

**CYTOKINES IN CANCER AND IMMUNITY**  
**Joint Meeting**  
**International Cytokine Society and**  
**International Society for Interferon and Cytokine Research**

**Caribe Hilton Resort**  
**San Juan, Puerto Rico**  
**October 21-25, 2004**

**THURSDAY, OCTOBER 21, 2004**

12:00 - 8:00 pm	<b>Registration</b>	<b>San Geronimo Foyer</b>
2:00 - 5:00 pm	<b>ICS COUNCIL MEETING</b>	<b>Executive Board Room</b>
2:00 - 5:00 pm	<b>ISICR COMMITTEE MEETINGS</b> See ISICR Committee Information for Rooms	
6:00 - 8:00 pm	<b>OPENING SESSION</b>	<b>San Geronimo Ballroom</b>
6:00 pm	<b>Opening Remarks</b>	
6:15 pm	<b>Keynote Address 1</b> <b>CELL SURVIVAL SIGNALS OF CYTOKINE RECEPTORS</b> , Paper 1 Tak Mak Advanced Medical Discovery Institute, Princess Margaret Hospital, Toronto, Ontario	
7:00 pm	<b>Milstein Award I</b> <b>FLUORESCENCE RECOVERY AFTER PHOTOBLEACHING REVEALS HIGHLY TRANSIENT INTERACTION OF IRF8 WITH CHROMATIN IN LIVE DIFFERENTIATING MACROPHAGES</b> , Paper 2 Keiko Ozato, NCI, National Institutes of Health, Bethesda Maryland (Introduced by Howard Young, President, ISICR)	
7:30 pm	<b>Milstein Award II</b> <b>OVERCOMING RESISTANCE AND AUGMENTING CLINICAL RESPONSE TO ANTITUMOR EFFECTS OF INTERFERONS (IFNS)</b> , Paper 3 Ernest Borden Cleveland Clinic Foundation, Cleveland, Ohio (Introduced by Howard Young, President, ISICR)	
8:00 - 9:30 pm	<b>WELCOME RECEPTION</b>	<b>Atlantic Garden</b>

**FRIDAY, OCTOBER 22, 2004**

7:00 am - 6:00 pm	<b>Registration</b>	<b>San Geronimo Foyer</b>
9:00 am - 12:00 N	<b>PLENARY SESSION I: Cytokines and Cancer</b> Papers 4-7 Chair: <b>David Wallach</b> , The Weizmann Institute of Science, Rehovot, Israel and <b>Frances Balkwill</b> , Cancer Research UK Cancer Centre, London, United Kindgom	<b>San Geronimo Ballroom</b>

**Friday, October 22 Continued**

- 9:00 am **GROWTH FACTOR REGULATION OF LYMPHANGIOGENESIS AND TUMOR METASTASIS**, Paper 4  
Kari Alitalo and collaborators  
University of Helsinki, Finland  
Helsinki, Finland
- 9:30 am **TNF- $\alpha$  AS AN ENDOGENOUS TUMOUR PROMOTER IN EPITHELIAL MALIGNANCIES**, Paper 5  
Frances Balkwill  
Cancer Research UK, Translational Oncology Laboratory, Barts and The London, Queen Mary's Medical School, London EC1M 6BQ, UK.
- 10:00 am **HER 2 AND EGFR IN HUMAN CANCER: SIGNALING MECHANISMS AND TARGETS FOR THERAPY**  
Yosef Yarden  
The Weizmann Institute of Science, Rehovot, Israel
- 10:30 am **Coffee Available**
- 11:00 am **REGULATION OF TYPE I AND TYPE II INTERFERON THROUGH TLR3 AND TLR8 ENGAGEMENT**, Paper 6  
Christophe Caux, Stephanie Burg, Grégory Gautier, Catherine Massacrier, Florence Alloin, Florence Deauvieu, Francine Briere, Giorgio Trinchieri, Pierre Garrone  
Laboratory for Immunological research, Schering-Plough, Dardilly, France
- 11:30 am **MULTIPLE ROLES OF PERSISTENT STAT SIGNALING IN CANCER**, Paper 7  
Hua Yu and Richard Jove  
Moffitt Cancer Center and Research Institute, Tampa, FL
- 12:00 -2:00 pm Lunch Break (cash lunch sales) **San Geronimo Foyer**
- 12:00 - 1:00 pm **BD BIOSCIENCES TUTORIAL** **Flamingo A-D**  
**NEW BDTM CYTOMETRIC BEAD ARRAY FLEX SET PLATFORM AND THEBD FACSARRAYTM BIOANALYZER: A NOVEL, MORE FLEXIBLE APPROACH FOR THE MEASUREMENT OF MULTIPLE ANALYTES FROM A SINGLE SAMPLE**  
Paper 386  
Edward L. Morgan  
BD-Biosciences, San Diego, California
- 12:00 - 1:00 pm **ICS General Business Meeting** **San Geronimo Ballroom**
- 2:00 - 4:00 pm **CONCURRENT WORKSHOPS**
- 2:00 - 4:00 pm **WORKSHOP 1: Signal Transduction**, Papers 8-14 **San Geronimo Ballroom**  
Chairs: **Howard Young**, National Cancer Institute, Frederick, MD and **Keiko Ozato**, National Institutes of Health, Bethesda, MD
- 2:00 pm **REGULATION OF STAT NUCLEAR TRAFFICKING**, Paper 8  
Nancy C. Reich, Greg Banninger, Ling Liu and Kevin McBride  
Stony Brook University, Stony Brook, NY

- 2:20 pm **GENETIC EVIDENCE FOR THE THRESHOLD OF GP130-DEPENDENT STAT3 SIGNALING OUTPUT AS A CRITICAL DETERMINANT FOR PHYSIOLOGICAL RESPONSES IN MAMMALS**, Paper 9  
Brendan J. Jenkins<sup>1</sup>, Dianne Grail<sup>1</sup>, Meri Nadjovska<sup>1</sup>, Heinz Baumann<sup>2</sup>, Andrew W. Roberts<sup>3</sup>, and Matthias Ernst<sup>1</sup>  
<sup>1</sup>Ludwig Institute for Cancer Research, Parkville, Victoria, Australia, <sup>2</sup>Roswell Park Cancer Institute, NY and <sup>3</sup>The Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia
- ICS OUTSTANDING SCHOLAR AWARD: André Limnander, 2<sup>nd</sup> Place**
- 2:35 pm **V-ABL SIGNALING DISRUPTS SOCS-1 FUNCTION IN TRANSFORMED PRE-B CELLS**, Paper 10  
André Limnander, Nika N. Danial and Paul B. Rothman  
Columbia University College of Physicians and Surgeons, New York, NY
- ICS YOUNG INVESTIGATOR AWARD: Annette R.Khaled , 1<sup>st</sup> Place (Sponsored by Peprtech)**
- 2:50 pm **INTERLEUKIN-7 PROMOTES LYMPHOCYTE PROLIFERATION THROUGH SIGNALS TRANSDUCED BY p38 MAPK THAT REGULATE THE CELL CYCLE ACTIVATOR, Cdc25A**, Paper 11  
Christina Kittipatarin<sup>1</sup>, Dmitry V. Bulavin<sup>2</sup>, Wen Qing Li<sup>4</sup>, Kyungjae Kim<sup>3,4</sup>, Howard A. Young<sup>3</sup>, Albert J. Fornace<sup>2</sup>, Scott K. Durum<sup>3</sup> and Annette R. Khaled<sup>1,3</sup>,  
<sup>1</sup>University of Central Florida, Orlando, FL, <sup>2</sup>National Cancer Institute, Bethesda, MD, <sup>3</sup>National Cancer Institute-Frederick, Frederick, MD, <sup>4</sup>Sahm-Yook University, Seoul, Korea
- ICS POSTDOCTORAL INVESTIGATOR AWARD: Anil K. Kamaraju , 1<sup>st</sup> Place (Sponsored by Peprtech)**
- 3:05 pm **CROSS TALK BETWEEN SMAD SIGNALING AND P38 MAP KINASE/RHO PATHWAYS IN TGF- $\beta$ -MEDIATED GROWTH INHIBITION OF A HUMAN BREAST CANCER CELL LINE**, Paper 12  
Anil K. Kamaraju<sup>1</sup>, Fang Liu<sup>2</sup> and Anita B. Roberts<sup>1</sup>.  
<sup>1</sup>National Cancer Institute, MD, and <sup>2</sup>Rutgers University, NJ
- 3:20 pm **LPS INDUCES ACTIVATION OF P21RAS IN PRIMARY MACROPHAGES THROUGH MECHANISMS DEPENDENT ON SRC AND Pi3 KINASES**, Paper 13  
Muriel David, Chris Cochrane and John W. Schrader  
The Biomedical Research Centre, University of British Columbia, Vancouver, BC, Canada
- 3:35 pm **CYTOKINES AND CHEMOTHERAPEUTIC DRUGS: POTENTIAL SYNERGISTIC INTERACTIONS CAN OFFER NEW APPROACHES TO CANCER THERAPEUTICS**, Paper 14  
Howard A. Young<sup>1</sup>, Victor Marquez<sup>2</sup>, Dehui Duan<sup>2</sup>, Peter M. Blumberg<sup>3</sup>, Noemi Kedel<sup>3</sup> and Della Reynolds<sup>1</sup>.  
<sup>1</sup>Lab. of Experimental Immunology, NCI-Frederick, <sup>2</sup>Lab of Medicinal Chemistry, NCI-Frederick, <sup>3</sup>Laboratory of Cellular Carcinogenesis and Tumor Promotion, NCI, Bethesda, MD, Center For Cancer Research, National Cancer Institute

**Friday, October 22 Continued**

- 2:00 - 4:00 pm      **WORKSHOP 2: Interferons**, Papers 15-21      **Flamingo A-D**  
Chairs: **Eliane Meurs**, Institut Pasteur, Paris, France and  
**Curt Horvath**, Mount Sinai School of Medicine, New York, NY
- 2:00 pm      **CHARACTERIZATION OF THE CONTRIBUTION OF INDIVIDUAL IFN-  $\alpha$  SUBTYPES TO ANTIVIRAL PROTECTION**, Paper 15  
Ehtesham Baig<sup>1,2</sup>, Jiabing Chen<sup>1</sup>, Raj Deonarain<sup>1</sup>, and Eleanor Fish<sup>1,2</sup>  
<sup>1</sup>Toronto General Research Institute, University Health Network, Toronto, Canada  
<sup>2</sup>University of Toronto, Toronto, Canada
- 2:20 pm      **ADJUVANT ACTIVITY OF INTERFERON ALPHA :MECHANISM(S) OF ACTION**  
Paper 16  
Michael Tovey, Christophe Lallemand, and Chantal Maury. UPR 9045 CNRS,  
Laboratory of Viral Oncology, Villejuif, France.
- 2:35 pm      **REGULATION OF IFN ANTIVIRAL TRANSCRIPTION RESPONSES BY PROTEIN DEACETYLATION**, Paper 17  
Curt M. Horvath and Inna Nusinzon  
Mount Sinai School of Medicine, New York, NY
- 3:50 pm      **DOWNREGULATION OF P53 LEVELS INDUCED BY DSRNA MODULATES THE ANTIVIRAL RESPONSE**, Paper 18  
Joao Trindade Marques and Bryan R. G. Williams  
Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH
- 3:05 pm      **INTERFERON (IFN)- $\lambda$  INDUCES EXPRESSION OF IFN-  $\alpha$ -RESPONSIVE GENES IN PRIMARY HUMAN HEPATOCYTES**, Paper 19  
Raymond P. Donnelly<sup>1</sup>, Faruk Sheikh<sup>1</sup>, Harold Dickensheets<sup>1</sup>, Sergei Kottenko<sup>2</sup>, and Bin Gao<sup>3</sup>,  
<sup>1</sup>CDER, Food and Drug Administration, Bethesda, MD, <sup>2</sup>UMDNJ, Newark, NJ and <sup>3</sup> National Institute on Alcohol Abuse and Alcoholism, NIH, Rockville, MD
- 3:20 pm      **GENE EXPRESSION PROFILING OF INTERFERON STIMULATED CELL LINES EXPRESSING IFNAR2C TYROSINE MUTANTS DEMONSTRATE A STRONG DEPENDENCE ON TWO SPECIFIC TYROSINE RESIDUES AND IDENTIFIES A SMALL GROUP OF GENES WHEREIN ACTIVATION IS INDEPENDENT OF IFNAR2C TYROSINE PHOSPHORYLATION**, Paper 20  
Sharlene Velichko<sup>1</sup>, T. Charis Wagner<sup>1</sup>, Parham Mirshahpanah<sup>1</sup>, Joern Kraetzschmar<sup>2</sup> and Ed Croze<sup>1</sup>  
<sup>1</sup>Berlex Bioscience, Richmond, CA and <sup>2</sup>Schering, Berlin, Germany
- 3:35 pm      **IDENTIFICATION OF GENES THAT REQUIRE TANK-BINDING KINASE 1 (TBK1) OR I $\kappa$ B KINASE  $\epsilon$  (IKK $\epsilon$ ) FOR THEIR EXPRESSION**, Paper 21  
Sarah M. McWhirter<sup>1</sup>, Katherine A. Fitzgerald<sup>2</sup>, Jacqueline Rosains<sup>1</sup>, Harry Björkbaka<sup>3</sup>, Tom Maniatis<sup>1</sup>,  
<sup>1</sup>Harvard University, Cambridge, MA, <sup>2</sup>University of Massachusetts Medical School, Worcester, MA <sup>3</sup>Lipid Metabolism Unit, Massachusetts General Hospital, Boston, MA

