



Tri-Society Annual Conference 2009
of the Society for Leukocyte Biology, International Cytokine Society, & International Society for Interferon and
Cytokine Research

Cellular and Cytokine Interactions in Health and Disease

October 18-21, 2009
Lisbon Convention Center
Lisbon, Portugal

Meeting Chair: Luis Montaner

Executive Committee: Scott Durum, Luis Montaner and Michael Tovey

Organizers: Ana Costa-Pereira, Thomas Decker, David Levy, Alberto Mantovani, Michael Parkhouse, Giorgio Trinchieri and Rui Victorino

(Note: The code preceding the title indicates its location in the Abstract Book. If no code appears, there is no abstract provided.)

Sunday, October 18th

11:00 AM – 5:30 PM

Registration – *Ground Floor Foyer*

12:30 PM – 2:15 PM

SLB Presidential Awards Presentations - *Auditorium 1*

Chairs: Matthew Fenton and William Nauseef

12:30 – 12:45 PM

Introduction *Matthew Fenton and William Nauseef*

POST – DOC AND JUNIOR FACULTY FINALISTS

12:45 – 1:00 PM

(SLBAW1-A) **c-Myc Triggers Macrophage Alternative Activation and Controls Macrophage Activity and Survival in Tumour** Oscar Pello, *Istituto Clinico Humanitas, Milano, IT*

1:00 – 1:15 PM

(SLBAW1-B) **Granule Exocytosis Contributes to TNF-Alpha and PAF-Induced Priming in Human Neutrophils** Silvia M. Uriarte, *University of Louisville, Louisville, KY, USA*

1:15 – 1:30 PM

(SLBAW1-C) **Heightened Activation of Plasmacytoid Dendritic Cells and Increased NK Activity in HIV-1 Exposed, Uninfected Intra-venous Drug Users** Costin Tomescu, *The Wistar Institute, Philadelphia, PA, USA*

STUDENT FINALISTS

1:30 – 1:45 PM

(SLBAW2-A) **A Diffusion Barrier in the Plasma Membrane During the Closure Stage of Macropinocytosis** Timothy P. Welliver, *University of Michigan, Ann Arbor, MI, USA*

1:45 – 2:00 PM

(SLBAW2-B) **Long Range Genomic Cytokine-Receptor Interaction Regulates Gene Expression** Chrysoula Deligianni, *IMBB-FORTH, Heraklion, GR*

2:00 – 2:15 PM

(SLBAW2-C) **Soluble Human CXCR2: Structure, Properties, Bioactivity** Kanstantsin Katlinski, *The Research Center for Hematology & Transfusiology, Minsk, BY*

2:20 PM – 5:30 PM

Plenary Award Session - *Auditorium 1*

Chairs: Eleanor Fish, Scott Durum, William M. Nauseef, and John Sims

- 2:20 – 2:25 PM **Awards and Recognitions Introduction:** Luis Montaner
- 2:25 – 2:35 PM **Tri-Society Recognition of Joe Oppenheim:** Scott Durum
- 2:35 – 2:50 PM **G. Jeanette Thorbecke Award, SLB:** William Nauseef
Julie Margarian Blander, *Mount Sinai School of Medicine, New York, NY, USA*
- 2:50 – 3:10 PM ISICR Awards Presentations: Robert Silverman
Honorary Membership – Sidney Grossberg and Charles Weissmann
2009 Seymour & Vivian Milstein Award – Glen Barber and Peter Staeheli
2009 Milstein Young Investigator Award – Hiroki Ishikawa, Xiao-Ling Li, Niamh Mangan, Ramtin Rahbar, Benjamin Tenover
2009 Christina Fleischmann Award - Caini Liu
2009 Outgoing President – Eleanor Fish
- 3:10 – 3:30 PM ICS Awards Presentations: John Sims
Outstanding Scholar Awards: First Place – Frank van de Veerdonk, Second Place – Swaidani Shadi, Third Place – Jamie Flammer, Fourth Place – Christoph Menzel
Post-Doctoral Investigator Award: First Place – Julie Ribot, Second Place – Tracy Putoczki, Third Place – Annalisa Camporeale, Fourth Place – Tilmann Buerckstuemmer
Young Investigator Award: First Place – Tao Lu, second Place – Bruno Silva-Santos, Third Place – Yasuo Yoshioka
- 3:30 – 4:00 PM Introduction of ICS Lifetime Achievement Award: John Sims
ICS – Lifetime Award Lecture, Nancy Ruddle, *Yale University School of Medicine, New Haven, CT, USA - (PP2-099)* **Lymphotoxin: From Inflammation to Lymphoid Organs and Back**
- 4:00 – 4:30 PM Introduction of ISICR – Milstein Award Lecture I: Eleanor Fish
ISICR Milstein Award Lecture: Glen N. Barber *Affiliation TBA* – **Innate Immune Signaling Pathways that Regulate Type I Interferon Production**
- 4:30 – 5:00 PM Introduction of ISICR – Milstein Award Lecture II: Michael Tovey
ISICR Milstein Award Lecture, Peter Staeheli, *University of Freiburg, Freiburg, DE* – **Role of IFN and Mx genes in Influenza Virus Defense**
- 5:00 – 5:30 PM Introduction of SLB Bonazinga Award: William Nauseef
SLB – Bonazinga Award Lecture, Peter Ward, *University of Michigan Medical School, Ann Arbor, MI, USA* – **Molecular Determinants of Sepsis**
- 4:30 PM – 8:30 PM** **Exhibits – Pavilion 4**
- 5:30 PM – 7:30 PM** **Joint Plenary Session 1: Opening Keynote Lectures - Auditorium 1**
Chairs: Scott Durum and Luis Montaner
- 5:30 – 6:10 PM *(PL1-1)* **Requirement For Mature T Cells, Type I Interferon and STAT1 in Negative T Cell Selection** Michael David, *UCSD, CA, USA*
- 6:10 – 6:50 PM *(PL1-2)* **Tracking Cytokine Expression in vivo: Getting to the Root of the Matter** Richard Locksley, *UCSF, CA, USA*
- 6:50 – 7:30 PM *(PL1-3)* **Interchromosomal Cytokine Gene Expression** Charalampos G. Spilianakism, *Institute of Molecular Biology and Biotechnology, GR*
- 7:30 PM – 8:30 PM** **Opening Reception - Pavilion 4**

