9th International Congress of Neuroimmunology Program

Sunday, October 26, 2008 - Course and Reception

Plenary Sessions

Monday, October 27, 2008 - Pathogenesis of Neuroimmune Disorders

Chair, Hartmut Wekerle and Scott Zamvil

9:00a.m. -9:15 a.m. Welcome, Hartmut Wekerle, ISNI President
9:15 a.m. – 10:00 a.m. McFarlin Memorial Lecture, Larry Steinman Stanford Univ. *"Large Scale Analysis of Proteins, Lipids and Gene Transcripts in MS Tissue Reveal*Multiple Therapeutic Targets for Different Stages of Disease"
10:00 a.m. – 10:45 a.m. Newsome-Davis Memorial Lecture, Angela VincentUniv. of Oxford *"Autoimmune channelopathies: John's legacy"*10:45 a.m. – 11:30 a.m. Josep Dalmau Univ. of Pennsylvania

"Immune-mediated disorders of memory, cognition, and psychosis"

Tuesday, October 28, 2008 - Advances in Imaging

Chair, Jerry Wolinsky

9:00 a.m. – 9:40 a.m. Jerry Wolinsky Univ. of Texas at Houston "MRI's role in the modern diagnosis and management of MS" 9:40 a.m. – 10:20 a.m. Christoph Wuelfing Univ. of Texas Southwestern "Dynamic spatiotemporal patterning in the immunological synapse as a regulator of T cell activation" 10:20 a.m. -11:00 a.m. Max Planck Inst. Neurobiology Alexander Fluegel "Immune surveillance and autoimmunity: how encephalitogenic T cells enter their target organ" 11:00 a.m. – 11:40 a.m. Massimo Filippi **Ospedale San Raffaele**

"How MR-based technology is changing our views on the pathophysiology of multiple sclerosis"

Wednesday, October 29, 2008 - Effector Mechanisms

Chair, Arlene Sharpe and Takashi Yamamura

9:00 a.m. – 9:40 a.m. Dan Littman New York Univ. "Transcriptional regulation of inflammatory T cell differentiation"
9:40 a.m. – 10:20 a.m. Vijay KuchrooHarvard Univ. "Interplay of pathogenic Th17 and regulatory T cells in CNS autoimmunity"
10:20 a.m. – 11:00 a.m. Arlene Sharpe Harvard Univ. "Role of PD-1, PD-L1 and their ligands in regulating T cell activation and tolerance" 11:00 a.m. – 11:40 a.m. Maria Grazia Roncarolo San Raff Inst for Gene Therapy

San Raffaele Telethon

Thursday, October 30, 2008 - Neuroprotection

Chair, Douglas Kerr 9:00 a.m. – 9:40 a.m. **Robin Franklin** Univ. of Cambridge "Stem cells, precursors and the biology of CNS remvelination" 9:40 a.m. – 10:20 a.m. Steve Strittmatter Yale Univ. "Myelin proteins inhibiting axonal plasticity and regeneration in the adult brain and spinal cord" 10:20 a.m. – 11:00 a.m. Douglas Kerr Johns Hopkins Univ. "Stem Cells. Inflammation and Neural Repair" Steve Goldman Univ of Rochester 11:00 a.m. – 11:40 noon "Progenitor cell-based strategies for treating disorders of central myelin"

Lunch Symposia – Immuno Therapy 12:00 – 1:00 daily

Monday, October 27 Steve Hauser Univ. of California at San Francisco *"Targeted Therapy: B cells join the A-list"*Tuesday, October 28 Richard Nash Univ. of Washington *"Is There a Role for Hematopoietic Stem Cell Transplantation in Autoimmune Neurological Diseases?"*Wednesday, October 29 Gil Wolfe Univ of Texas Southwestern *"MGTX: Rationale for the thymectomy trial in non-thymomatous myasthenia gravis"*

Concurrent Symposia

Monday October 27, 2008

Genetics of CNS Diseases 1:15p.m.-3:15p.m.

Chair, Jorge Oksenberg

1:15 p.m.-1:45p.m. Ward Wakeland Univ of Texas Southwestern
1:45p.m.-2:15p.m. Jorge Oksenberg Univ of California San Francisco *"Mapping genetic susceptibility and modeling pathogenesis in multiple sclerosis"*2:15p.m.-2:45p.m. James Lupski Baylor University *"Genomic disorders: mechanisms and clinical implementation of high resolution genome analysis"*

Signal Transduction in Neuroimmunology 1:15p.m.-3:15p.m.

Chair, Walter Royal

1:15 p.m.-1:45p.m. Amy Weinmann Univ. of Washington "The role for T-box proteins in the induction of epigenetic states"
1:45p.m.-2:15p.m. Amy Lovett-Racke Ohio State University "Role of T-bet in Regulating Autoimmune Th1 and Th17 Cells"
2:15p.m.-2:45p.m. Hilde Cheroutre Univ of California at San Diego "Gut feelings in Immunology"
2:45p.m.-3:15p.m. Walter Royal Univ. of Maryland "Vitamin D and Retinoid Effects on Immune Function in Multiple Sclerosis"

Dendritic Cells in Neuroimmunology 1:15p.m.-3:15p.m.

