

**14th Annual International Spinal Muscular
Atrophy Research Group Meeting**
June 24th, 25th, & 26th, 2010
Santa Clara, CA

Schedule of Events

Thursday, June 24th

Continental Breakfast	7:30 AM - 8:30 AM	Room
SMA Research Meeting	8:30 AM - 5:45 PM	Room
Cocktail Reception	5:45 - 7 PM	Room
Meet and Greet with Families	7 PM	Room

Friday, June 25th

Continental Breakfast	7:30 AM - 8:30 AM	Room
SMA Research Meeting	8:30 AM - 4:30 PM	Room
Banquet with Families	5:30 PM - 9:00 PM	Ballroom

Saturday, June 26th

Continental Breakfast	7:30 AM - 8:30 AM	Room
SMA Research Meeting	8:30 AM - 1:30PM	Room

Meeting Adjourns

Research Program

Thursday, June 24, 2010

8:30 AM Welcoming Remarks – Jill Jarecki

Human SMA Studies: Population Screening, and Outcome Measures, and Clinical Trial Updates, Session Moderators Tom Crawford, M.D. (before break) and Kathryn Swoboda, M.D. (after break)

8:40 AM Douglas Sproule: Adiposity is increased among High-Functioning, Non-Ambulatory Patients with Spinal Muscular Atrophy

9:00 AM Kathryn Swoboda: Nutritional Analysis in Infants and Children with Spinal Muscular Atrophy Type I

9:20 AM Aga Lewelt: CMAP: Validity, Reliability, Feasibility, and Correlation to Motor Function in Children with Spinal Muscular Atrophy

9:40 AM Stephen Lynn: TREAT-NMD: advancing diagnosis, care and treatment for neuromuscular disorders

10:00 AM Bernie La Salle: Maximizing Project Cure SMA Data Value From Clinical Trials

10:20 AM 15 Minute Break

10:40 AM F. Rebecca Pruss: Planning for a pivotal clinical trial of olesoxime in SMA patients

11:00 AM F. Danilo Tiziano: Salbutamol increases SMN mRNA in spinal muscular atrophy patients (SMA): relevance for clinical trial design

11:20 AM Tom Crawford: Results of a prospective, unbiased search for plasma and urine biomarkers of disease severity in spinal muscular atrophy (the BforSMA study)

Lunch 11:45 AM to 1:00 PM

Regulation of SMN Expression and Function with Therapeutic Implications, Session Moderator Adrian Krainer, Ph.D.

1:00 PM Ching Wang: Hydroxyurea Enhances SMN2 Gene Expression through NO Release in SMA Cells

1:20 PM Lutz Garbes: SMA-therapy with VPA: Why do we have Positive- and Non-Responders?

1:40 PM Sabastian Lunke: A Fine Map of Histone Acetylation Patterns in SMA Patients

2:00 PM Megerditch Kiledjian: DcpS-Mediated Regulation of Gene Expression

2:20 PM Mumtaz Kasim: Discovery of SMN complex modulators and dissection of its function in cells

2:40 PM Darrkci Li: Identification of a novel non-coding RNA associated with the SMN complex

New Mouse Models, Session Moderator Louise Simard, Ph.D.

3:00 PM Rocco G. Gogliotti: Second generation SMN2 mouse models with Smn inducibility

3:20 PM Chris Lorson: Development of a genetic read-through model in SMA

3:45 to 5:45 PM Poster Session A with Coffee Break

5:45 to 7:00 PM Cocktail Hour

7:00 PM Meet and Greet with SMA Families

Friday June 25, 2010

SMN Neuronal Specific Functions, Session Moderator Doug Kerr, M.D., Ph.D.

8:30 AM Anindya Sen: FGF signaling at the Drosophila NMJ is regulated by Smn activity

8:50 AM Umrao Monani: Defining the Cellular Site of Action of SMN: Effects of Depleting SMN Selectively in Motor Neurons of Model Mice.