- 2:00 - 4:00 pm      **WORKSHOP 3: Therapeutics**, Papers 22-27, 84      **Tropical A-C**  
Chairs: To be Announced
- 2:00 pm      **BELEROFON™, AN IMPROVED IFN  $\alpha$  WITH SINGLE AMINO ACID SEQUENCE CHANGE, DESIGNED TO REDUCE FREQUENCY OF INJECTION FOR HEPATITIS C CHRONIC INFECTION AND CANCER** , Paper 22  
T.Guyon, G.Borrelly & L Drittanti  
Nautilus Biotech SA, Evry, France
- 2:20 pm      **IMPROVED PHARMACOKINETICS AND EFFICACY OF N-TERMINALLY PEGYLATED INTERFERON- $\beta$ -1A**, Paper 23  
Darren P. Baker<sup>1</sup>, Ted Lin<sup>1</sup>, KoChung Lin<sup>1</sup>, Ling Ling Chen<sup>1</sup>, Donna Hess<sup>1</sup>, Dingyi Wen<sup>1</sup>, Alan Gill<sup>1</sup>, Blake Pepinsky<sup>1</sup>, and Daniel Lindner<sup>2</sup>, <sup>1</sup>BiogenIdec, Inc., Cambridge, MA, <sup>2</sup>Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH
- 2:35 pm      **INHIBITION OF B16 MELANOMA METASTASES BY THERAPY WITH M20 IL-1 INHIBITOR**, Paper 24  
V. Barak, Y. Sherman, P. Yanai. T. Halperin, I. Vlodavsky, S. Slavin and L. Weiss  
Hadassah University Hospital, Jerusalem, Israel
- 2:50 pm      **EXPRESSION AND REGULATION BY CYTOKINES OF MULTIPLE SCLEROSIS (MS)-ASSOCIATED RETROVIRUS (MSRV), IN VITRO AND IN VIVO** , Paper 25  
Caterina Serra, Giuseppe Mameli, Vito Astone, Giannina Arru, Stefano Sotgiu, and Antonina Dolei  
University of Sassari, Sassari, Italy
- 3:05 pm      **SOLUBLE MURINE INTERLEUKIN 21 RECEPTOR REDUCES CLINICAL DISEASE IN ANIMAL MODELS OF ARTHRITIS** , Paper 26  
Deborah Young, Martin Hegen, Mayra Senices, Yelena Leathurby, Leo Albert, Matthew Whitters, Cheryl Nutter, Leslie Lowe, Barbara Sheppard, James Keith, and Mary Collins  
Inflammation Discovery Research, Wyeth, Cambridge, MA
- 3:20 pm      **IL-2 DEFECTIVE RESPONSIVENESS OF CD4 AND CD8 LYMPHOCYTES FROM HIV PATIENTS. RESTORATION BY HAART** , Paper 84  
Marko Kryworuchko<sup>1,6</sup>, Virginie Pasquier<sup>1</sup>, Cécile Goujard<sup>2</sup>, Jacques Gilquin<sup>3</sup>, Jean-Paul Viard<sup>4</sup>, Marcel Joussemet<sup>5</sup>, Jean-François.De Ifraissy<sup>2</sup> and Jacques Thèze<sup>1</sup>,  
<sup>1</sup>Immunogénétique Cellulaire, D<sup>pt</sup> de Médecine Moléculaire, Institut Pasteur, Paris, <sup>2</sup>Service de Médecine Interne, Hôpital Bicêtre, <sup>3</sup>Hôpital St. Joseph, <sup>4</sup> Necker, <sup>5</sup>Percy, Paris, France
- 3:35 pm      **ANTI-INTERFERON- $\gamma$  AND ANTI-TUMOR NECROSIS FACTOR- $\alpha$  IN TH1-MEDIATED AUTOIMMUNE DISEASE (RHEUMATOID ARTHRITIS) AND TH1/TH2 DISEASE (SLE)**  
Paper 27  
Galina Loukina, Yakov Sigidin, O. Pashkova, Boris Skurkovich,<sup>1</sup> Simon Skurkovich<sup>2</sup>  
<sup>1</sup>Institute of Rheumatology, Moscow, Russia; <sup>1</sup>Brown Medical School, Providence, RI, <sup>2</sup>Advanced Biotherapy, Inc., Rockville, MD

**Friday, October 22 Continued**

2:00 - 4:00 pm      **WORKSHOP 4: Innate Immunity I**, Papers 28-34      **Las Olas Room**  
Chairs: **Mihai G. Netea**, Nijmegen University Medical Center, Nijmegen, Netherlands  
and **Liwu Li**, Wake Forest University School of Medicine, Winston-Salem, NC

2:00 pm      **FUNCTIONAL CONSEQUENCES OF THE Asp299Gly TOLL-LIKE RECEPTOR POLYMORPHISM** Paper 28  
Mihai G. Netea<sup>1,2</sup>, Chantal van der Graaf<sup>1,2</sup>, Leo Joosten<sup>1</sup>, Bart Jan Kullberg<sup>1,2</sup>, and  
Jos W.M. Van der Meer<sup>1,2</sup>  
<sup>1</sup>University Medical Center St. Radboud Nijmegen, and <sup>2</sup>Nijmegen University Center of  
Infectious Diseases, The Netherlands

2:20 pm      **CPG MOTIFS OF BACTERIAL DNA CONTRIBUTE TO THE PERPETUATION OF CHRONIC INTESTINAL INFLAMMATION BY INTERACTION WITH TLR9**  
Paper 29  
Florian Obermeier, Nadja Dunger, Ulrike G. Strauch, Nicole Grunwald,  
Jürgen Schölmerich and Werner Falk  
University of Regensburg, D-93042 Regensburg, Germany

2:35 pm      **TOLL-LIKE RECEPTORS 7: TYPE I INTERFERON SIGNALING VIA MYD88, IRAK1, TRAF6 AND IRF-5/7**, Paper 30  
Annett Schoenemeyer<sup>1</sup>, Eicke Latz<sup>1</sup>, Jun-Ichiro Inoue<sup>2</sup>, Betsy J. Barnes<sup>3</sup>, Paula M. Pitha<sup>3</sup>,  
Katherine A. Fitzgerald<sup>1</sup> and Douglas T. Golenbock<sup>1</sup>  
<sup>1</sup>University of Massachusetts Medical School, Worcester, MA; <sup>2</sup>University of Tokyo,  
Tokyo, Japan; <sup>3</sup>Johns Hopkins University School of Medicine, Baltimore, MD

**ISICR YOUNG INVESTIGATOR: Ehssan Sharif-Askari**

2:50 pm      **BAX-DEPENDENT MITOCHONDRIAL DEPolarIZATION IS REQUIRED FOR IRF-3 ACTIVATION DURING VESICULAR STOMATITIS VIRUS ONCOLYSIS**, Paper 31  
Ehssan Sharif-Askari<sup>1</sup>, Stephanie Olierie<sup>1</sup>, Jennifer Harris<sup>1</sup>, Rongtuan Lin<sup>1</sup>, John Bell<sup>2</sup>,  
and John Hiscott<sup>1</sup>  
<sup>1</sup>Lady Davis Institute, McGill University, Montreal, Canada and <sup>2</sup>Ottawa Health  
Research Institute, Ottawa, Canada

3:05 pm      **SYNERGISTIC ACTIVATION OF INNATE IMMUNITY BY POLY-IC AND CPG DNA STIMULATES ENHANCED ANTITUMOR ACTIVITY AGAINST ESTABLISHED B16-F10 PULMONARY METASTASES**, Paper 32  
Mark M Whitmore, Andrea E Edling, and Bryan RG Williams  
Lerner Research Institute, The Cleveland Clinic Foundation, Cleveland, OH

3:20 pm      **DIFFERENTIAL INDUCTION OF APOPTOSIS BY LPS AND TAXOL IN MONOCYTIC CELLS**, Paper 33  
Tao Li, Jean Hu, James Thomas, and Liwu Li  
Wake Forest University School of Medicine, Winston Salem, NC

**ICS OUTSTANDING SCHOLAR: Julianne Stack, 1<sup>st</sup> Place**

3:35 pm      **VACCINIA VIRUS A46R TARGETS MULTIPLE TOLL-LIKE RECEPTOR ADAPTORS AND CONTRIBUTES TO VIRULENCE**, Paper 34  
Julianne Stack<sup>1</sup>, Ismar Haga<sup>2</sup>, Martina Schroeder<sup>1</sup>, Geraldine Maloney<sup>1</sup>, Geoff Smith<sup>2</sup>  
and Andrew Bowie<sup>1</sup>  
<sup>1</sup>Trinity College Dublin, Ireland and <sup>2</sup>Imperial College London, UK.

4:00 - 6:00 pm

**POSTER SESSION 1**, Papers 35 -113  
*with wine and cheese*

**San Cristobal Ballroom**

**SIGNALING**, Papers 35-61

**RESTORATION OF NF- $\kappa$ B ACTIVATION WITH TNF  $\alpha$  RECEPTOR COMPLEX-TARGETED MEKK3 IN RIP-DEFICIENT CELLS**, Paper 35

Marzenna Blonska<sup>1</sup>, Yun You<sup>1</sup>, Romas Gelezinas<sup>2</sup>, and Xin Lin<sup>1</sup>

<sup>1</sup>State University of New York, Buffalo, NY and <sup>2</sup>Merck Research Laboratories, West Point, PA

**MONITORING B CELL RESPONSES TO CYTOKINES AND BCR ENGAGEMENT USING A NOVEL MULTIPLEX TRANSCRIPTION FACTOR ASSAY**, Paper 36

M.M. Brodey, S. Dhandapani, Y. Wu, R. Brandt, and J.A. Mikovits

BioSource International, Camarillo, CA USA

**IFN $\beta$  INDUCES SECRETED IL-1RA PRODUCTION IN HUMAN MONOCYTES THROUGH A PI3K-DEPENDENT, STAT1-INDEPENDENT PATHWAY**, Paper 37

Nicolas Molnarfi, Lyssia Gruaz, Jean-Michel Dayer and Danielle Burger

Faculty of Medicine, University Hospital, Geneva, Switzerland

**MITOTIC DELAY, CYCLIN DEPENDENT SIGNALING, AND APOPTOSIS ASSOCIATED WITH RADIATION-INDUCED DOUBLE STRAND BREAKS IN NIH/3T3 FIBROBLAST**, Paper 38

Mickael J. Cariveau<sup>1,2</sup>, Charles J. Kovacs<sup>2</sup>, Ron R. Allison<sup>2</sup>, and Mark Evans<sup>2</sup>

<sup>1</sup>East Carolina University, Greenville, NC <sup>2</sup>The Brody School of Medicine, Greenville, NC

**INTERLEUKIN-1 ALPHA (IL-1  $\alpha$ ) RADIOPROTECTION OF THE MURINE COLONIC EPITHELIUM : DOWNREGULATION OF THE CASPASE RESPONSE**, Paper 39