Monday, October 19th

7:30 AM – 5:00 PM **Registration** – *Ground Floor Foyer*

8:30 AM – 6:30 PM **Exhibits** – *Pavilion 4*

8:00 AM – 9:30 AM **Joint Plenary Session 2: Pattern Recognition Receptors & Inflammation** - Auditorium 1
Chairs: Luke O'Neill and Leon Plataniias
Sponsored by PBL Interferon Source

8:00 – 8:30 AM (PL2-1) **Zc3h12a, a Negative Regulator in the TLR Response** Shizuo Akira, *Osaka University, Osaka, Japan*

8:30 – 9:00 AM (PL2-2) **Activation of an Antiviral Program through the Cytoplasmic Recognition of Non-Self RNA Patterns by RLR** Takashi Fujita, *Kyoto University, Kyoto, JP*

9:00 – 9:30 AM (PL2-3) **The Inflammasome** Jurg Tschopp, *Universite de Lausanne, Epalinges, CH*

9:30 AM – 10:00 AM **Coffee Break** - *Pavilion 4*
Sponsored by Invitrogen

10:00 AM – 12:00 PM **Concurrent Basic Science Symposia 1: Immunoregulation I** - Auditorium 1
Chairs: Richard Locksley and Rachel Caspi

10:00 – 10:30 AM (CBSS1-1) **IL-35 and Regulatory T Cell Function** Dario Vignali, *St. Judes Children's Research Hospital, Memphis, TN, USA*

10:30 – 11:00 AM **Modulating Vaccine Responses with Innate Immunity** Bali Pulendran, *Emory Vaccine Center, Atlanta, GA, USA*

11:00 – 11:30 AM (CBSS1-3) **The Transcription Factor XBP1 Regulates Hepatic Lipogenesis, Immunity and Inflammation** Laurie Glimcher, *Harvard School of Public Health, Boston, MA, USA*

Selected Talks

11:30 – 11:45 AM (CBSS1-4) **A Critical Function of TGF-beta in the Generation of Adaptive and Natural CD4⁺Foxp3⁺ Regulatory T Cells** Wanjun Chen, *NIDCR/NIH, Bethesda, MD, USA*

11:45 – 12:00 PM (CBSS1-5) **Dual Function for a Vision-Related Molecule: Retinoic Acid in the Eye May Contribute to Ocular Immune Privilege by Inducing T Regulatory Cells** Rachel R Caspi, *NIH, Bethesda, MD, USA*

10:00 AM – 12:00 PM **Concurrent Basic Science Symposia 2: Inflammation and Cancer** - Auditorium 2
Chairs: Thomas Decker and Giorgio Trinchieri
Sponsored by Meso Scale Discovery

10:00 – 10:30 AM **Inflammation as an Inducer of Tumor-Induced Immune Suppression**
Suzanne Ostrand-Rosenberg, *University of Maryland, Baltimore, MD, USA*

10:30 – 11:00 AM (CBSS2-2) **Protumor Immunity and Breast Cancer Development** Lisa Coussens, *UCSF, CA, USA*

Selected Talks

11:00 – 11:15 AM (CBSS2-3) **GRIM-19: A Novel Growth Regulator that Inhibits STAT3 and Beyond** Dhan V. Kalvakolanu, *University of Maryland School of Medicine, Baltimore, MD, USA*