9:10 AM Christopher Henderson: Intrinsic gene expression changes in early SMA motor neurons

9:30 AM Hao Le: Plastin 3 rescues synapse defects in smn mutant zebrafish

9:50 AM Claudia Fallini: SMN associates with mRNA-binding proteins ZBP1 and HuD in motor neuron axons

10:10 AM Cyril Peter: Binding of SMN to coatomer couples the snRNP assembly machinery to COPI vesicular transport.

10:30 AM 15 Minute Break

10:50 AM Mara Almeida: Novel interaction of Survival Motor Neuron protein with PABPC1 directs neuromuscular junction morphology by regulating translation at the synapse

11: 10 AM PM Brian McCabe: Motor Circuit Dysfunction in a Drosophila Model of Spinal Muscular Atrophy

11:30 AM George Mentis: Altered synaptic input and excitability of motor neurons in SMA mice and their partial reversal by TSA treatment

11: 50 AM Karen Ling: Synaptic defects in spinal muscular atrophy: an investigation of central vs. peripheral synaptopathy in a mouse model of SMA

12:10 PM Thomas Wishart: Survival motor neuron protein deficiency causes abnormal brain development in spinal muscular atrophy

12:30 to 2:50 PM Poster Session B with Boxed Lunch

3:00 to 4:15 PM Poster Highlights, Session Moderator, Louise Simard, Ph.D.

5:30 PM: Families of SMA Annual Banquet with SMA Families

Saturday June 26, 2010

SMA Therapeutic Development, Session Moderator Arthur Burghes, Ph.D.

8:30 AM Charlotte Sumner M.D., Assistant Professor of Neurology, Johns Hopkins University, Overview of Possible Therapeutic Strategies for SMA

Abstract Selections:

8:45 AM Nikolai Naryshkin: Optimizing small molecule compounds that post-transcriptionally modulate SMN gene expression

9:00 AM Jingbo Xiao: Design, Synthesis and Initial Biological Evaluation of New Series of SMN Modulators

9:15 AM Yimin Hua: Splicing-based Antisense Rescue of SMA mice

9:30 AM Marco Passini: Gene and Antisense Therapies for SMA

9:45 AM Martine Barkats: Intravenous injection of SMN1-expressing self-complementary AAV9 rescues severe type I SMA mice

10:00 AM Rafael J Yáñez-Muñoz: Integration deficient lentiviral vectors (IDLVs) transduce spinal cord efficiently in vitro and in vivo

10:15 AM Hans Keirstead: Motor Neuron Progenitors Derived from Human Embryonic Stem Cells for Clinical Application

10:30 AM 20 Minute Break

11 AM John Porter, Ph.D., Program Director, Neuromuscular Disease, Neurogenetics Cluster, NINDS, NIH / NINDS role in SMA Drug Development,

11:20 AM Grace Furman, Ph.D., DABT, President and CEO of Paracelsus, Inc. Making Drug Candidates IND-Ready

11:40 AM James Rusche, Ph.D., Senior VP, Research and Development, Repligen Corporation, Industry Perspective on Challenges and Opportunities in Orphan Disease Drug Development

12:00 PM Elizabeth McNeil, M.D., Senior Medical Reviewer, Office of Orphan Product Development, FDA, FDA Perspective on SMA Drug Development

12:30 to 1:30 PM Panel discussion with invited speakers.

Possible panel discussion points include:

- 1. What pre-clinical efficacy data should be in hand before initiating clinical trials?*
- 2. What juvenile toxicology is needed prior to efficacy trials in children? How does this differ in SMA Type I versus other SMA Types?*
- 3. How does safety assessment differ for small molecules versus biologics like cellular therapy, gene therapy, and oligonucleotide approaches?*
- 4. What specific/special safety considerations are there for developing CNS drugs? How important is brain clearance, for instance?*
- 5. What is the best target population to test SMA drugs? Does it differ with drug type and risk/benefit profile of the particular therapy?*
- 6. In the SMA field, HDACi inhibitors, being developed for cancer, have been shown to be efficacious in cellular and animal models of SMA. What are the concerns about using these drugs in chronic dosing regimens as would be required in SMA versus short term dosing situations?*

Meeting Adjourns.