Elizabeth S. Smith, Charles J. Kovacs, Mark J. Evans, Mickael J Cariveau,

Roberta M. Johnke, Ron Allison

Brody School of Medicine, East Carolina University, Greenville, North Carolina

**NOVEL SIGNALLING REQUIREMENTS FOR THE CLASS II HLA AND ANTIVIRAL RESPONSES TO INTERFERON- $\gamma$** , Paper 40

Ana P. Costa-Pereira<sup>\*1</sup>, Heike M. Hermanns<sup>\*2</sup>, Hayaatun Is'harc<sup>\*1</sup>, Timothy M. Williams<sup>\*1</sup>, Diane Watling<sup>\*1</sup>, Velmurugesan Arulampalam<sup>3</sup>, Sally J. Newman<sup>1</sup>, Peter C Heinrich<sup>2</sup> and Ian M. Kerr<sup>1</sup>

<sup>1</sup>Cancer Research UK - London Research Institute, London, United Kingdom, <sup>2</sup>Institut fuer Biochemie, Uniklinik RWTH Aachen, Germany, <sup>3</sup>Karolinska institute, Stockholm, Sweden

**REGULATION OF IRF-7 AND IFN- $\alpha$  PRODUCTION BY ENVELOPED VIRUS AND LPS IN HUMAN PLASMACYTOID DENDRITIC CELLS**, Paper 41

Jihong Dai, Nicholas J. Megjugorac, Sheela B. Amrute, and Patricia Fitzgerald-Bocarsly  
UMDNJ-NJ Medical School-GSBS,

**A PROTOCOL FOR ANALYSIS OF MAPK ACTIVATION IN WHOLE BLOOD**, Paper 42

John DeSimone, Mark Donovan, Jimin Wang, and Kevin Reagan

BioSource International, Inc., Camarillo, CA, USA

**SIGNALING continued**

**REGULATION OF INNATE AND ADAPTIVE IMMUNE RESPONSES BY MAP KINASE PHOSPHATASE 5**, Paper 43

Yongliang Zhang<sup>1</sup>, Joseph N. Blattman<sup>1</sup>, Norman J. Kennedy<sup>2</sup>, Julie Duong<sup>1</sup>, Thang Nguyen<sup>1</sup>, Ying Wang<sup>1</sup>, Roger J. Davis<sup>2</sup>, Philip D. Greenberg<sup>1</sup>, Richard A. Flavell<sup>3,4</sup> and Chen Dong<sup>1,4</sup>

<sup>1</sup>University of Washington, Seattle, WA, <sup>2</sup>Howard Hughes Medical Institute, University of Massachusetts, Worcester, MA <sup>3</sup>Section of Immunobiology, Howard Hughes Medical Institute, Yale University, New Haven, CT

**DISRUPTION OF THE INTERFERON- $\gamma$  TRANSCRIPTION FACTOR STAT-1 A IN PANCREATIC ISLETS INHIBITS SUSCEPTIBILITY TO B-CELL KILLING**, Paper 44

C. Gysemans<sup>1</sup>, L. Ladière<sup>2</sup>, H. Callewaert<sup>1</sup>, P. Matthys<sup>3</sup>, D. Eizirik<sup>2</sup> and C. Mathieu<sup>1</sup>  
<sup>1</sup>LEGENDO, K.U.Leuven, <sup>2</sup>Experimental Medicine, U.L.Bruxelles, <sup>3</sup>Immunobiology K.U.Leuven, Belgium

**REGULATED NUCLEAR LOCALIZATION OF THE STAT5 TRANSCRIPTION FACTOR**, Paper 45

Janaki Iyer, Ling Liu and Nancy C. Reich  
Stony Brook University, Stony Brook, New York

**IL-22 CAN ENHANCE ACTIVITY OF IFN- $\gamma$  THROUGH THE IFN- $\gamma$  RECEPTORS CHAINS**, Paper 46

Lara S. Izotova, Christopher D. Krause, Barbara Schwartz, Youngsun Kim, Olga V. Mirochnitchenko, Naomi Logsdon<sup>1</sup>, Mark R. Walter<sup>1</sup> and Sidney Pestka  
UMDNJ-Robert Wood Johnson Medical School, Piscataway, NJ and

<sup>1</sup>University of Alabama, Birmingham, AL

**A PAN PKC INHIBITOR DIFFERENTIALLY REGULATES TLR-3 MEDIATED SIGNALING PATHWAY IN HUMAN DENDRITIC CELLS**, Paper 47

Jolyn Johnson<sup>1</sup>, Ezra Aksoy<sup>1</sup>, Fabienne Willems<sup>1</sup>, and Michel Goldman<sup>1</sup>  
Universite Libre de Bruxelles, Laboratory of Experimental Immunology<sup>1</sup>  
Brussels, Belgium

**THE INTRACELLULAR DOMAIN OF CRF2-4 IS REQUIRED FOR IL-10 RECEPTOR SIGNALING**, Paper 48

Barbi A. Judd<sup>1</sup>, Brian K. Weaver<sup>1</sup>, Koon S. Lai<sup>2</sup>, and Robert D. Schreiber<sup>1</sup>  
<sup>1</sup>Washington University School of Medicine, St. Louis, Missouri, USA

**MEP50, A STIMULATOR OF METHYLTRANSFERASE ACTIVITY OF PROTEIN ARGININE METHYLTRANSFERASE 5**, Paper 49

Youngsun Kim<sup>1</sup>, Lara Izotova<sup>1</sup>, Zihong Yang<sup>1</sup>, Olga Mirochnitchenko<sup>1</sup>, Jin H. Lee<sup>1</sup>, Jeffrey R. Cook<sup>1</sup>, Tina L. Branscombe<sup>2¶</sup>, Steven Clarke<sup>2</sup> and Sidney Pestka<sup>1</sup>

<sup>1</sup>University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, Piscataway, NJ, <sup>2</sup>Institute, UCLA, Los Angeles, CA

**DIFFERENTIAL REGULATION OF KEY SIGNALING MOLECULES BY DISTINCT TLR LIGANDS**, Paper 50

Liwu Li  
Wake Forest University School of Medicine, Winston Salem, NC



**SINGALING, continued**

**CONSTITUTIVE NUCLEAR PRESENCE OF THE STAT3 TRANSCRIPTION FACTOR**

Paper 51

Ling Liu, Kevin McBride, and Nancy C. Reich  
Stony Brook University, Stony Brook, New York

**THE POXVIRUS TOLL-LIKE RECEPTOR ANTAGONIST A52R DIFFERENTIALLY MODULATES NF $\kappa$ B AND MAP KINASE ACTIVATION**, Paper 52

Geraldine Maloney and Andrew Bowie  
The Viral Immune Evasion Group, Department of Biochemistry, Trinity College  
Dublin, Ireland

**ROLE OF TYK2 KINASE IN MITOCHONDRIAL RESPIRATION**, Paper 53

Ramesh B. Potla<sup>1,2</sup>, Thomas Koeck<sup>1</sup>, Ana M. Gamero<sup>3</sup>, Kulwant S. Aulak<sup>1</sup>,  
Shuji Sakamoto<sup>1</sup>, Joanna Wegrzyn<sup>1</sup>, Dennis J. Steuhr<sup>1</sup>, Kazuya Shimoda<sup>4</sup>,  
Dhananjaya V. Kalvakolanu<sup>5</sup> and Andrew C. Larner<sup>1,2</sup>.

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Cleveland Clinic Foundation, Cleveland, OH

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<sup>#</sup>Lerner Research Institute, The Cleveland Clinic Foundation, Cleveland, Ohio and  
<sup>^</sup>Berlex Biosciences Inc., Richmond, California

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Rainer Hubmann<sup>2</sup>, Markus Döchler<sup>2</sup>  
Medical University of Vienna, Internal Medicine I, Haematology Department<sup>1</sup>,  
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Department of Pathology and Laboratory Medicine and Abramson Family Cancer  
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<sup>1</sup>Research Institute for Microbial Diseases, Osaka University, <sup>2</sup>ERATO, Suita, Osaka,  
Japan

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<sup>1</sup>Lerner Research Institute, The Cleveland Clinic Foundation, Cleveland, OH  
<sup>3</sup>New York University School of Medicine, New York, NY

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Robert-Wood-Johnson Medical School and Graduate School of Biomedical Sciences, University of Medicine and Dentistry of New Jersey, Piscataway, NJ

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<sup>1</sup>Cancer Research Institute, Kanazawa University, Kanazawa, Japan, <sup>2</sup>Wakayama Medical University, Wakayama, Japan, <sup>3</sup>The Institute of Medical Science, The University of Tokyo, Tokyo, Japan.

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Lerner Research Institute, The Cleveland Clinic Foundation, Cleveland, OH

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<sup>1</sup>University of Navarra-FIMA, Pamplona, Spain and <sup>2</sup>Friedrich-Alexander Universität Erlangen, Germany

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<sup>1</sup>Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai , P. R. China, <sup>2</sup>Ningbo Institute of Microcirculation & Henbane, Ningbo Drug Addiction Research and Treatment Center, Ningbo, P. R. China

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Uniformed Services University of the Health Sciences, Bethesda, MD

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<sup>1</sup>Pediatric Oncology Branch, <sup>2</sup>Laboratory of Pathology, National Cancer Institute, Bethesda, MD and <sup>3</sup>Children's Hospital of the Albert-Ludwigs University, Freiburg, Germany

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<sup>1</sup>University "La Sapienza", Rome, Italy, <sup>2</sup>University Hospitals, Basel, Switzerland, <sup>3</sup>University of Bari, Italy, <sup>4</sup>NIB-NINDS-NIH, Bethesda, and <sup>5</sup>Inmi "L. Spallanzani", Rome, Italy

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The Weizmann Institute of Science, Rehovot, Israel

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<sup>1</sup>Cleveland State University; <sup>2</sup>The Cleveland Clinic Foundation; <sup>3</sup>Ridgeway Biosystem, Inc.

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<sup>1</sup>Pediatric Oncology Branch and <sup>4</sup>Metabolism Branch, NCI-CCR, and <sup>2</sup>Functional Tumor Imaging Group, Department of Radiology, Bethesda, MD; <sup>3</sup>Laboratory of Experimental Immunology, NCI at Fredrick, Frederick, MD

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Department of Internal Medicine Korea University Medical Center<sup>1</sup>, Yonsei Cancer Center<sup>2</sup>, Chonnam National University Hospital<sup>3</sup>, Chonbuk National University Hospital<sup>4</sup>, Hanyang University Hospital<sup>5</sup>. Korea

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I. Bubanovic<sup>1</sup>, S. Najman<sup>2</sup>  
<sup>1</sup>Ob/Gyn Department, Medica Centre, Nis, Serbia and Montenegro, <sup>2</sup>Institute for Biology, Medical School B Nis, Serbia and Montenegro

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<sup>1</sup>Unité de Pharmacologie Cellulaire, <sup>2</sup>Unité d'Immuno-Génétique Cellulaire, <sup>3</sup>Unité des Cytokines et Développement Lymphoïde, Institut Pasteur, Paris; France

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<sup>1</sup>Unité d'ImmunoGénétique Cellulaire, Institut Pasteur, Paris; <sup>2</sup> Service de Médecine Hôpital Bicêtre, Assistance Publique BHôpitaux de Paris, <sup>3</sup>Unité d'Epidémiologie des Maladies Emergentes, Institut Pasteur, Paris, France .