- 11:15 – 11:30 AM (CBSS2-4) **IL-11 Mediated STAT3 Activation in Inflammation and Cancer** Tracy Putoczki (Award Recipient), Ludwig Institute for Cancer Research, Melbourne, AU
- 11:30 – 11:45 AM (CBSS2-5) **Origin, Phenotype and Function of Monocyte/Macrophage Subsets in Distinct Mammary Tumor Microenvironments** Jo A. Van Ginderachter, VIB-Vrije Universiteit Brussel, Brussels, BE
- 11:45 – 12:00 PM (CBSS2-6) **Interferon-Alpha Boosts Anti-Tumor Immunity Through Effects on T Cells and Dendritic Cells and Augments the Clinical Efficacy of Regulatory T Cell Depletion** Tyler J. Curiel, CTRC, San Antonio, TX, USA
- 10:00 AM – 12:00 PM** **Concurrent Immunopathogenesis Symposia 1: Immunopathogenesis I** - Pavilion 5 A&B
Chairs: Nancy Reich and Michael Parkhouse
- 10:00 – 10:40 AM (CIS1-1) **Viral Pathogenesis and Interactions with Toll-Like Receptors: HIV** Maureen M. Goodenow, University of Florida College of Medicine, Gainesville, FL, USA
- 10:40 – 11:20 AM **Viral pathogenesis and interactions with Toll-like Receptors: CMV** Mariapia Degli-Esposti, Lions Institute Centre for Experimental Immunology, CITY, AU
- 11:20 – 12:00 PM (CIS1-3) **TLR Recognition of Self Nucleic Acids Hampers Glucocorticoids Anti-Inflammatory Activity in Lupus** Franck Barrat, Dynavax Technology Corporation, Berkeley, CA, USA
- 12:00 PM – 1:30 PM** **Lunch on your own**
- 1:30 PM – 3:00 PM** **Joint Plenary Session 3: Anti-Tumor Immunity** - Auditorium 1
Chairs: Eleanor Fish and Ana Costa-Pereira
- 1:30 – 2:00 PM (PL3-1) **Role of Myeloid Cells and Inflammation in Cancer Progression and Metastasis** Michael Karin, UCSD, La Jolla, CA, USA
- 2:00 – 2:30 PM **Innate and Adaptive Inflammation in Prostate Cancer** Charles (Chuck) Drake, John Hopkins University, MD, USA
- 2:30 - 3:00 PM Late Breaking Abstract : **Detection and Immune Correlates of an Infectious Retrovirus, XMRV, in Blood Cells of Patients with Chronic Fatigue Syndrome and Cancer** Judy Mikovits, University of Nevada, Reno, NV, USA
- 3:00 PM – 3:30 PM** **Coffee Break** - Pavilion 4
Sponsored by Amgen
- 3:30 PM – 6:00 PM** **Concurrent Basic Science Symposia 3: Gene Activation** - Auditorium 1
Chairs: Tom Hamilton and Ana Gamero
- 3:30 – 4:00 PM (CBSS3-1) **IKK/NK-kappaB Signaling in Chronic Inflammation** Manolis Pasparakis, University of Cologne, Cologne, DE
- 4:00 – 4:30 PM **Transcriptional and Epigenetic Regulation of Helper T Cell Differentiation** John O'Shea, NIAMS/NIH, MD, USA
- 4:30 – 5:00 PM **New Mechanisms in the Interferon-Gamma Signaling Network** Rod Bremner, University of Toronto, Toronto, CA

Selected Talks:

- 5:00 – 5:15 PM *(CBSS3-4)* **Inhibition of Dynamin-Dependent Endocytosis Interferes with Type III IFN Expression in Bacteria-Infected Human Dendritic Cells** Taija E. Pietilä, *National Institute for Health and Welfare, Helsinki, FI*
- 5:15 – 5:30 PM *(CBSS3-5)* **Regulation of c-maf by IL-2** Susan John, *Kings College London, London, UK*
- 5:30 – 5:45 PM *(CBSS3-6)* **Single-Stranded RNA Viruses Inhibit P53 Transcriptional Activity by Post Translational Activation of ΔNP63** Christophe Lallemand, *CNRS, Paris, FR*
- 5:45 – 6:00 PM *(CBSS3-7)* **Interferon Signaling is Activated in Response to DNA Damage** Nancy Reich, *Stony Brook University, Stony Brook, NY, USA*

3:30 PM – 6:00 PM

Concurrent Immunopathogenesis Symposia 2: Immunopathogenesis II - Auditorium 2
 Chairs: Michele Somes Swanson and Lee-Ann H. Allen
 Sponsored by Celgene

- 3:30 – 4:00 PM **Immune Responses in Experimental Human Malaria Infections** Robert W. Sauerwein, *NCLMS-Medical Microbiology, Nijmegen, NL*
- 4:00 – 4:30 PM *(CIS2-2)* **Dendritic Cell-Derived Notch Ligand, Delta-Like 4, Regulates the Immune Environment via TLR9 during Mycobacterial Challenge** Steven L. Kunkel, *University of Michigan Medical School, Ann Arbor, MI, USA*

Selected Talks:

- 4:30 – 4:45 PM *(CIS2-3)* **p53 Regulates TLR3 Expression and Function in Human Epithelial Cells** Manabu Taura, *Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto, JP*
- 4:45 – 5:00 PM *(CIS2-4)* **The Anti-Inflammatory Cytokine IL-10 Inhibits miR-155 in Response to Toll-like Receptor Signaling** Claire E. McCoy, *Trinity College Dublin, Dublin, IE*
- 5:00 – 5:15 PM *(CIS2-5)* **Activation of NK Cells in vivo Following Leishmania Infection Requires Myeloid Dendritic Cells, TLR9 and a Unique Set of Cytokines** Ulrike Schleicher, *University Hospital Erlangen, Erlangen, DE*
- 5:15 – 5:30 PM *(CIS2-6)* **A Medium-Throughput, Microplate-Based ex vivo Model for Measuring Intramacrophage Growth of Mycobacterium Tuberculosis** Daniel Eklund (SLB Travel Award Recipient), *Linköping University, Linköping, SE*
- 5:30 – 5:45 PM *(CIS2-7)* **NLRP3 Inflammasome in Malaria: Role of Hemozoin-Induced Signaling on Inflammasome Activation** Marina Tiemi Shio, *McGill University, Montreal, CA*
- 5:45 – 6:00 PM *(CIS2-8)* **Subversion of Human CD4+CD25+ Regulatory T Cells to IL-17-Producing T Cells by an Inflammatory Milieu** Behdad Afzali, *Kings College London, London, UK*

3:30pm-6:00pm

Concurrent Immunopathogenesis Symposia 3: Pathogen Manipulation of Cytokine Responses - Pavilion 5 A&B
 Chairs: Eleanor Fish and Christopher Karp

- 3:30 – 4:00 PM *(CIS3-1)* **The IL-6/12 Family in Resistance to Infection** Chris Hunter, *University of Pennsylvania, Philadelphia, PA, USA*
- 4:00 – 4:30 PM *(CIS3-2)* **Virus Manipulation of the Interferon Response** Steve Goodbourn, *St. Georges' University, London, UK*

