break-out sessions) to draft key questions in each main area
 - c. Following presentation, provide review and discussion of small group recommendations, and formulation of integrated list of key questions for each area
 - d. Ascertaining the provisional formation of new, dedicated working groups
- 4. Guiding questions throughout the conference:
 - a. What are the new questions that can be asked?
 - b. How do the results diverge from conventional wisdom?
 - c. Is there another sample set that could be used to inform these results?
 - d. What other experiments inside or outside of nPOD should be performed to extend results/analysis
 - e. How can DataShare make investigation in such instances easier?

AGENDA

Time	Function	Location	
Sunday, Febr	Sunday, February 23, 2014		
2:00-7:00 pm	Registration	TBD	
3:00-6:00 pm	 Working Groups: nPOD-V, nPOD-T, Matrix, TCR, & "I Don't Have a Group Group" 	TBD	
6:00-7:00 pm	Opening Reception – Heavy Hors d'Oeuvres	TBD	
Monday, Feb	ruary 24, 2014		
7:30 am 7:30-8:30 am	RegistrationBreakfast	Verandina patio	
8:30-9:00 am	Welcome and Introductions (Mark Atkinson, Alberto Pugliese)The State of nPOD	Atlantica Ballroom	
9:00-9:30 am	Keynote Speaker – Noshir Contractor	Atlantica Ballroom	
9:30-10:00 am	DataShare Presentation (John Kaddis/Les Jebson/Suzanne Ball) Illustrate the nPOD-V working group concept by example from Task 6 leader and demonstrate use of DataShare	Atlantica Ballroom	
10:00-10:30 am	Break	Verandina patio	
10:30-11:00 am	Reports from Two Working Groups 15 minutes each	Atlantica Ballroom	
11:00-12:00 pm	Oral Abstracts I (10 minutes +5 minutes Q&A for each) - Viral etiology Chair: Mark Atkinson 1. Francesco Dotta – Beta cell expression of enteroviral receptor CAR 2. Ivan Gerling – Gene expression profiles from laser captured nPOD donor islets 3. Vincent Plagnol – Link between viral infections and T1D 4. Maarti Oikarinen - Correlation between enterovirus positivity in different tissues 5. Luis Soares – A potential viral etiology of NOD T1D	Atlantica Ballroom	

12:00-1:00 pm	Lunch	Verandina patio
1:00-2:00 pm	Cutting Edge Seminars I (3 talks, 20 min each) Chair: Dale Greiner 1. New pathogenic leads – Ezio Bonifacio 2. Beta cell replication – Andrew Stewart 3. Beta cell trans-differentiation or regeneration—Mathias Hebrok	Atlantica Ballroom
2:00-2:30 pm	General Discussion on Cutting Edge Seminars Chairs: Dale Greiner and Clayton Mathews	Atlantica Ballroom

	Following previous Seminar presentations, this session will formulate a list of key questions for the creation of new, dedicated working groups.	
2:30-3:00 pm	Break	Verandina patio
	Oral Abstracts II (10 minutes +5 minutes Q&A for each)	
3:00-4:30 pm	- Islet Biology	
	Chair: Teo Stavea	
	1. Ben Giepmans – Anatomy of human islets	
	2. Roberto Gianani – Diabetic pathology syndromes distinguished by	
	beta cell mass and islet phenotype	Atlantica Ballroom
	3. Marika Bogdani – Hyaluronan accumulates in islets and lymphoid	
	tissues of T1D patients	
	4. Maggie Morris – Expression patterns in lipoxygenases	
	5. Linda Yip – Diminished A1 receptor function in pancreatic alpha cells	
	6. Giacomo Lanzoni – Stem and progenitor cell signatures	
4:30-4:45 pm	Group Photo	TBD
4:45-6:30 pm	End of Afternoon (Break)	On your own
6:30-9:00 pm	Dinner – Beach Luau	