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Stony Brook University, Stony Brook, New York

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Nicholas Topley<sup>1</sup>

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and <sup>3</sup>Cardiff School of Biosciences, Cardiff University, Cardiff, UK

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Otto Haller<sup>1</sup>,

<sup>1</sup>University of Freiburg, Freiburg, Germany; <sup>2</sup>European Molecular Biology  
Laboratory, Heidelberg, Germany

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<sup>1</sup>University of Freiburg, Freiburg, Germany; <sup>2</sup>Heinrich-Pette-Institut, Hamburg,  
Germany and <sup>3</sup>Memorial Sloan-Kettering Cancer Center, Sloan-Kettering Institute,  
New York NY

**NON-VIRAL INDUCTION OF TYPE-I INTERFERON**, Paper 91

Peter L Smith<sup>1</sup>, Meleri Jones<sup>1</sup>, Giovanna Lombardi<sup>2</sup> Graham R Foster<sup>1</sup>

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London,UK and <sup>2</sup>Imperial College at Hammersmith Hospital, London,UK

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The Scripps Research Institute, La Jolla, CA

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University of Toledo, Toledo, OH

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University of Toledo, Toledo, OH

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Michael Gale, Jr<sup>2</sup>, and Stanley M. Lemon<sup>1</sup>

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Center, Dallas, TX

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<sup>1</sup>Program in Molecular and Cell Biology, and <sup>2</sup>Greenebaum Cancer Center, University of Maryland, Baltimore, MD

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University of Texas Southwestern Medical Center, Dallas, TX

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Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University, Baltimore, MD

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Princess Alexandra Hospital, University of Queensland, Brisbane, Australia

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**INTERFERON ALFA INHIBITS CRIMEAN-CONGO HEMORRHAGIC FEVER VIRUS (CCHFV) REPLICATION CYCLE,** Paper 102

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<sup>2</sup>Div. of Medical Microbiology, Linköping, Sweden, <sup>3</sup>University of Freiburg, Germany

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Carla Olsnes, Hans Jørgen Aarstad, and Jan Olofsson  
Haukeland University Hospital, Bergen, Norway

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Virion Systems Inc., Rockville, MD

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Shaun Rosebeck and Douglas W. Leaman  
University of Toledo, Toledo, OH

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Hideo Saotome<sup>3</sup>, Junnji Hamuro<sup>4</sup>, Tsunataro Kishida<sup>1</sup>

<sup>1</sup>L.Pasteur Ctr. Med. Res., <sup>2</sup>Dept. Surgery, Kinki Univ., <sup>3</sup>Wyeth Research, <sup>4</sup>Ajinomoto Company, Ltd

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Raisa N.Vasilenk

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Bernadette Drayton<sup>3</sup>, Odile deLapeyrière<sup>3</sup> and Jean-François Gauchat<sup>1</sup>

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**IL-20 IS AN ANGIOGENIC FACTOR**, Paper 109

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Erik Hasselager<sup>1</sup>, Maja Myren<sup>2</sup>, Peder L. Nørby<sup>1</sup>, Uffe B. Olsen<sup>1</sup>, Katerina Tritsarlis<sup>2</sup>

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**NEW CYTOKINES, continued**

**INTERLEUKIN-20 PROTEIN IN PSORIATIC SKIN PLAQUES DISAPPEARS AFTER SHORT TERM TREATMENT WITH CYCLOSPORINE A OR**

**CALCIPOTRIOL**, Paper 110

Erik Hasselager<sup>1</sup>, Torben Steiniche<sup>2</sup>, Stefan Zahn<sup>3</sup>, John Rømer<sup>4</sup>, Tom Bukowski<sup>5</sup>, Jes T. Clausen<sup>3</sup>, and Knud Kragballe<sup>6</sup>

<sup>1</sup>Discovery, Novo Nordisk, Maaloev, Denmark; <sup>2</sup>Aarhus Kommunehospital, Aarhus, Denmark, <sup>3</sup>Discovery, Novo Nordisk, Bagsvaerd, Denmark, <sup>4</sup>Finsenlaboratoriet, Copenhagen, Denmark, <sup>5</sup>ZymoGenetics, Seattle, WA, and <sup>6</sup>Dept of Dermatology, Marselisborg Hospital, Aarhus, Denmark.

**ISOLATION AND CHARACTERIZATION OF cDNAs ENCODING CHICKEN IL-16 AND 1L-17**, Paper 111

Erik P. Lillehoj<sup>1</sup>, Wongi Min,<sup>2</sup> and Hyun S. Lillehoj<sup>2</sup>

<sup>1</sup>University of Maryland, Baltimore, MD; <sup>2</sup>Animal Parasitic Diseases Laboratory, ARS, USDA, Beltsville, MD

**BIRA-BIOTINYLATED CARDIOTROPHIN LIKE CYTOKINE: A NEW TOOL TO STUDY CILIARY NEUROTROPHIC FACTOR AND CARDIOTROPHIN LIKE CYTOKINE RECEPTOR EXPRESSION**, Paper 112

Isabelle Cagnet<sup>1</sup>, Florence Guilhot<sup>1</sup>, Mélanie Gabriac<sup>1</sup>, Alexandra Bert<sup>1</sup>, Greg Elson<sup>2</sup>, Hugues Gascan<sup>3</sup> and Jean-François Gauchat<sup>1</sup>

<sup>1</sup>Pharmacology, University of Montreal, Montreal, Quebec, Canada; <sup>2</sup>NovImmune, Geneva, Switzerland and <sup>3</sup>INSERM U564, Angers, France

**T-CELL DERIVED CYTOKINE, INTERLEUKIN-31, INDUCES A DERMATITIS PHENOTYPE IN MICE**, Paper 113

J. Bilsborough, S. Dillon, H. Haugen, K. Kim, K. Bontadelli, D. Cutler, S. Mudri, K. Waggle, H-P Ren, M. Maurer, B. Harder, M. Rosenfeld-Franklin, C. Sprecher, J. Parrish-Novak, A. Hammond, M. Dasovich, J. Johnston, L. Lockwood, Z. Chen, C. Clegg, D. Foster and J. Gross.  
ZymoGenetics Inc., Seattle, WA

6:00 - 7:30 pm	<b>LECTURES</b>	<b>San Geronimo Ballroom</b>
6:00 pm	<b>Keynote Address 2</b> <b>THE IKB KINASE (IKK) AND THE CONTROL OF IMMUNITY, INFLAMMATION AND CANCER</b> , Paper 114 Michael Karin University of California, San Diego School of Medicine, La Jolla, California	
6:45 pm	<b>ICS Lifetime Achievement Award</b> Joost J. Oppenheim, National Institutes of Health, Frederick, Maryland (Introduced by Warren Leonard, President, ICS)	

**SATURDAY, OCTOBER 23, 2004**

- 9:00 am - 12:00 noon **PLENARY SESSION 2: Signal Transduction**, **San Geronimo Ballroom**  
Papers 115-118  
Chairs: **Eleanor Fish**, University of Toronto, Ontario, Canada and  
**George Stark**, Lerner Institute, Cleveland Clinic, Ohio
- 9:00 am **HUMAN INTERFERON- $\beta$  GENE REGULATION: SIGNALING PATHWAYS AND TRANSCRIPTION MECHANISMS**, Paper 115  
Tom Maniatis  
Harvard University, Cambridge MA
- 9:30 am **MAP KINASE PATHWAYS IN TYPE I INTERFERON SIGNALING**, Paper 116  
L.C. Platanius  
Northwestern University School of Medicine, Chicago IL
- 10:00 am **THE RNA HELICASE RIG-I FUNCTIONS AS A RECEPTOR FOR CYTOPLASMIC DOUBLE-STRANDED RNA AND PLAYS CRITICAL ROLES IN INNATE ANTIVIRAL RESPONSES**, Paper 117  
M. Yoneyama<sup>1</sup>, M. Kikuchi<sup>1</sup>, T. Natsukawa<sup>1</sup>, N. Shinobu<sup>1</sup>, T. Imaizumi<sup>2</sup>, S. Akira<sup>3</sup>,  
M. Miyagishi<sup>4</sup>, K. Taira<sup>4</sup> and T. Fujita<sup>1</sup>  
<sup>1</sup>Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan <sup>2</sup>Hirosaki University School of Medicine, Hirosaki, Japan <sup>3</sup>Research Institute for Microbial Diseases, Osaka, Japan <sup>4</sup>School of Engineering, University of Tokyo, Tokyo, Japan
- 10:30 am **Coffee Available**
- 11:00 am **CYTOKINE SIGNALING AND LYMPHOID DEVELOPMENT, DIFFERENTIATION AND IMMUNOREGULATION**, Paper 118  
John J. O'Shea  
NIAMS, National Institutes of Health, Bethesda, MD
- 11:30 am **mTOR SIGNALING TO TRANSLATION FACTORS**  
Nahum Sonenberg  
McGill University, Montreal, Canada
- 12:00 - 2:00 pm Lunch Break (cash lunch sales) **San Geronimo Foyer**
- 12:30 - 2:00 pm **WOMENS' FORUM: Skills for Success** **San Geronimo Ballroom**
- 2:00 - 4:00 pm **CONCURRENT WORKSHOPS**
- 2:00 - 4:00 pm **WORKSHOP 5: Gene Regulation**, Papers 119-125 **San Geronimo Ballroom**  
Chairs: **David Levy**, New York University School of Medicine, New York  
**Betsy Barnes**, Johns Hopkins University, Baltimore, Maryland
- 2:00 pm **REGULATION OF NUCLEAR FACTOR  $\kappa$ B SUBUNIT C-REL THROUGH PHOSPHORYLATION BY TWO I $\kappa$ B KINASE (IKK)-RELATED KINASES, IKKe AND TANK-BINDING KINASE-1**, Paper 119  
Jennifer Harris<sup>1,2</sup>, Nathalie Grandvaux<sup>1</sup>, Sonia Sharma<sup>1,2</sup>, Rongtuan Lin<sup>1</sup> and John Hiscott<sup>1,2</sup>. <sup>1</sup>Lady Davis Institute for Medical Research and <sup>2</sup>McGill University, Montreal, Quebec, Canada

- 2:20 pm **GENE EXPRESSION PROFILING OF MYELOID AND FIBROBLAST CELLS LACKING BOTH C-REL AND RELA IN RESPONSE TO TNF  $\alpha$** , Paper 120  
Rebecca McCrackan<sup>1</sup>, Raelene Grumont<sup>1</sup>, Liam O'Connor<sup>2</sup>, Dobrila Nestic<sup>1</sup>, Raffi Gugasyan<sup>1</sup>, and Steve Gerondakis<sup>1</sup>  
<sup>1</sup>Walter and Eliza Hall Institute of Medical Research, Parkville, Australia and  
<sup>2</sup>Incyte Genomics, Inc., Palo Alto, CA
- 2:35 pm **THE ROLE OF NF- $\kappa$ \_B IN THE ANTIVIRAL ACTION OF IFN AND IFN-REGULATED GENE EXPRESSION**, Paper 121  
Lawrence M. Pfeffer<sup>1</sup>, Jong-Gwan Kim<sup>1</sup>, Susan R. Pfeffer<sup>1</sup>, Dennis J. Carrigan<sup>1</sup>, Darren P. Baker<sup>2</sup>, Lai Wei<sup>1</sup>, and Ramin Homayouni<sup>1</sup>  
<sup>1</sup>University of Tennessee Health Science Center, Memphis, TN and <sup>2</sup>Biogen Idec, Inc., Cambridge, MA
- 2:50 pm **CHARACTERIZATION OF THE MULTIPLE IRF-5 VARIANTS : A CLOSER LOOK AT THEIR REGULATION AND FUNCTION**, Paper 122  
Betsy J. Barnes, Margo E. Mancl, Guodong Hu, Katherine Hoops, and Paula M. Pitha,  
The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University, Baltimore, MD
- 3:05 pm **IRF-8/ICSBP IS A MASTER REGULATOR OF MATURE MACROPHAGES, ESSENTIAL FOR INNATE IMMUNITY TO INTRAPHAGOSOMAL PATHOGENS**  
Paper 123  
Michal Alter-Koltunoff, Natalie Dror, Aviva Azriel, and Ben-Zion Levi  
Technion, Haifa, Israel
- 3:20 pm **PHYSIOLOGY AND PATHOLOGY OF STAT1 and STAT3**, Paper 124  
David E. Levy, Alicia Corlett, Marta Sabbadini, Marion Bonnet, Chien-Kuo Lee, and Giorgio Inghirami  
New York University School of Medicine, New York NY
- 3:35 pm **CONTROL OF ANTIVIRAL CYTOKINE GENE EXPRESSION BY SIGNALING THROUGH RNA SENSORS**, Paper 125  
Anat Hasson, Sarah Namer, Smadar Cohen-Chalamish, Merav Persky, Yona Banai, Farhat Osman and Raymond Kaempfer  
The Hebrew University-Hadassah Medical School, Jerusalem, Israel
- 2:00 - 4:00 pm **WORKSHOP 6: Receptor Mechanisms** **Flamingo A-D**  
Papers 126-132  
Chairs: **Sandra Pellegrini**, Institut Pasteur, Paris, France and **Serge Y. Fuchs**, University of Pennsylvania, Philadelphia, PA
- 2:00 pm **MOLECULAR DISSECTION OF DIFFERENTIAL RECEPTOR ASSEMBLING BY TYPE I INTERFERONS**, Paper 126  
José Van der Heyden<sup>1</sup>, Gilles Uzé<sup>1</sup>, Tal Peleg-Shulman<sup>2</sup>, Laila C. Roisman<sup>2</sup>, Gideon Schreiber<sup>2</sup>, Peter Lamken<sup>3</sup>, Eva Jaks<sup>3</sup>, Jacob Piehler<sup>3</sup>,  
<sup>1</sup>UMR 5124, CNRS, Montpellier, France, <sup>2</sup>Dept. of Biological Chemistry, Weizmann Institute of Science, Rehovot, Israel, <sup>3</sup>Institute of Biochemistry, Goethe-University, Frankfurt/Main, Germany