Chair, Steve Miller

1:15 p.m.-1:45p.m. J. Bancherau Baylor Univ *"Taking Dendritic Cells into Medicine"*1:45p.m.-2:15p.m. Burkhard Becher Univ. of Zurich *"Encephalitogenicity: on T cell flavors and knock-out mice"*2:15p.m.-2:45p.m. Yong-Jun Liu Univ of Texas MD Anderson *"Human dendritic cells in regulating innate and adaptive immune responses"*2:45p.m.-3:15p.m. B. Segal Univ of Michigan

"Cytokine networks that regulate myeloid cell trafficking and differentiation in CNS autoimmunity"

<u>B-Cells in Neuroimmunologic Disease</u> 1:15p.m.-3:15p.m.

Chair, Francesca Aloisi

1:15p.m.-1:45p.m. Bernard Hemmer Technical University, Munich

"Antibodies and B cells in CNS inflammation"
1:45p.m.-2:15p.m. Bar-Or Amit McGill Univ. 'B cell subsets as targets in MS'
2:15p.m.-2:45p.m. Francesca Aloisi Istituto Superiore di Sanità in Rome "Pathogenic relavance of ectopic B-cell follicles in MS"
2:45 p.m.-3:15p.m. Ann Cross Washington Univ "B cell depletion as an add-on therapy in relapsing MS"

Tuesday October 28, 2008

Infection of the CNS 1:15p.m.-3:15p.m.

Chair, Hugh Perry

1:15 p.m.-1:45p.m. Tammy Kielian Univ of Arkansas "Toll-like receptors (TLRs): a link between innate and adaptive immunity and tissue injury in bacterial brain abscesses"
1:45p.m.-2:15p.m. Madeline Cunningham Univ of Oklahoma

"Autoimmunity and Behavior: Sydenham's Chorea and Related Disorders" 2:15p.m.-2:45p.m. Avi Nath Johns Hopkins Univ *"Immune reconsitution syndrome in HIV infection"* 2:45p.m.-3:15p.m. Hugh Perry Univ. of Southampton

"The impact of systemic inflammation on the brain in health and disease"

<u>Innate Immunity</u> 1:15p.m.-3:15p.m.

Chair, Serge Rivest

1:15 p.m.-1:45p.m. Serge Rivest Laval University 'Bone marrow stem cells to the rescue of brain diseases"
1:45p.m.-2:15p.m. Tim Vartanian Harvard Univ. "Innate Immunity in Degeneration and Regeneration of the CNS: The Good and Evil of Host Defense"
2:15p.m.-2:45p.m. Tony Wyss –Coray Stanford Univ. "TGF beta signaling in immune mediated CNS disease"
2:45p.m.-3:15p.m. William Karpus Northwestern Univ "Antigen presenting cell regulation of CNS chemokine expression"

Hormonal Regulation of Neuroimmunologic Disease 1:15p.m.-3:15p.m.

Chair, Betty Diamond

1:15 p.m.-1:45p.m. Rhonda Voskuhl Univ of California Los Angeles *"Estrogen treatments in EAE/MS"*

1:45p.m.-2:15p.m. Halina Offner Oregon Health Sciences Univ "Immunoregulatory and NeuroprotectiveEffect of Sex Steroids on EAE and MS"
2:15p.m.-2:45p.m. Lee Nelson Univ of Washington

2:15p.m.-2:45p.m. Lee Nelson Univ of Washington "Microchimerism: The legacy of maternal-fetal cell traffic"

2:45p.m.-3:15p.m. Betty Diamond Columbia Univ. *"Hormonal influences on the B cell repertoire and predisposition to autoimmunity"*

Developments in Myasthenia Gravis 1:15p.m.-3:15p.m.

1:15 p.m.-1:45p.m. Ellen Kraig Univ of Texas at San Antonio "Use of a novel transgenic model to unravel mechanisms of tolerance to AChR"
1:45p.m.-2:15p.m. P. Christadoss Univ of Texas Medical Branch at Galveston "Classical complement pathway and IL-6 in autoimmune myasthenia gravis pathogenesis"

2:15p.m.-2:45p.m. Kazuhiro Shigemoto "Myasthenia gravis experimentally induced with muscle-specific kinase"

Wednesday October 29, 2008

<u>T-Regulatory Cells in Human Immunology</u>

1:15p.m.-3:15p.m.