Tuesday, February 25, 2014

Time	Function	Location
7:30-8:30 am	Breakfast	Verandina patio
8:30-9:00 am	Reports from Remaining Working Groups Chair: Alberto Pugliese	Atlantica Ballroom
	nPOD-T keynote talk (George Burke; 20 min) Updates: Alberto for nPOD-T Tim Tree for the JDRF Immune Memory Consortium	
9:00-10:00 am	Oral Abstracts III (10 minutes +5 minutes Q&A for each) – -Transplantation Chair: Luca Inverardi 1. Clayton Mathews – Reduced B cell expression of glucokinase and	Atlantica Ballroom
	ATP synthase linked to impaired insulin secretion 2. Francesco Vendrame - Memory T cells in the transplanted pancreas with recurrent diabetes	
10:00-10:30 am	Break	Verandina patio
10:30-11:30 am	Cutting Edge Seminars II (3 talks, 20 min each) Chair: Ron Gill	
	 The Pancreas in T1D, A pathologist's perspective – Alexandra Butler Mechanisms of Beta cell death – Decio Eizirik Extracellular Matrix – Thomas Wight 	Atlantica Ballroom

11:30-12:30 pm	Breakout Brainstorming Sessions: small groups will assemble, discuss ideas, goals and key questions to collaboratively address in the following key research areas: 1. Insulitis (Chairs: Peter In't veld and Martha Campbell Thompson) 2. Beta Cell replication (Chair: Jake Kushner) 3. Biomarkers (Chairs: Bart Roep and Jerry Nepom)	Breakout rooms
12:30 pm	Pick up Box Lunch	Verandina patio
12:45-1:00 pm	Meet Group/Transportation for Afternoon Activity	Lobby
1:00-6:00 pm	Free Time/Afternoon Activity	
6:00-7:00 pm	Poster Session Wine & Cheese Reception	Atlantica Ballroom
7:00 pm	Dinner on your own	
9:00-11:00 pm	Open Bar/Open Mike – All Things Diabetes No Agenda – General Forum Free Speech about Needs in Type 1 Diabetes	TBD

Time	Function	Location
7:30-8:30 am	Breakfast	Verandina patio
8:30-9:15 am	Reports from Breakout Session Chairs	Atlantica Ballroom
9:15-10:30 am	Oral Abstracts IV (10 minutes +5 minutes Q&A - Immunology Chair: Todd Brusko 1. Darius Schneider - Cytokine signatures of cells 2. Kathleen Gillespie - Maternal microchimerism in healthy and T1D pancreas 3. Howard Seay - Global CpG methylation signature of pancreatic draining lymph node CD8+ T cells in type 1 diabetes 4. Sally Kent - Splenic autoreactive B cells from T1D subjects 5. Helena Reijonen - Islet Autoreactive CD4 T cells restricted by T1D Protective HLA molecules in a T2D donor and Islet autoantigen specific CD4 T cells with distinct HLA restrictions, epitope specificities and chemokine profiles in the blood and spleen of a T1D patient 6. Merce Marti - Redundancy of CDR3 sequences in the TCR VB& family of intrapancreatic T cell infiltrates 7. Melanie Stumpf - Identification of potential disease associated T cell receptor (TCR) sequences in pancreatic tissue from patients with recent-onset type 1 diabetes	Atlantica Ballroom
10:30-10:45 am	Break	
10:45-11:45 am	Cutting Edge Seminars III	Atlantica Ballroom
11:45 am-12:00 pm	 Wrap Up -General Discussion Chairs: Mark Atkinson and Alberto Pugliese What general principles have we learned from nPOD to date that has changed our understanding of T1D and may affect therapeutic strategies? Is the nPOD culture and resource providing a new paradigm for conducting research? What could nPOD be exploring that it is currently not doing? What do we not know about T1D that nPOD could address? 	Atlantica Ballroom
12:00 pm	Box Lunch	Verandina patio