**Saturday, October 23 Continued**

- 2:20 pm **TWO-STEP ACTIVATION OF IRF-3: ROLE OF PI3 KINASE IN TLR3-MEDIATED SIGNALING BY DSRNA**, Paper 127  
Saumendra N. Sarkar, Kristi L. Peters, Christopher P. Elco and Ganes C. Sen  
The Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH
- 2:35 pm **THE ROLE OF JANUS KINASES IN CYTOKINE RECEPTOR TRAFFIC : TYK2 CATALYTIC ACTIVITY CONTRIBUTES TO LIGAND-DEPENDENT DEGRADATION OF IFNAR1**, Paper 128  
Z. Marijanovic, J. Ragimbeau and S. Pellegrini  
Unité de Signalisation des Cytokines, Institut Pasteur, Paris, France
- 2:50 pm **INTERFERON $\gamma$  RESPONSES ARE BLOCKED UNDER CONDITIONS THAT PREVENT THE ASSEMBLY OF CLATHRIN COMPLEXES**, Paper 129  
John A. Lewis  
SUNY Downstate Medical Center, Brooklyn, NY.
- 3:05 pm **DOWN REGULATION OF TYPE I INTERFERON RECEPTOR VIA UBIQUITINATION OF IFNAR1: ROLE OF SCF<sup>B-TRCP</sup> E3 UBIQUITIN LIGASE**, Paper 130  
K.G. Suresh Kumar and Serge Y. Fuchs  
University of Pennsylvania, Philadelphia, PA
- 3:20 pm **NATURAL SOLUBLE IL-15RA IS GENERATED BY CLEAVAGE THAT INVOLVES THE TUMOR NECROSIS FACTOR-A-CONVERTING ENZYME**, Paper 131  
Vadim Budagian<sup>1</sup>, Elena Bulanova<sup>1</sup>, Zane Orinska<sup>1</sup>, Andreas Ludwig<sup>2</sup>, Stefan Rose-John<sup>2</sup>, Paul Saftig<sup>2</sup> and Silvia Bulfone-Paus<sup>1</sup>  
<sup>1</sup>Research Center Borstel, Borstel, Germany, <sup>2</sup>Christian-Albrechts-University, Kiel, Germany
- 3:35 pm **THE ANTIVIRAL STATE INDUCED BY HUMAN IFN-BETA LASTS MUCH LONGER THAN THAT INDUCED BY IFN-ALPHA2**, Paper 132  
Menachem Rubinstein, Daniela Novick and Sara Barak  
The Weizmann Institute of Science, Rehovot, Israel
- 2:00 - 4:00 pm **WORKSHOP 7: Innate Immunity 2**, Papers 133 - 139 **Los Olas**  
Chairs: **Joan Durbin**, Ohio State University, Columbus, Ohio and **Christine Biron**, Brown University, Providence, Rhode Island  
**ICS POSTDOCTORAL INVESTIGATOR AWARD: Ana Fernandez-Sesma, 3<sup>RD</sup> Place**
- 2:00 pm **THE INTERFERON ANTAGONIST NS1 OF INFLUENZA VIRUS ATTENUATES HUMAN DENDRITIC CELL MATURATION AND FUNCTION**, Paper 133  
Ana Fernandez-Sesma, Svetlana Marukian, Barbara J. Ebersole, Man-Seong Park, Stuart C. Sealfon, Adolfo García-Sastre and Thomas M. Moran  
Mount Sinai School of Medicine, New York, NY
- 2:20 pm **TYPE I INTERFERON INDUCTION BY RESPIRATORY VIRUS INFECTION *IN VIVO***, Paper 134  
Nancy Jewell, Negin Gitiban, Paris Akter, Randall Harris, Sara Mertz, Russell Durbin, Lauren Bakaletz, and Joan Durbin  
Columbus Children's Research Institute, Ohio State University, Columbus, OH

- 2:35 pm **CHARACTERIZATION OF PLASMACYTOID DENDRITIC CELLS FROM MURINE PEYER'S PATCHES**, Paper 135  
Nikhat Contractor<sup>1</sup>, Jennifer Louten<sup>2</sup>, Christine Biron<sup>2</sup>, and Brian Kelsall<sup>1</sup>  
<sup>1</sup>National Institute of Allergy and Infectious Disease, National Institutes of Health, Bethesda, MD and <sup>2</sup>Brown University, Providence, RI
- ISICR CHRISTINA FLEISHMANN MEMORIAL AWARD: Brenda Fredericksen**
- 2:50 pm **EXAMINATION OF THE MECHANISM BY WHICH WEST NILE VIRUS DELAYS THE ACTIVATION OF THE HOST ANTIVIRAL RESPONSE**, Paper 136  
Brenda L. Fredericksen and Michael Gale Jr.  
University of Texas Southwestern Medical Center, Dallas, TX
- ISICR YOUNG INVESTIGATOR AWARD: Tomohiko Tamura**
- 3:05 pm **IRF-4 AND IRF-8 REGULATE DENDRITIC CELL SUBSET DEVELOPMENT AND THEIR FUNCTIONAL DIVERSITY**, Paper 137  
Tomohiko Tamura<sup>1</sup>, Prafullakumar Tailor<sup>1</sup>, Hee Jeong Kong<sup>1</sup>, Hideki Tsujimura<sup>1</sup>, Harinder Singh<sup>2</sup> and Keiko Ozato<sup>1</sup>, <sup>1</sup>Lab. of Molecular Growth Regulation, NICHD, NIH, Bethesda, MD, <sup>2</sup>Howard Hughes Medical Institute, University of Chicago, Chicago, IL
- 3:20 pm **IFN $\alpha$ , $\beta$  COOPERATES WITH FLT3L AND PLASMACYTOID PRE-DENDRITIC CELLS DURING HERPES SIMPLEX VIRUS TYPE 1 INFECTION IN NEONATAL MICE**, Paper 138  
Sabine Vollstedt, Bettina Glanzmann, Beat Ryf, Vicky Meier and Mark Suter  
<sup>1</sup>Institute for Virology, University of Zurich, Switzerland
- 3:35 pm **THE ANTIVIRAL ACTIVITY OF TBK1 AND IKKE IN HCV INFECTION**, Paper 139  
Adrien Breiman<sup>1</sup>, Nathalie Grandvaux<sup>2</sup>, Rongtuan Lin<sup>2</sup>, Catherine Ottone<sup>1</sup>, Lydiane Pichard<sup>3</sup>, Pierre Charneau<sup>4</sup>, Patrick Aurel<sup>3</sup>, Shizuo Akira<sup>5</sup>, John Hiscott<sup>2</sup>, and Eliane F.Meurs<sup>1</sup>  
<sup>1</sup>Unité Hépacivirus, Institut Pasteur, Paris, France; <sup>2</sup>Lady Davis Institute for Medical Research, Montreal, Canada; <sup>3</sup>INSERM-U632, Montpellier, France; <sup>4</sup>Laboratoire Virologie Moléculaire et Vectorologie, Institut Pasteur, Paris, France; <sup>5</sup>Research Institute for Microbial Diseases, Osaka University, Osaka, Japan
- 2:00 - 4:00 pm **WORKSHOP 8: ADAPTIVE IMMUNITY** **Tropical A-C**  
Papers 140 - 146  
Chairs: **Filippo Belardelli**, Istituto Superiore di Sanità, Rome, Italy and **Angela Battistani**, Istituto Superiore di Sanità, Rome, Italy
- 2:00 pm **IRF-1 IS A CRITICAL FACTOR IN THE CONTROL OF TOLEROGENTIC IMMUNE FUNCTIONS, AFFECTING THE DEVELOPMENT OF TOLEROGENTIC DENDRITIC CELLS AND CD4+CD25+ REGULATORY T CELLS**, Paper 140  
Lucia Gabriele, Alessandra Fragale, Paola Borghi, Paola Sestili, Emilia Stellacci, Massimo Venditti, Filippo Belardelli, and Angela Battistini, Istituto Superiore di Sanità, Rome, Italy

**Saturday, October 23 Continued**

- 2:20 pm **MONOCYTE-DERIVED DENDRITIC CELLS GENERATED WITH IFN- $\gamma$  : MOLECULAR SIGNATURE AND ADVANTAGES FOR THEIR USE IN THE DEVELOPMENT OF THERAPEUTIC VACCINES** , Paper 141  
Stefania Parlato, Paolo Sirabella, Lucia Gabriele, Irene Canini, Caterina Lapenta, Stefano M. Santini, and Filippo Belardelli  
Istituto Superiore di Sanità, Rome, Italy
- 2:35 pm **ROLE OF TYPE I INTERFERONS IN THE INITIATION OF AN IMMUNE RESPONSE**  
Paper 142  
Graham R Foster<sup>1</sup>, Conrad Germain<sup>2</sup>, Meleri Jones<sup>1</sup>, Linda Hibbert<sup>1</sup>, Federica Marelli<sup>2</sup>, Robert I Lechler<sup>2</sup> and Giovanna Lombardi<sup>2</sup>  
<sup>1</sup>Queen Mary's School of Medicine and Dentistry, Barts and The London, London, UK,  
<sup>2</sup>Faculty of Medicine, Imperial College at Hammersmith Hospital, London, UK
- 2:50 pm **INTERFERON-GAMMA IS NOT NECESSARY FOR BORNA DISEASE VIRUS-INDUCED IMMUNOPATHOLOGY BUT REQUIRED FOR ANTIVIRAL DEFENCE BY CD8 T CELLS**, Paper 143  
Juergen Hausmann, Karin Engelhardt, Karen Baur, Axel Pagenstecher, and Peter Staeheli  
University of Freiburg, Germany
- 3:05 pm **DECREASED IL-12 AND IL-15 PRODUCTION AND IMPAIRED IL-12 INDUCED T-HELPER RESPONSES IN HIV-1 INFECTED INDIVIDUALS** , Paper 144  
Vainav Patel, Antonio Valentin and George N. Pavlakis  
National Cancer Institute-Frederick, MD
- 3:20 pm **ENHANCING CTL RESPONSES TO WHOLE CANCER CELL VACCINES *IN VIVO*: SYNERGISTIC INCREASES OBTAINED USING IFN  $\gamma$  PRIMED AND IFN $\beta$ TREATED B7-1<sup>+</sup> CELLS**, Paper 145  
Shala Dezfouli, Irene Hatzinisiriou, Pauline Low and Stephen J. Ralph  
Griffith University, Gold Coast, Southport, Queensland, Australia
- 3:35 pm **REGULATION OF TYPE 1 INTERFERONS EFFECTS ON CD8 T CELL RESPONSES DURING VIRAL INFECTION** , Paper 146  
M. Pilar Gil, Rachelle Salomon and Christine A. Biron  
Brown University, Providence, Rhode Island
- 4:00 - 6:00 pm **POSTER SESSION 2**, Papers 147-241 **San Cristobal Ballroom**  
***with wine and cheese***

**GENE REGULATION**, Papers 147-173

**THE INTERFERON-INDUCED GTPASE, MGBP-2, DOWNREGULATES MATRIX METALLOPROTEINASE-9 EXPRESSION** , Paper 147

Sujata Balasubramanian, Jill A. Trendel, and Deborah J. Vestal  
University of Toledo, Toledo, OH

**MECHANISMS OF INTERFERON REGULATORY FACTOR-1 DEREGLATION IN RAS-TRANSFORMED MOUSE FIBROBLASTS** , Paper 148

Frank A. Attard, Tze-Jou Annie Yeh, Sara Contente, Dorothy L. Buchhagen, and Robert M. Friedman  
Uniformed Services University of the Health Sciences, Bethesda, MD

**GENE REGULATION, continued**

**IRF-1 BINDS THE ENHANCER REGION OF THE HIV-1 LTR AND COOPERATES WITH NF-KB IN INDUCING LTR TRANSCRIPTION**, Paper 149

Anna L. Remoli, Giulia Marsili, Marco Sgarbanti, Alessandra Borsetti, Barbara Ridolfi, Edvige Perrotti, Ramona Ilari, Roberto Orsatti, Emilia Stellacci, Barbara Ensoli and Angela Battistini  
Diseases, Istituto Superiore di Sanità, Rome, Italy