Selected Talks

- 4:30 – 4:45 PM *(CIS3-3)* **Inhibition of Type I Interferon Transcription by IRF3/7 Sumoylation** Keiko Ozato, *NICHHD, NIH, Bethesda, MD, USA*
- 4:45 – 5:00 PM *(CIS3-4)* **Interferon and Influenza Viruses: The Yin and Yang of Survival** Eleanor N. Fish, *Toronto General Research Institute, Toronto, CA*
- 5:00 – 5:15 PM *(CIS3-5)* **Microbial Immune Evasion Through Exploitation of Macrophage Pattern-Recognition Receptors** George Hajishengallis, *University of Louisville, Louisville, KY, USA*
- 5:15 – 5:30 PM *(CIS3-6)* **A Novel Function of the Crohn's Disease-Associated NOD2 Mutant 1007fs in the Regulation of Human IL10 Gene Transcription** Xiaojing Ma, *Weill Medical College of Cornell University, New York, NY, USA*
- 5:30 – 5:45 PM *(CIS3-7)* **V Protein-Mediated Block of MX Transcription is Essential for Morbillivirus Virulence** Nicholas Svitek, *INRS-Institut Armand-Frappier, Quebec, CA*
- 5:45 – 6:00 PM *(CIS3-8)* **C1q Enhances Phagocytosis of Mycobacterium Avium through a Pertussis Toxin Sensitive Pathway** Suzanne S. Bohlson, *Indiana University School of Medicine, South Bend, IN, USA*

6:00 PM – 8:30 PM

Focus Workshop: A Spotlight on: Interferon-lambda (IL-29) – Pavilion 5 A&B

Chairs: *Raymond Donnelly* and *Eleanor Ramos*

Sponsored by Bristol Myers Squibb

- 6:00 – 6:20 PM **Introduction and Brief Overview of IFN-lambda/IL-29**
Raymond Donnelly, Center for Drug Evaluation & Research, FDA, Bethesda, MD, USA
- 6:20 – 6:45 PM **IFN-lambda is Functionally an Interferon but Structurally More Related to the IL-10 Family**
Rune Hartmann, University of Aarhus, Aarhus, Denmark
- 6:45 – 7:10 PM **What Have He Learned From the IL-28R Knock-Out Mouse?**
Markus Mordstein and Peter Staeheli (Award Recipient), University of Freiburg, Freiburg, Germany
- 7:10 – 7:35 PM **Expression and Function of Type III IFNs During Viral Infection *in vitro* and *in vivo***
Søren Paludan, University of Aarhus, Aarhus, DK
- 7:35 – 8:00 PM **Mechanisms of IFN-lambda Antiviral Activity Against HBV and HCV**
Michael Robek, Yale University School of Medicine, New Haven, CT, USA
- 8:00 – 8:30 PM **Preclinical and Clinical Development of Pegylated-IFN-lambda**
Eleanor Ramos, Zymogenetics, Inc. Seattle, WA, USA

7:30 PM-10:00 PM

Student/Post-Doc Mixer – Trindade

Sponsored by The Society for Leukocyte Biology (SLB)

Tuesday, October 20th

8:00 AM – 5:00 PM Registration – Ground Floor Foyer

8:30 AM – 6:30 PM Exhibits – Pavilion 4

8:00 AM – 9:30 AM **Joint Plenary Session 4: New T-helper Subsets** - Auditorium 1

Chairs: Warren Leonard and Elizabeth J. Kovacs

Sponsored by Biogen Idec, Inc.

8:00 – 8:30 AM *(PL4-1)* **Role of Microbiota and Transcription Factors in Control of Th17 Cell Differentiation** Dan Littman, *NYU School of Medicine, New York, NY, USA*

8:30 – 9:00 AM **Control of Immune-Mediated Inflammation by Regulatory T Cells** Sasha Rudensky, *University of Washington School of Medicine Immunology, WA, USA*

9:00 – 9:30 AM **IL-10 Producing Th1 Cells** Anne O'Garra, *The National Institute for Medical Research, London, UK*

9:30 AM – 10:00 AM Coffee Break - Pavilion 4

Sponsored by Biomonitor

10:00 AM – 12:00 PM **Concurrent Basic Science Symposia 4: Signaling Session I** - Auditorium 1

Chairs: Martha Cathcart and John Schrader

10:00 – 10:30 AM *(CBSS4-1)* **Structural and Functional Analyses of Protein Complexes in Immune and Inflammatory Pathways** Hao Wu, *Weill Cornell Medical College, New York, NY, USA*

10:30 – 11:00 AM *(CBSS4-2)* **Transcriptional Control of Dendritic Cell Development and Homeostasis** Boris Reizis, *Columbia University Medical Center, New York, NY, USA*

Selected Talks

11:00 – 11:15 AM *(CBSS4-3)* **Essential Regulatory Role of NOX2 in RIG-I-Mediated Innate Immune Responses** Nathalie Grandvaux, *University of Montreal, Montreal, CA*

11:15 – 11:30 AM *(CBSS4-4)* **Regulation of NF κ B by NSD1/FBXL11-Dependent Reversible Lysine Methylation of p65** Tao Lu (*Award Recipient*), *Cleveland Clinic Foundation, Cleveland, OH, USA*

11:30 – 11:45 AM *(CBSS4-5)* **TRAF3 Recruitment to Sec16A and p115 Reveals a New Role for the ER-TO-GOLGI Transport Compartments in Innate Immunity** Marc Servant, *Université de Montréal, CA*