Chair, Steven Ziegler

1:15 p.m.-1:45p.m. Clare Becher-Allen

"Functionally Distinct populations of human natural CD25high Tregs in healthy donors and patients with Multiple Sclerosis" 1:45p.m.-2:15p.m. Steven Ziegler Benaroya Research Inst. At Virginia Mason *"FOXP3 and Regulatory T cell Function"* 2:15p.m.-2:45p.m. Nitin Karandikar Univ of Texas Southwestern

"CD4 and CD8 regulatory T cells in multiple sclerosis"

Neuroprotective Strategies in Neuroimmunologic Disease 1:15p.m.-3:15p.m.

Chair, Samia Khoury

1:15 p.m.-1:45p.m. S Khoury Harvard Univ "Interactions between the immune system and neural stem cells"
1:45p.m.-2:15p.m. J. Kipnis Univ of Virginia "T cell-astrocyte crosstalk in health and disease"
2:45p.m.-3:15p.m. Gianvito Martino Univ Vita-Salute San Raffaele "Regenerating the brain; the role of neural stem cells"

Paraneoplastic and Post-Infectious Syndromes 1:15p.m.-3:15p.m.

Chair, Steven Vernino

1:15 p.m.-1:45p.m. Steve Vernino Univ of Texas Southwestern "Autoimmune Autonomic Ganglionopathy"
1:45p.m.-2:15p.m. Hugh Willison Univ of Glasgow "Anti-glycolipid antibodies in Guillain Barre syndrome"

2:15p.m.- 2:45p.m. Susumu Kusunoki "Antibodies to gangliosides and ganglioside complexes in autoimmune neuropathies"

Immune Regulation and Tolerance 1:15p.m.-3:15p.m.

Chair, Joan Goverman and Thomas Forsthuber

1:15 p.m.-1:45p.m. Joan Goverman Univ of Washington
1:45p.m.-2:15p.m. JM Van Noort *"The dual-face role of alpha B-crystallin in MS"*2:15p.m.-2:45p.m. Monica Carson Univ of California Riverside *"Defining molecular tipping points between CNS neuroregeneration and neurodegeneration: the impact of regulating microglial responses"*2:45p.m.-3:15p.m. Thomas Forsthuber Univ of Texas at San Antonio *"T cell tolerance to neuroantigens mediated by HLA-DR2 haplotype molecules"*

Thursday October 30, 2008

Gene Therapy of Gliomas Noon-2:00p.m.

Chair, Maria Castro and Nino ChioccaNoon-12:30p.m.Nino ChioccaOhio State Univ

"Immune responses against gene and viral therapy in the brain"

12:30p.m.-1:00p.m. Maria Castro Univ of California Los Angeles "Brain Tumor Cell Death Mediates Toll-like Receptor 2 Signaling and Contributes to Tumor Regression and Anti-tumor Adaptive Immunity"

Virus-Induced Autoimmune Disease		Noon-2:00p.m.
Chair, Robert Fuj Noon-12:30p.m.	i nami Robert Fujanami	Univ of Utah
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"Peripheral infections can lead to CNS disease – infection of the CNS is not required for inflammation and demyelination" 12:30p.m.-1:00p.m. Pedro Lowenstein Univ of California Los Angeles

"Immunological synapses: the cellular and molecular biology of antiviral immune responses in the brain" 1:00p.m.-1:30p.m. Matthias Von Herrath La Jolla Inst for Allergy and Immunology "Understanding how viruses can enhance as well as stop autoimmune processes" 1:30p.m.-2:00p.m. Susan Weiss Univ of Pennsylvania

"Determinants of murine coronavrius pathogenesis in the central nervous system"

<u>Nuclear Hormone Receptors in Neuroimmunologic Disease</u> Noon-2:00p.m.

Chair, Paul Drew and Gary Landreth

Noon-12:30p.m. Dana McTigue Ohio State Univ *"The role of PPARs after spinal cord injury"*12:30p.m.-1:00p.m. Paul Drew Univ of Arkansas *"Peroxisome Proliferator-Activated Receptor Agonists: Relevance to Multiple Sclerosis"*1:00p.m.-1:30p.m. Gary Landreth Case Western Univ
1:30p.m.-2:00p.m. Michael Heneka Univ of Bonn *"Role of PPARγ in neurodegeneration and inflammation"*

<u>Neurodegeneration in the CNS</u> Noon-2:00p.m.

Chair, Claire Shepherd and Stan Appel

Noon-12:30p.m.Anna Bruce-Keller,Louisiana State University"How free radical formation in microglia and macrophages impinges onneurodegenerative disease"12:30p.m.-1:00p.m.Claire Shepherd,Prince of Wales Medical Research Inst (Sydney)

"Neuroinflammation, abnormal protein deposition and neuronal cell loss"

1:00p.m.-1:30p.m.Phil PopovichOhio State Univ"Manipulating the immune system to promote spinal cord repair"1:30p.m.-2:00p.m.Akio Suzumura"Therapeutic strategies against microglia-induced neurotoxicity"