**NOVEL POSITIVE AND NEGATIVE REGULATORY ELEMENTS IN THE HUMAN STAT1 GENE**, Paper 150

Samuel J. Cutler, Ibtisam Ghazawi, Albert S. Mellick, and Stephen J. Ralph  
School of Health Sciences, Griffith University, Gold Coast, Queensland, Australia

**INTERLEUKIN 10 AND ITS FUNCTIONAL DOMAIN IT9302 REGULATE GENE EXPRESSION IN MALIGNANT AND HIGH METASTATIC MELANOMA CELLS**

Paper 151

Borbala Gesser<sup>1</sup>, Mogens Kruhøffer<sup>2</sup>, Friedrik P. Wikman<sup>2</sup>, Torben F. Ørntoft<sup>2</sup>, and Christian G Larsen<sup>1</sup>,  
<sup>1</sup>Aarhus Amtssygehus, Aarhus, and <sup>2</sup>Aarhus University Hospital, Skejby, Aarhus, Denmark

**INTERLEUKIN-6-TYPE CYTOKINES NEGATIVELY REGULATE TISSUE INHIBITOR OF METALLOPROTEINASES-3 EXPRESSION IN SYNOVIAL LINING CELLS**

Paper 152

Katrin Golz<sup>1</sup>, Eddy van de Leur<sup>2</sup>, Peter C. Heinrich<sup>1</sup> and Heike M. Hermanns<sup>1</sup>  
<sup>1</sup>Institut of Biochemistry; <sup>2</sup>Institute of Clinical Chemistry, University Hospital RWTH Aachen, Germany

**TRANSLATIONAL CONTROL OF INTERLEUKIN-3 MRNA: INVOLVEMENT OF THE ADENOSINE/URIDINE-RICH ELEMENT**, Paper 153

Kirla R. Maurás-Rivera, Félix Araujo-Pérez, and Carlos I. González<sup>1</sup>  
University of Puerto Rico-Río Piedras, College of Natural Sciences, San Juan, PR

**TRANSCRIPTIONAL PROFILING IN JURKAT T CELLS TREATED WITH INTERFERON-β1A AND INTERFERON-γ**

Paper 154

Jaya Goyal, Deborah Kinch, Karen Flynn, Quyen Duong, Matthew Cooper, and Meena Subramanyam  
Clinical Science and technology, PCDS, Biogen Idec Inc., Cambridge, MA, USA

**THE ISG15-SPECIFIC PROTEASE, UBP43, INTERACTS WITH SSRP1 IN AN INTERFERON-DEPENDENT MANNER**, Paper 155

Janette Harro<sup>1</sup>, Xiao-Ling Li<sup>1</sup>, and Bret A. Hassel<sup>1,2</sup>  
<sup>1</sup>Program in Molecular and Cell Biology, and <sup>2</sup>Greenebaum Cancer Center, University of Maryland, Baltimore, MD

**MIIXED LINEAGE KINASES AND THE INTERFERON-g SIGNAL TRANSDUCTION PATHWAYS**, Paper 156

Sanjit K. Roy<sup>1</sup>, Jon D. Shuman<sup>3</sup>, Paul S. Shapiro<sup>2</sup>, Leonidas Plataniias<sup>2</sup>, Peter F. Johnson<sup>3</sup> and Dhan V. Kalvakolanu<sup>1</sup>  
<sup>1</sup>Greenebaum Cancer Center, University of Maryland School of Med., Baltimore, MD;  
<sup>2</sup>Northwestern University Feinberg School of Medicine, Chicago, IL and  
<sup>3</sup>National Cancer Institute Frederick Cancer Research Facility, Frederick, MD

**GENE REGULATION continued**

**IFN $\gamma$ -MEDIATED REGULATION OF 25-HYDROXYVITAMIN D-1-ALPHA-HYDROXYLASE IN HUMAN MONOCYTES** , Paper 157

K. Stoffels, L. Overbergh, A. Giulietti, R. Bouillon, and C. Mathieu  
Catholic University of Leuven, Leuven, Belgium.

**IDENTIFICATION OF A DISTINCT PROMOTER ACTIVITY IN THE PROXIMAL UPSTREAM OF SWINE INTERLEUKIN-12 RECEPTOR BETA 2 GENE** , Paper 158

Takehiro Kokuho, Satoko Watanabe, Shigeki Inumaru, and Takayuki Kubota  
National Institute of Animal Health, Tsukuba, Ibaraki, Japan

**STAT AND TGF- $\beta$  SIGNALS COLLABORATE IN THE DAUER DEVELOPMENTAL DECISION IN THE NEMATODE, *C. ELEGANS***, Paper 159

Yaming Wang and David E. Levy,  
New York University School of Medicine, New York, NY

**LPS STABILIZES FORMYL PEPTIDE RECEPTOR 1 mRNA VIA AUTOCRINE ACTION OF TNF $\alpha$** , Paper 160

Palash Mandal and Thomas Hamilton  
Cleveland Clinic Foundation, Cleveland, OH

**REGULATION OF THE TYPE I IFN LOCUS DURING VIRAL INFECTION**, Paper 161

Isabelle J. Marié, Nadia Cohen, and David E. Levy  
New York University School of Medicine, New York, NY

**ROLE OF ETS-1 IN ERYTHROID AND MEGAKARYOCYTIC DIFFERENTIATION**

Paper 162

Giovanna Marziali Valentina Lulli, Paolo Romania, Simona Mazzeo, Ornella Morsilli, Marco Gabbianelli, Alfredo Pagliuca, Ugo Testa and Cesare Peschle.  
Istituto Superiore Sanità, Rome, Italy

**IDENTIFICATION OF RNA ACTIVATORS OF 2',5'-OLIGOADENYLATE SYNTHETASE IN PROSTATE CANCER CELLS** , Paper 163

Ross J. Molinaro<sup>1,2</sup>, Krishnamurthy Malathi<sup>1</sup>, and Robert H. Silverman<sup>1</sup>  
<sup>1</sup>Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH and  
<sup>2</sup>Cleveland State University, Cleveland, OH

**P38 MAP KINASE REGULATES STAT1- AND NF- $\kappa$ B-DEPENDENT TRANSCRIPTIONAL SYNERGY VIA ENHANCEOSOME FORMATION IN INTERFERON AND LPS-STIMULATED MACROPHAGES** , Paper 164

Yoshihiro Ohmori and Miki Hiroi  
Meikai University School of Dentistry, Sakado, Saitama, Japan

**ROLE OF ETS-1 IN TRANSCRIPTIONAL REGULATION OF TRANSFERRIN RECEPTOR IN PRIMARY HUMAN LYMPHOCYTES ACTIVATION** , Paper 165

Edvige Perrotti, Ramona Ilari, Ornella Morsilli, Ugo Testa, Giovanna Marziali and Angela Battistini  
Istituto Superiore di Sanità, Rome, Italy



**GENE REGULATION continued**

**TNF- $\alpha$ /IL-1 $\beta$  STIMULATION OF HepG2 CELLS LEADS TO A TIME DEPENDENT SHIFT IN THE COM-POSITION OF THE NF- $\kappa$ B DIMERS AND IN THE NF- $\kappa$ B BINDING AFFINITY TO IL-8/P53 PROMOTERS** , Paper 166

Mads Rasmussen, Borbala Gesser, Lars Iversen, and Knud Kragballe  
Marselisborg Hospital, Aarhus University, Denmark

**COOPERATIVE REGULATION OF THE ACETYL TRANSFERASE AND CCAAT DISPLACEMENT PROTEIN ON THE EXPRESSION OF NF- $\kappa$ B-REGULATED CHEMOKINES IN MELANOMA CELLS** , Paper 167

Yukiko Ueda<sup>1</sup> and Ann Richmond<sup>1,2</sup>.

<sup>1</sup>Vanderbilt University School of Medicine and <sup>2</sup>VA Medical Center, Nashville, TN

**IFN- $\alpha$  REGULATED INTERLEUKIN-21 AND INTERLEUKIN-21 RESEPTOR GENE EXPRESSION IN HUMAN NK AND T CELLS** , Paper 168

Mari Strengell, Ilkka Julkunen, and Sampsa Matikainen,  
National Public Health Institute, Helsinki, Finland

**HEPATOCTE GROWTH FACTOR GENE IS TRANSCRIPTIONALLY ACTIVATED BY LEUKEMIA INHIBITORY FACTOR THROUGH THE STAT3 PATHWAY**

Paper 169

Mikio Tomida<sup>1</sup> and Takeshi Saito<sup>1,2</sup>,

<sup>1</sup>Saitama Cancer Center, Ina-machi, Saitama, Japan and <sup>2</sup>REDS Group (Saitama Prefecture Collaboration of Regional Entities for the Advancement of Technologica Excellence, JST), Saitama Small Enterprise Promotion Corporation, Kawaguchi, Saitama, Japan

**IL-1 $\beta$  REGULATES THE EXPRESSION OF IL-6-INDUCED SUPPRESSOR OF CYTOKINE SIGANLING -3 POSITIVELY AND NEGATIVELY THROUGH NF- $\kappa$ B ACTIVATION** , Paper 170

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Brain Korea 21 Project for Medical Science, Yonsei University College of Medicine, Seoul, Korea

**INCREASED SENSITIVITY OF SARS-CORONAVIRUS TO A COMBINATION OF HUMAN TYPE I AND TYPE II INTERFERONS**, Paper 223

Carolina Scagnolari<sup>1</sup>, Elisa Vicenzi<sup>2</sup>, Francesca Bellomi<sup>1</sup>, Maria Giuseppina Stillitano<sup>1</sup>, Debora Pinna<sup>2</sup>, Guido Poli<sup>2,3</sup>, Massimo Clementi<sup>3,4</sup>, Ferdinando Dianzani<sup>5</sup>, Guido Antonelli<sup>\*1</sup>

<sup>1</sup>University "La Sapienza", Rome; <sup>2</sup>AIDS Immunopathogenesis Unit, San Raffaele Scientific Institute, Milan; <sup>3</sup>School of Medicine, Vita-Salute University, Milan

<sup>4</sup> Microbiology and Virology Laboratory, San Raffaele Scientific Institute, Milan and

<sup>5</sup> Università "Campus Biomedico", Rome; Italy



**INFECTIOUS DISEASES, continued**

**PHOSPHOLIPID SCRMBLASE 1 (PLSCR 1) MARKEDLY POTENTIATES THE ANTIVIRAL ACTIVITY OF INTERFERON**, Paper 224

Beihua Dong<sup>1</sup>, Quansheng Zhou<sup>2</sup>, Ji Zhao<sup>2</sup>, Aimin Zhou<sup>3</sup>, Ronald N. Harty<sup>4</sup>, Santanu Bose<sup>1</sup>, Amiya Banerjee<sup>1</sup>, Jeanna Guenther<sup>1</sup>, Roger Slee<sup>1</sup>, and Bryan R. G. Williams<sup>1</sup>

<sup>1</sup>Lerner Research Institute, The Cleveland Clinic Foundation, Cleveland, OH,

<sup>2</sup>The Scripps Research Institute, La Jolla, CA, <sup>3</sup>Cleveland University, Cleveland, OH, and <sup>4</sup>School of Veterinary Med, University of Pennsylvania, Philadelphia, PA

**EVALUATION OF INTERFERON-BETA AS A THERAPEUTIC TREATMENT FOR EBOLA HEMORRHAGIC FEVER IN NONHUMAN PRIMATES**, Paper 225

Elizabeth A. Fritz<sup>1</sup>, Lisa E. Hensley<sup>1</sup>, Christopher L. Karp<sup>2</sup>, Robert Fisher<sup>1</sup>, Jason Paragas<sup>1</sup>, Howard A. Young<sup>3</sup>, Peter B. Jahrling<sup>1</sup>, and Thomas W. Geisbert<sup>1</sup>

<sup>1</sup>United States Army Medical Institute of Infectious Diseases, Fort Detrick, MD,

<sup>2</sup>Cincinnati Children's Hospital Research Foundation, Cincinnati Children's Hospital Medical Center, Cincinnati, OH, and <sup>3</sup>NCI-FCRDC, Frederick, MD

**NSs PROTEIN OF RIFT VALLEY FEVER VIRUS BLOCKS INTERFERON PRODUCTION BY INHIBITING HOST GENE TRANSCRIPTION**, Paper 226

Agnès Billecocq<sup>1</sup>, Martin Spiegel<sup>2</sup>, Pierre Vialat<sup>1</sup>, Alain Kohl<sup>1</sup>, Friedemann Weber<sup>2</sup>,

Michèle Bouloy<sup>1</sup> and Otto Haller<sup>2</sup>, <sup>1</sup>Unité de génétique moléculaire des Bunyaviridés, Institut Pasteur, Paris, France; <sup>2</sup>Department of Virology, University of Freiburg, Freiburg, Germany

**EXPRESSION OF INFLAMMATORY MEDIATORS IN BALB/C MICE FOLLOWING INTRANASAL CHALLENGE WITH VACCINIA VIRUS**, Paper 227

Matthew C. Jackson, Amanda Phelps, Lin Eastaugh, Amanda J. Gates and Roman Lukaszewski.