11:45 – 12:00 PM *(CBSS4-6)* **Tank is a Negative Regulator of TLR Signaling and Critical for Preventing Autoimmune Nephritis** Osamu Takeuchi, *IFReC, Osaka University, Suita, JP*

10:00 AM – 12:05 PM **Concurrent Special Symposia 1: IFN in the Clinic: Immunotherapy of Multiple Sclerosis** - Auditorium 2

Chairs: Michael Tovey and John Hiscott

Sponsored by Bayer Schering Pharma AG and others

10:00 – 10:25 AM **Role of Interferons in the Pathogenesis of Autoimmune Disease** Anthony Coyle, *MedImmune, Gaithersburg, MD, USA*

10:25 – 10:50 AM *(CSS1-2)* **Pharmacokinetic, Pharmacodynamic, and Safety Profiles of Pegylated Interferon Beta-1A in Healthy Volunteers: Results from Two Phase 1 Clinical Studies** Darren Baker, *Biogen Idec, Cambridge, MA, USA*

- 10:50 – 11:15 AM *(CSS1-3)* **Clinical Significance of Antibodies to Interferon beta Therapy in Patients with Relapsing-Remitting Multiple Sclerosis** Klaus Bendtzen, *Rigshospitalet University Hospital, Copenhagen, DK*
- 11:15 – 11:40 AM *(CSS1-4)* **Translational Approaches and Patient Profiling to Identify Relevant Biomarkers of Interferon beta Activity in MS** Ed Croze, *Bayer HealthCare Pharmaceuticals, Inc., Richmond, CA, USA*
- 11:40 – 12:05 PM *(CSS1-5)* **Natalizumab Therapy of MS** Michael Hutchinson, *St Vincent's University Hospital, Dublin, IE*

10:00AM – 12:00 PM **Concurrent Special Symposia 2: Recent Advances** - Pavilion 5 A&B
Chairs: Howard Young and *TBA*

Selected Talks

- 10:00 – 10:15 AM *(CSS2-1)* **Thymic CD70-CD27 Signals Promote the Differentiation of ab and gd T Cell Subsets** Julie C. Ribot (*Award Recipient*), *Instituto de Medicina Molecular, Lisbon, PT*
- 10:15 – 10:30 AM *(CSS2-2)* **Characterization of a New Population of CD4+ Innate Spleen Cells that Produce IL-22 During Inflammatory Processes** Laure Dumoutier, *Universite Catholique de Louvain, Brussels, BE*
- 10:30 – 10:45 AM *(CSS2-3)* **Caspase-8 Regulates Cellular Response to Pattern Recognition Receptors and Prevents Spontaneous Triggering of Chronic Inflammation by their Endogenous Activators** David Wallach, *Weizmann Institute of Science, Rehovot, IL*
- 10:45 – 11:00 AM *(CSS2-4)* **TGF- β 1 Signals TIAF1 Self-Association, Amyloid Superinduction and Apoptosis** Nan-Shan Chang, *National Cheng Kung University Medical College, Tainan, TW*
- 11:00 – 11:15 AM *(CSS2-5)* **Genetic Variants and Disease-Associated Factors Contribute to IRF-5 Expression in Primary Blood Cells of SLE Patients** Betsy J. Barnes, *University of Medicine and Dentistry of New Jersey, Newark, NJ, USA*
- 11:15 – 11:30 AM *(CSS2-6)* **Acute T Cell Leukemia: An in vivo Struggle Between HTLV-1-Production and Type 1 Interferon Production** Francis Ruscetti, *NCI Laboratory of Experimental Immunology, Frederick, MD, USA*
- 11:30 – 11:45 AM *(CSS2-7)* **T Cell Receptor Agonist and Tumor Biomarkers For Gamma-Delta T-Cell-Based Immunotherapy of Lymphomas and Leukemias** Bruno Silva-Santos (*Award Recipient*), *Instituto de Medicina Molecular, Lisbon, PT*
- 11:45 - 12:00 PM *(CSS2-8)* **Intracellular Inhibitors of Cysteine Cathepsins in Activated Macrophages** Natasa Kopitar-Jerala, *Institute Jozef Stefan, Ljubljana, SI*

10:00 AM – 12:15 PM **Concurrent Basic Science Symposia 5: Immunoregulation II** – Pavilion 5 C
Chairs: David Artis and Anne O'Garra
Sponsored by PBL Interferon Source

Selected Talks

- 10:00 – 10:15 AM *(CBSS5-1)* **Immediate Mediators of the Inflammatory Response are Poised for Rapid Gene Activation Through RNA Polymerase Stalling** Inez Rogatsky, *HSS and Weill Cornell, New York, NY, USA*
- 10:15 – 10:30 AM *(CBSS5-2)* **LOX-1 as Natural IFN- γ Mediated Signal for Apoptotic Cell Uptake and Antigen Presentation in Dendritic Cells** Filippo Belardelli, *Istituto Superiore di Sanita, Rome, IT*