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**DENGUE VIRUS INHIBITS EARLY INTERFERON SIGNALLING**, Paper 228

Meleri Jones<sup>1</sup>, Andrew Davidson<sup>2</sup>, Simon Ball<sup>1</sup>, Linda Hibbert<sup>1</sup>, Joerg Schlaak<sup>3</sup>, Graham Foster<sup>1</sup> and Michael Jacobs<sup>4</sup>

<sup>1</sup>Queen Mary's School of Medicine and Dentistry, London, UK, <sup>2</sup>Bristol University, UK

<sup>3</sup>University of Essen, Germany; <sup>4</sup>Royal Free & University College Medical School, London, UK

**FUNCTIONAL GENOMIC ANALYSIS OF FILOVIRUS INFECTED LIVER CELLS REVEALS DIFFERENCES IN THE INHIBITION OF TYPE I INTERFERON RESPONSES BY EBOLA ZAIRE AND EBOLA RESTON VIRUSES**, Paper 229

John C. Kash<sup>1</sup>, Elke Mühlberger<sup>2</sup>, Victoria Carter<sup>1</sup>, Hans-Dieter Klenk<sup>2</sup>, and Michael G. Katze<sup>1</sup>

<sup>1</sup>Department of Microbiology and Washington National Primate Research Center, University of Washington School of Medicine, Seattle, WA, <sup>2</sup>Institute for Virology, Philipps-University, Marburg, Germany

**IFN-BETA INCREASES PARASITE BURDEN IN LEISHMANIA-INFECTED HUMAN MACROPHAGES THROUGH A SUPEROXIDE-DEPENDENT, NITRIC OXIDE-INDEPENDENT MECHANISM**, Paper 230

A.R. Khouri<sup>1</sup>, G. Santana<sup>1</sup>, A. Báfica<sup>1</sup>, J. Wietzerbin<sup>2</sup>, M. Barral-Netto<sup>1</sup> and J. Van Weyenbergh<sup>1</sup>,

<sup>1</sup>LIMI-CPqGM-FIOCRUZ, Salvador-BA, Brazil and <sup>2</sup>U563 INSERM, Institut Curie, Paris, France

**INFECTIOUS DISEASES, continued**

**THE ANTIVIRAL AND OTHER FUNCTIONS OF THE ISG15 CONJUGATION PATHWAY INDUCED BY INTERFERON- $\alpha/\beta$** , Paper 231

Chen Zhao<sup>1</sup>, Sylvie L. Beaudenon<sup>1</sup>, Melissa L. Kelley<sup>1</sup>, Brenda A. Schulman<sup>2</sup>, Cuifeng Yin<sup>3</sup>, Gaetano T. Montelione<sup>3</sup>, Jon M. Huibregtse<sup>1</sup>, and Robert M. Krug<sup>1</sup>  
<sup>1</sup>Institute for Cellular and Molecular Biology, Section of Microbiology and Molecular Genetics, University of Texas at Austin, Austin, TX, USA; <sup>2</sup>Department of Structural Biology, St. Jude Children's Research Hospital, Memphis, TN, USA; <sup>3</sup>Center for Advanced Biotechnology and Medicine, Rutgers University, Piscataway, NJ, USA

**MECHANISM(S) OF PATHOGENESIS OF VEE: ROLE OF THE BLOOD BRAIN BARRIER**, Paper 232

Radha K Maheshwari, Anuj Sharma, James Warren, Keith Steele, Franziska Grieder, and Anoop Singh  
Uniformed Services University of The Health Science, Bethesda, MD.

**INHIBITION OF INTERFERON GAMMA-STIMULATED GENE EXPRESSION BY *M. TUBERCULOSIS***, Paper 233

Y. Qiao<sup>1</sup>, S. Prabhakar<sup>1</sup>, A. Canova<sup>1</sup>, Y. Hoshino<sup>2</sup>, M. Weiden<sup>2</sup>, and R. Pine<sup>1</sup>  
<sup>1</sup>Public Health Research Institute, Newark, NJ and <sup>2</sup>New York University School of Medicine, New York, NY

**CHARACTERIZATION OF THE ROLES OF CXCL-8 IN HEPATITIS C VIRUS REPLICATION AND INHIBITION OF INTERFERON**, Paper 234

Paula McPoland, Bon Chang Koo, Courtney Plumlee, Michael J. Gale Jr<sup>2</sup>, Mette Peters, Roger E. Bumgarner, and Stephen J. Polyak  
University of Washington, Seattle, WA and <sup>2</sup>University of Texas Southwestern Medical Center, Dallas, TX

**TYPE I IFN IS A POWERFUL ADJUVANT FOR SYSTEMIC AND MUCOSAL VACCINATION AGAINST INFLUENZA VIRUS IN BOTH ADULT AND AGED MICE**  
Paper 235

Enrico Proietti<sup>1</sup>, Laura Bracci<sup>1</sup>, Federica Moschella<sup>1</sup>, Massimo Venditti<sup>1</sup>, Massimo Spada<sup>1</sup>, Simona Puzelli<sup>2</sup>, Isabella Donatelli<sup>2</sup> and Filippo Belardelli<sup>1</sup>  
<sup>1</sup>Department of Cell Biology and Neurosciences, <sup>2</sup> Department of Infectious, Parasitic and Immune-mediated Diseases, Istituto Superiore di Sanità, Rome, Italy

**VACCINIA VIRUS ENGAGEMENT OF CCR5**, Paper 236

Ramtin Rahbar<sup>1,2</sup> and Eleanor N. Fish<sup>1,2</sup>  
<sup>1</sup>Toronto General Research Institute, University Health Network and <sup>2</sup>Department of Immunology, University of Toronto, Toronto, Canada

**DNA MICRO-ARRAY ANALYSIS OF GENES INDUCED BY INTERFERON AND RIBAVIRIN IN HEPATITIS C PATIENTS**, Paper 237

Milton .W. Taylor<sup>1</sup>, Howard.J. Edenberg<sup>2</sup>, Takuma.Tsukahara<sup>1</sup>, Matthew Stephens<sup>2</sup>, Joel Schaley<sup>1</sup> and the Virahep C Study Group  
Indiana University Biology, Bloomington, IN. <sup>1</sup> and Center for Medical Genomics, Indiana University Medical School, IN. <sup>2</sup>

**WEST NILE VIRUS INHIBITS THE INTERFERON RESPONSE BY A NOVEL MECHANISM**, Paper 238

J.-T. Guo, Junpei Hayashi, Qing Zhu and Christoph Seeger  
Fox Chase Cancer Center, Philadelphia, PA

**INFECTIOUS DISEASES, continued**

**INTERFERON INDUCTION, AND ITS SUPPRESSION, BY INFLUENZA VIRUSES**

Paper 239

Philip I. Marcus,<sup>1</sup>Jillian M. Rojek,<sup>2</sup>and Margaret J. Sekellick<sup>1</sup>

Depts. Molecular & Cell Biology,<sup>1</sup> Pathobiology & Veterinary Science,<sup>2</sup> and Center for Excellence in Vaccine Research,<sup>1</sup> University of Connecticut, Storrs, CT

**INHIBITION OF INTERFERON-BETA INDUCTION BY SARS-CORONAVIRUS**

Paper 240

Martin Spiegel<sup>1</sup>, Andreas Pichlmair<sup>1</sup>, Luis Martínez-Sobrido<sup>2</sup>, Adolfo García-Sastre<sup>2</sup>, Otto Haller<sup>1</sup>, and Friedemann Weber<sup>1</sup>

<sup>1</sup>Institut für Medizinische Mikrobiologie und Hygiene, Universität Freiburg, Germany; <sup>2</sup>Mount Sinai School of Medicine, New York, NY

**VIRAL IRF-3 INHIBITOR CONFERS PATHOGENICITY IN VIVO** , Paper 241

Stephanie Jennings, Andreas Pichlmaier, Friedemann Weber, Otto Haller, Peter Staeheli and Georg Kochs  
Universität Freiburg, Freiburg, Germany

6:00 - 7:30 pm

**CONCURRENT SYMPOSIA**

6:00 - 8:00 pm

**SYMPOSIUM 1: Gene Regulation**, Papers 242-243 **San Geronimo Ballroom**  
Chair, **John Hiscott**, McGill University, Montreal, Canada and  
**Dimitris Thanos**, Institute of Molecular Biology and Genetics,  
B.S.R.C., Vari-Athens

6:00 pm

**THE ROLE OF CHROMATIN ARCHITECTURE IN GENE TRANSCRIPTION**

Paper 242

Marios Aggelopoulos, Efi Apostolou and Dimitris Thanos  
Institute of Molecular Biology and Genetics, B.S.R.C., Vari-Athens

6:30 pm

**CRYSTAL STRUCTURE OF IRF-3 REVEALS MECHANISM OF AUTOINHIBITION AND VIRUS INDUCED PHOSPHO-ACTIVATION** , Paper 243

Bin Y. Qin<sup>1</sup>, Cheng Liu<sup>2</sup>, Suvana S. Lam<sup>1</sup>, Hema Srinath<sup>1</sup>, Rachel Delston<sup>2</sup>, John J. Correia<sup>3</sup>, Rik Derynck<sup>2</sup>, and Kai Lin<sup>1</sup>

<sup>1</sup>University of Massachusetts Medical School, Worcester, MA, <sup>2</sup>University of California at San Francisco, San Francisco, CA and <sup>3</sup>University of Mississippi Medical Center, Jackson, MS

7:00 pm

**TRANSCRIPTIONAL PROGRAMS IN T CELLS**

Aanja Rao

The CBR Institute for Biomedical Research, Boston, MA

7:30 pm

**STRUCTURAL AND BIOCHEMICAL STUDIES OF STAT PROTEINS**

Xiaomin Chen

University of Texas, MD Anderson Cancer Center, Houston, TX

**Saturday, October 23 Continued**

6:00 - 8:00 pm                    **SYMPOSIUM 2: Chemokines**, Papers 244-245                    **Flamingo A-D**  
Chair: **Amanda Proudfoot**, Serono, Geneva, Switzerland

6:00 pm                    **EFFECTS OF MCP-1/CCL2 ON MAMMARY CARCINOMAS IN VIVO**  
Barrett Rollins  
Dana-Farber Cancer Institute, Boston, MA

6:30 pm                    **THE PARTICIPATION OF CHEMOKINES IN DIVERSE BIOLOGICAL PARADIGMS**, Paper 244  
Steven L. Kunkel  
University of Michigan Medical School, Ann Arbor, MI

7:00 pm                    **ORF74, KAPOSÍ'S SARCOMA, AND ANGIOGENESIS**, Paper 245  
Sergio A. Lira, Kristian K. Jensen, Marcos G. Grisotto, Alexandre Garin,  
Andrea P. Martin  
Immunobiology Center, Mount Sinai School of Medicine, New York, New York

7:30 pm                    **To be Announced**  
Tracey Handel  
University of California, Berkeley, CA

6:00 - 8:00 pm                    **SYMPOSIUM 3: Inflammation**, Papers 246-247                    **Las Olas Room**  
Chair **Matthew Fenton**, University of Maryland School of Medicine,  
Baltimore, MD

6:00 pm                    **THE INFLAMMASOMES: KEY REGULATORS OF INFLAMMATION**, Paper 246  
Jurg Tschopp  
University of Lausanne, Epalinges, Switzerland

6:30 pm                    **To be Announced**  
Marco Colonna  
Washington University, St. Louis, MO