- 10:30 – 10:45 AM (CBSS5-3) **Novel Gene Expression Patterns in IFN-GAMMA 3'Untranslated Region Au-Rich Element-Deleted Mice** Deborah L. Hodge, *NCI/CCR, Frederick, MD, USA*
- 10:45 – 11:00 AM (CBSS5-4) **The IL-27 P28 Subunit Binds CLF to form a Cytokine Regulating NK and T Cell Activities Requiring IL-6R for Signaling** Sandrine Crabé, *Université de Montréal, Montreal, CA*
- 11:00 – 11:15 AM (CBSS5-5) **The Type I Interferon (IFN) α Mediates a More Severe Neurological Disease in the Absence of the Canonical Signaling Molecule Interferon Regulatory Factor (IRF) 9** Markus J. Hofer, *University of Marburg, Marburg, DE*
- 11:15 – 11:30 AM (CBSS5-6) **Unc93 Homolog B1 Regulates the Balance of Toll-Like Receptor 7 and Toll-Like Receptor 9 Responses Reciprocally in Dendritic Cells** Ryutaro Fukui, *The Institute of Medical Science, The University of Tokyo, Tokyo, JP*
- 11:30 – 11:45 AM (CBSS5-7) **Identification of a Novel Antigen Presenting Cell Population Modulating Anti-Influenza Type-2 Immunity** Jae-Kwang Yoo, *University of Toronto, Toronto, CA*
- 11:45 – 12:00 PM (CBSS5-8) **Antiviral Effects of Cytokines** Thomas Lavoie, *PBL Interferonsource, Piscataway, NJ, USA*
- 12:00 – 12:15 PM (PP2-173) **Act1: A Novel U-box E3 Ubiquitin Ligase for IL-17R-Mediated Signaling** Caini Liu (Award Recipient), *Cleveland Clinic, Cleveland, OH, USA*

12:15 PM – 1:30 PM

Lunch On Your Own

1:30 PM – 3:00 PM

Concurrent Basic Science Symposia 6: Neutrophil Biology - Auditorium 1

Chair: Marco Cassatella and William Nauseef

- 1:30 – 2:00 PM (CBSS6-1) **Neutrophils as Active Participants in Cross-Talks with Other Cells of the Immune System** Marco A. Cassatella, *University of Verona, Verona, IT*

Selected Talks

- 2:00 – 2:15 PM (CBSS6-2) **Inter-Kingdom Signalling: A Quorum-Sensing Molecule of Pseudomonas Aeruginosa Activates Human Polymorphonuclear Neutrophils (PMN)** Gertrud Maria Hänsch, *University of Heidelberg, Heidelberg, DE*
- 2:15 – 2:30 PM (CBSS6-3) **Functional Cooperation between Fc Gamma RIIa AND Fc Gamma RIIIb on Human Neutrophils** Louis Marois, *Laval University, Québec, CA*
- 2:30 – 2:45 PM (CBSS6-4) **A Critical Role of Nitric Oxide in the Resolution of Inflammation** Yoshiro Kobayashi, *Toho University, Funabashi, JP*
- 2:45 – 3:00 PM (CBSS6-5) **Leishmania Promastigotes Induce the Formation of Neutrophil Extracellular Traps** Albert Descoteaux, *Institut Armand-Frappier, Laval, CA*

1:30 PM – 3:00 PM

Concurrent Basic Science Symposia 7: IFN-Stimulated Genes - Auditorium 2

Chairs: Moira K. B. Whyte and Ganes Sen

- 1:30 – 2:00 PM (CBSS7-1) **Signaling Pathways Controlling mRNA Translation of Interferon Regulated Genes** Leon C. Platanius, *Northwestern University Medical School, Chicago, IL, USA*
- 2:00 – 2:30 PM **UBP43 and ISG15 in the Innate Immune Response** Dong Zhang, *The Scripps Research Institute, La Jolla, CA, USA*

Selected Talks

- 2:30 – 2:45 PM *(CBS7-3)* **A Novel Small RNA Regulatory Mechanism Employed by Interferons for Regulating Growth** Dhan V. Kalvakolanu, *University of Maryland School of Medicine, Baltimore, MD, USA*
- 2:45 – 3:00 PM *(CBS7-4)* **Cooperation of Stat and NFkB in the Assembly of a Transcription Competent Initiation Complex** Thomas Decker, *University of Vienna, Vienna, AT*
- 1:30 PM – 3:00 PM** **Concurrent Clinical Symposia: Biological Therapeutics** - Pavilion 5 A&B
Chairs: Kathy Zoon and John Sims
- 1:30 – 2:00 PM *(CCS1-1)* **Interferons and Interferon Antagonists in Disease and Clinical Applications** Sergei V. Kotenko, *New Jersey Medical School, Newark, NJ, USA*
- 2:00 – 2:30 PM *(CCS1-2)* **Where are we with Anti-Chemokine Therapies?** Amanda Proudfoot, *Merck Serono, Geneva, CH*
- 2:30 – 3:00 PM **Developing Safe and Effective Immunotherapy: Lessons from Anti-CD28 Trials (TGN1412)** Sir Gordon Duff, *University of Sheffield Molecular Medicine, London, UK*
- 1:30 PM – 3:00 PM** **Concurrent Immunopathogenesis Symposia 4: Inflammation & Pathogenesis** - Pavilion 5 C
Chairs: Sanna M. Goyert and Amanda Proudfoot
- 1:30 – 2:00 PM *(CIS4-1)* **Immune Modulation by Virus-Encoded Cytokine Binding Proteins** Antonio Alcami, *Centro de Biología Molecular Severo Ochoa CSIC-UAM, Madrid, Spain*
- 2:00 – 2:30 PM *(CIS4-2)* **Molecular Pathogenesis of West Nile Virus Encephalitis** Phil Murphy, *NIH-LMI/NIAID, Bethesda, MD, USA*
- 2:30 – 3:00 PM *(CIS4-3)* **Dissecting "Alternative Macrophage Activation": The Role of L-Arginine Metabolism in Chronic Inflammation and Fibrosis** Tom Wynn, *NIAID-NIH, Bethesda, MD, USA*
- 3:00 PM – 5:00 PM** **Poster Session I** - Pavilion 4
- 7:30 PM – 10:30 PM** **Conference Banquet**
National Agronomy Pavilion – Bus service provided from hotels

Wednesday, October 21st

8:00 AM – 2:30 PM **Registration** – *Ground Floor Foyer*

8:30 AM – 2:30 PM **Exhibits** – *Pavilion 4*

8:00 AM – 9:00 AM **Joint Plenary Session 5: The Macrophages in Health and Disease** - *Auditorium 1*
Chairs: David Levy and Alberto Matovani

8:00 – 8:30 AM *(PL5-1)* **The Macrophage's Dual Role in Health and Disease** Siamon Gordon, *NCI, SAIC-Frederick, MD, USA*

8:30 – 9:00 AM *(PL5-2)* **Learning Tolerance from Cancer: Lessons from Myeloid-Derived Suppressor Cells** Vincenzo Bronte, *Universita Degli Studi Di Padova, Padova, IT*

9:00 AM – 9:30 AM **Coffee Break** – *Pavilion 4*
Sponsored by BD Biosciences

9:30 AM – 11:30 AM **Concurrent Immunopathogenesis Symposia 5: The Role of Tissue-Specific Macrophages in Chronic Disease Processes** - *Auditorium 1*
Chairs: Joe Oppenheim and Jill Suttles

9:30 – 10:00 AM *(CIS5-1)* **Mechanisms and Consequences of Macrophage Apoptosis and Efferocytosis in Atherosclerosis** Ira Tabas, *Columbia University, New York, NY, USA*

10:00 – 10:30 AM *(CIS5-2)* **Regulation of Macrophage Activation and Function by PPARs** Ajay Chawla, *Stanford University, Stanford, CA, USA*

Selected Talks

10:30 – 10:45 AM *(CIS5-3)* **Macrophage Effector Function in Anti-Filarial Nematode Immunity is Independent of Arginase 1, Relm α and YM-1** Stephen Jenkins, *University of Edinburgh, Edinburgh, UK*

10:45 – 11:00 AM *(CIS5-4)* **Stabilin-1 –Multifunctional Receptor Linking Endocytosis and Secretion in Macrophages** Alexei Gratchev, *University of Heidelberg, Mannheim, DE*

11:00 – 11:15 AM *(CIS5-5)* **Expression of the Inhibitory CD200 Receptor is Associated with Alternative Macrophage Activation** Jörg Hamann, *Academic Medical Center, University of Amsterdam, Amsterdam, NL*

11:15 – 11:30 AM *(CIS5-6)* **Control of RSV-Induced Lung Injury by Alternatively Activated macrophages is IL-4R α -, TLR4-, and IFN- β -dependent** Jorge C. Blanco, *Virion Systems Inc., Rockville, MD, USA*

9:30 AM –11:30 AM **Concurrent Basic Science Symposia 8: Signaling Session II** - *Auditorium 2*
Chairs: Sara Gaffen and Rui Victorino

9:30 – 10:00 AM *(CBSS8-1)* **NLR Genes and Adaptive and Innate Immunity** Jenny Ting, *UNC CCBC, Chapel Hill, NC, USA*

10:00 – 10:30 AM *(CBSS8-2)* **Signaling Through SUMO Ligases to Regulate Immune Responses** Ke Shuai, *Biological Chemistry-UCLA, Los Angeles, CA, USA*

Selected Talks

- 10:30 – 10:45 AM (CBSS8-3) **Deregulated Activation of Cytokine Signaling by Interleukin-6 (IL-6) in the Pathogenesis of Emphysema** Saleela M Ruwanpura, *Monash University, Clayton, AU*
- 10:45 – 11:00 AM (CBSS8-4) **IL-22, a TH17 Cytokine, Induces a Systemic Acute Phase Response** Lynette A. Fouser, *Wyeth Research, Cambridge, MA, USA*
- 11:00 – 11:15 AM (CBSS8-5) **Interleukin-6 Induces Translocation of the Adapter Protein GAB1 by MAPK-Dependent Phosphorylation of GAB1 on SERINE 552** Fred Schaper, *RWTH Aachen University, Aachen, DE*
- 11:15 – 11:30 AM (CBSS8-6) **Role of Small RNAs Generated by RNASE L in Signaling Innate Immunity against Hepatitis C Virus** Robert H. Silverman, *Cleveland Clinic, Cleveland, OH, USA*

9:30 AM – 11:30 AM

Concurrent Immunopathogenesis Symposia 6: Immunopathogenesis III - Pavilion 5 A&B
Chairs: Patricia Fitzgerald-Bocarsly and TBA

- 9:30 – 10:00 AM (CIS6-1) **HIV-1 Escape from Innate Immune Response** Domenico Mavilio, *Istituto Clinico Humanitas, Milano, IT*
- 10:00 – 10:30 AM (CIS6-2) **Tumor Suppressors in Antiviral Immunity** Cesar Munoz-Fontela, *Mount Sinai, New York, NY, USA*
- 10:30 – 11:00 AM **Transcriptional Regulation of CD8 T Cell Differentiation During Chronic Viral Infection** John Wherry, *The Wistar Institute, Philadelphia, PA, USA*

Selected Talks

- 11:00 – 11:15 AM (CIS6-4) **Alpha-1-Antitrypsin Inhibits Influenza *in vitro*, Reduces Influenza Disease *in vivo*, and Genetic Deficiency is a Risk Factor for Human Influenza Infection** K. Scott Beard, *University of Colorado Denver, Denver, CO, USA*
- 11:15 – 11:30 AM (CIS6-5) **Lethal Viral Infection Results from STAT1 but not STAT2 or IRF9 Deficiency in Mice and is Mediated by CD4+ T-Cells** Markus J. Hofer, *University of Marburg, Marburg, DE*

11:30 AM – 12:30 PM

Lunch On Your Own - Boxed Lunches Available for Purchase at the Bar located near Pavilion 4

ISICR General Society Meeting – Auditorium 1

ICS General Society Meeting – Auditorium 2

SLB General Society Meeting – Pavilion 5 A&B

12:30 PM – 2:30 PM

Poster Session II - Pavilion 4

2:30 PM – 4:30 PM

Concurrent Basic Science Symposia 9: Allergy and Mast Cells - Auditorium 1
Chairs: Matthew Fenton and Keiko Ozato

- 2:30 – 3:00 PM (CBSS9-1) **Mechanisms of Human Eosinophil Cytokine Secretion** Peter Weller, *Harvard University, Boston, MA, USA*
- 3:00 – 3:30 PM (CBSS9-2) **New Facets in Mast Cell Activation** Silvia Bulfone-Paus, *Research Center Borstel, Borstel, DE*

Selected Talks

- 3:30 – 3:45 PM (CBSS9-3) **S100A8 – An Oxidant Scavenger and Immune Modulator in Allergic Inflammation** Carolyn L. Geczy, *University NSW, Sydney, AU*
- 3:45 – 4:00 PM (CBSS9-4) **T Cell-Specific Act1 Deficiency Leads to Attenuated Cellular and Humoral Allergic Responses** Swaidani Shadi (*Award Recipient*), *Cleveland Clinic, Cleveland, OH, USA*
- 4:00 – 4:15 PM (CBSS9-5) **Mast Cell Degranulation Requires Activation of PI3K α by PKC β** Romy Walser, *University of Basel, Basel, CH*
- 4:15 – 4:30 PM (CBSS9-6) **The Antimicrobial Peptides Human beta-Defensins Mediate Secretion of Pruritogenic Factors in Human Mast Cells** Francois Niyonsaba, *Juntendo University School of Medicine, Tokyo, JP*

2:30 PM – 4:30 PM

Concurrent Immunopathogenesis Symposia 7: Sensing of Fungal & Parasitic Infection and Host Response - Auditorium 2

Chairs: Michael Tovey and Christian Bogdan

- 2:30 – 3:00 PM (CIS7-1) **Sensing Danger Signals and Pathogen-Associated Molecular Patterns Defines Binary Signaling Pathways in Mammalian Response to Fungi** Luigina Romani, *University of Perugia, Perugia, IT*
- 3:00 – 3:30 PM **Role of beta-glucan in anti-fungal immunity** Gordon D. Brown, *University of Aberdeen, Aberdeen, UK*

Selected Talks

- 3:30 – 3:45 PM (CIS7-3) **Vitamin A Derived Retinoic Acid Signaling Mediates Intestinal Immune Homeostasis and Immunity** Jason A. Hall, *National Institutes of Health/ U Penn Partnership, Bethesda, MD, USA*
- 3:45 – 4:00 PM (CIS7-4) **The Induction of IL-10 by Fungi in Dendritic Cells Depends on CREB Activation by the Coactivators CBP and TORC2 and Autocrine PGE2** Mariano Sánchez Crespo, *CSIC, Valladolid, ES*
- 4:00 – 4:15 PM (CIS7-5) **Th17/IL-17 Receptor Signaling and not Th1 Cells are Essential for Mucosal Host Defense Against Oral Candidiasis** Sarah L. Gaffen, *University of Pittsburgh, Pittsburgh, PA, USA*
- 4:15 – 4:30 PM (CIS7-6) **Origin, Phenotype and Function of Monocyte/Macrophage Subsets in Distinct Mammary Tumor Microenvironments** Shinobu Saijo, *The University of Tokyo, The Institute of Medical Science, Tokyo, JP*

2:30 PM – 4:30 PM

Concurrent Immunopathogenesis Symposia 8: Chronic Inflammatory Disease –

Pavilion 5 A&B

Chairs: Sir Gordon Duff and Otto Haller

- 2:30 – 3:00 PM **Cytokines and Innate Immunity in Intestinal Inflammation** Fabio Cominelli, *University of Virginia, Richmond, VA, USA*
- 3:00 – 3:30 PM (CIS8-2) **Linking Inflammation to Cancer - A Novel Role for Stat3** Matthias Ernst, *Ludwig Institute for Cancer Research, Melbourne, AU*
- 3:30 – 4:00 PM **Regulation of Immunity and Inflammation in the Gut** David Artis, *University of Pennsylvania, Philadelphia, PA, USA*
- 4:00 – 4:30 PM **Regulation of Macrophage Signaling and Function During Chronic Inflammation** Lionel Ivashkiv, *Cornell University, New York, NY, USA*

4:45 PM – 6:15 PM

Joint Plenary Session 6: Closing Keynote Lectures - Auditorium 1

Chairs: Luis Montaner and David Wallach

4:45 – 5:15 PM

Violation of the Sanctity of the Cytosolic Compartment Provokes the Wrath of the Inflammasome Vishva Dixit, *Genentech, South San Francisco, CA, USA*

5:15 – 5:45 PM

(PL6-2) **How Specificity for Self-Peptides Shapes the Development and Function of Regulatory T Cells** Andrew Caton, *The Wistar Institute, Philadelphia, PA, USA*

5:45 – 6:15 PM

T Lymphocyte Trafficking in Immunity and Autoimmunity Federica Sallusto, *Institute for Research in Biomedicine, Switzerland*