7:00 pm                    **TUNING OF INFLAMMATORY CYTOKINES AND CHEMOKINES BY DECOY RECEPTORS**, Paper 247  
Alberto Mantovani  
Istituto di Ricerche Farmacologiche Mario Negri and Institute of General Pathology  
University of Milan, Italy

7:30 pm                    **THE INFLAMMATORY REFLEX**  
Kevin Tracey  
North Shore Hospital, Manhasset, NY

8:00 pm                    Dinner (on your own)

**SUNDAY, OCTOBER 24, 2004**

- 8:15 am - 9:00 am      **ISICR General Membership Meeting**      **San Geronimo Ballroom**
- 9:00 am - 12:00 noon      **PLENARY SESSION 3: Negative Regulation** ,      **San Geronimo Ballroom**  
Papers 248-250  
Chair: **Kathryn Zoon**, National Cancer Institute, National Institutes of Health, Bethesda, Maryland and **Ganes Sen**, Cleveland Clinic Foundation, Cleveland, Ohio
- 9:00 am      **SUPPRESSOR OF CYTOKINE SIGNALLING PROTEINS AND IMMUNE REGULATION** , Paper 248  
Christine Brender<sup>1</sup>, Joel Fletcher<sup>1</sup>, Douglas J. Hilton<sup>2</sup>, Warren S. Alexander<sup>2</sup>, and Robyn Starr<sup>1</sup>  
<sup>1</sup>St Vincent's Institute, Fitzroy, VIC, and <sup>2</sup>Walter and Eliza Hall Institute of Medical Research, Parkville, VIC, Australia.
- 9:30 am      **REGULATION OF INFLAMMATORY DISEASES BY ANTI-IL6 RECEPTOR ANTIBODY**  
Tadamitsu Kishimoto  
Osaka University, Osaka, Japan
- 10:00 am      **SOCS1 AND SOCS3; CRITICAL REGULATORS FOR CYTOKINE SIGNALING, INFLAMMATION, AUTOIMMUNITY, CANCER AND OBESITY** , Paper 249  
Akihiko Yoshimura, Hitomi Nishinakamura, Hiroshi Shiraishi, Yumiko Matsumura and Toshikatsu Hanada  
Medical Institute of Bioregulation, Kyushu University, Fukuoka/Japan
- 10:30 am      **Coffee Available**
- 11:00 am      **REGULATION OF CYTOKINE SIGNALING BY PIAS PROTEINS** , Paper 250  
Ke Shuai  
University of California, Los Angeles
- 12:30 - 2:00 pm      Lunch Break (cash lunch sales)      **San Geronimo Foyer**
- 12:30 - 1:30 pm      **BIOSOURCE LUNCHTIME SEMINAR**      **Flamingo A-D**  
(Lunch is included for all attendees)  
Chair: Kevin J. Reagan, Executive Vice President, Technical Operations BioSource International, Inc.
- 12:30 pm      **Introduction**  
Kevin Reagan, Chair
- 12:35 pm      **TUMOR CELL-PRODUCED CYTOKINES FOR EARLY DIAGNOSIS OF CANCER**  
Anna Lokshin  
Assistant Professor of Medicine Director, Luminex Core Facility University of Pittsburgh  
Cancer Center Hillman Cancer Pittsburgh, PA
- 1:00 pm      **DISTINCT IMMUNOPATHOLOGICAL CYTOKINE-BASED DISEASE PROFILES OF THE SPONDYLOARTHROPATHIES**  
Cherie M. Chappell  
Senior Vice President - Riley Genomics, Inc., OUHSC - Department of Pathology/Specialization in Neuroscience OMRF-Affiliate-Department of Arthritis & Immunology

**Sunday, October 24 Continued**

2:00 - 4:00 pm **CONCURRENT WORKSHOPS**

2:00 - 4:00 pm **WORKSHOP 9: Negative Regulation** **San Geronimo Ballroom**  
Papers 251-257  
Chairs: **Robyn Starr**, The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia and **Elena Toniato**, University of Chieti, Italy

2:00 pm **CONDITIONAL DELETION OF SUPPRESSOR OF CYTOKINE SIGNALLING-3 IN THE MAMMARY GLAND**, Paper 251  
Kate D Sutherland, Geoffrey J Lindeman, Ben A Croker, Warren S Alexander, and Jane E Visvader  
The Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia.

2:20 pm **COEXPRESSION OF TRIM8/GERP WITH SOCS-1 DECREASES SOCS-1 PROTEIN STABILITY**, Paper 252  
Vincenzo Flati<sup>1</sup>, Emanuele Laglia<sup>1</sup>, Alessandro Allegrini<sup>2</sup>, Francesco Cipollone<sup>2</sup>, Andrea Mezzetti<sup>2</sup>, Lucia Cilenti<sup>3</sup>, Raffaella Faricelli<sup>2</sup>, Chen XP<sup>4</sup>, Paul Rothman<sup>4</sup>, Stefano Martinotti<sup>2</sup>, Elena M. Toniato<sup>2</sup>  
<sup>1</sup>University of L'Aquila, L'Aquila, Italy; <sup>2</sup>Ce.S.I. (Centro Studi sull'Invecchiamento) University of Chieti, Chieti, Italy, <sup>3</sup>University of Central Florida, Orlando, FL and <sup>4</sup>Columbia University, New York, NY

2:35 pm **TYPE I INTERFERONS (IFNs) CONTRIBUTE TO SUPPRESSOR OF CYTOKINE SIGNALING (SOCS)1-MEDIATED PHYSIOLOGICAL AND PATHOLOGICAL EFFECTS**, Paper 253  
Jennifer E. Fenner<sup>1</sup>, Robyn Starr<sup>2</sup>, Ann Cornish<sup>2</sup>, Donald Metcalf<sup>2</sup>, Warren S. Alexander<sup>2</sup>, Douglas J. Hilton<sup>2</sup> and Paul J. Hertzog<sup>1</sup>  
<sup>1</sup>Monash Institute of Reproduction and Development, Monash University, Melbourne, Australia. <sup>2</sup>The Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

**ISICR YOUNG INVESTIGATOR AWARD: Chen Dong**

2:50 pm **REGULATION OF INNATE AND ADAPTIVE IMMUNE RESPONSES BY MAP KINASE PHOSPHATASE 5**, Paper 254  
Yongliang Zhang<sup>1</sup>, Joseph N. Blattman<sup>1</sup>, Norman J. Kennedy<sup>2</sup>, Julie Duong<sup>1</sup>, Thang Nguyen<sup>1</sup>, Ying Wang<sup>1</sup>, Roger J. Davis<sup>2</sup>, Philip D. Greenberg<sup>1</sup>, Richard A. Flavell<sup>3,4</sup> and Chen Dong<sup>1,4</sup>  
<sup>1</sup>University of Washington, Seattle, WA <sup>2</sup>Howard Hughes Medical Institute, University of Massachusetts, Worcester, MA <sup>3</sup>Howard Hughes Medical Institute, Yale University, New Haven, CT

**ICS POSTDOCTORAL INVESTIGATOR AWARD: Youcun Qian, 2<sup>nd</sup> Place**

3:05 pm **ACT1, A NEGATIVE REGULATOR IN CD40- AND BAFF-MEDIATED B CELL SURVIVAL**, Paper 255  
Youcun Qian and Xiaoxia Li  
Cleveland Clinic Foundation, Cleveland, OH

- 3:20 pm **UBP43 PHYSICALLY INTERACTS WITH STAT1 AND REMOVES ISG15 FROM ISG15-MODIFIED STAT1**, Paper 256  
Oxana A. Malakhova, Keun Il Kim and Dong-Er Zhang  
The Scripps Research Institute, La Jolla, CA
- 3:35 pm **NOVEL FUNCTION OF STAT1 AS A CYTOPLASMIC ATTENUATOR OF RUNX2 IN THE TRANSCRIPTIONAL PROGRAM OF OSTEOBLAST DIFFERENTIATION**  
Paper 257  
Sunhwa Kim<sup>1,2</sup>, Takako Koga<sup>1,3</sup>, Hiroshi Takayanagi<sup>1,3</sup>, and Tadatsugu Taniguchi<sup>1</sup>  
<sup>1</sup>Graduate School of Medicine and Faculty of Medicine, University of Tokyo, Tokyo, Japan, <sup>2</sup>The CBR Institute for Biomedical Research, Harvard Medical School, Boston, MA, <sup>3</sup>Tokyo Medical and Dental University, Tokyo, Japan
- 2:00 - 4:00 pm **WORKSHOP 10: Chemokines**, Papers 258 -262 **Flamingo A-D**  
Chair: **Amanda Proudfoot**, Serono, Geneva, Switzerland and  
**Richard Horuk**, Berlex Biosciences, Richmond, California
- 2:00 pm **CHEMOKINES NETWORK MODULATION IN DIFFERENTIAL MACROPHAGE POLARIZATION**, Paper 258  
F.O. Martinez<sup>1</sup>, C. Buracchi<sup>2</sup>, M. Sironi<sup>2</sup>, M. Locati<sup>1</sup>, D. D'Ambrosio<sup>3</sup>, F. Sinigaglia<sup>3</sup>,  
A. Vecchi<sup>2</sup>, A. Mantovani<sup>1,2</sup>  
<sup>1</sup>Institute of General Pathology, University of Milan, Milan, Italy; <sup>2</sup>Mario Negri Institute, Milan, Italy; <sup>3</sup>BioXcell, Milan, Italy.
- 2:20 pm **INDUCTION OF A CXCL8 CHEMOKINE BINDING SITE ON ENDOTHELIAL SYNDECAN-3 IN INFLAMMATION**, Paper 259  
Angela M Patterson<sup>1</sup>, Lucy Gardner<sup>1</sup>, Jennifer Shaw<sup>1</sup>, Guido David<sup>2</sup>, Emilie Loreau<sup>3</sup>, Luc Aguilar<sup>3</sup>, Brian A Ashton<sup>1,4</sup>, Jim Middleton<sup>1,4</sup>
- 2:35 pm **IMMUNOBIOLOGY OF CCR5: UNDERSTANDING THE CONTRIBUTION OF TYROSINE PHOSPHORYLATION**, Paper 260  
Thomas T. Murooka, Mark M. Wong and Eleanor N. Fish  
University of Toronto & Toronto General Research Institute, Toronto, Canada
- 2:50 pm **COSTIMULATORY FACTOR-DEPENDENT  $\beta$ -CHEMOKINE EXPRESSION IS DOWNREGULATED BY HIV-1 THROUGH A TGF- $\beta$ -DEPENDENT MECHANISM**  
Paper 261  
Paola DiMarzio<sup>1</sup>, Larisa Dubrovsky<sup>2</sup>, Shirin Rahman<sup>3</sup>, David Shepp<sup>3</sup>,  
Helena Schmidtmayerova<sup>1</sup>, Michael Bukrinsky<sup>2</sup> and Barbara Sherry<sup>1</sup>.  
<sup>1</sup>Center for Immunology and Inflammation, NS-LIJ Research Institute Manhasset, NY,  
<sup>2</sup>George Washington University, Washington DC, <sup>3</sup>Division of Infectious Disease, North Shore University Hospital, Manhasset, NY
- 3:05 pm **To be Announced**
- 3:20 pm **GLOBAL ANALYSIS OF GENES INDUCED BY A TYPE I AND TYPE II INTERFERON ALONE AND IN COMBINATION IN A549 CELLS**, Paper 262  
Corneliu Sanda, <sup>1</sup>Patrick Weizel, <sup>2</sup>Lawrence M. Blatt, <sup>3</sup>Howard J. Edenberg and  
<sup>1</sup>Milton W. Taylor.  
<sup>1</sup>Indiana University, Bloomington, IN. USA <sup>2</sup>Intermune Inc., Brisbane, CA and  
<sup>3</sup>Indiana University School of Medicine, Indianapolis, IN

**Sunday, October 24 Continued**

- 2:00 - 4:00 pm      **WORKSHOP 11: Noteworthy**, Papers 263-269      **Tropical A-C**  
Chairs: **Patricia Fitzgerald-Bocarsly**, UMDNJ-New Jersey Medical School, Newark, New Jersey and **Sidney Pestka**, University of Medicine and Dentistry of New Jersey, Piscataway, New Jersey
- 2:00 pm      **FUNCTIONAL GENOMICS AND THE MOLECULAR EVOLUTION OF VIRUS-HOST-INTERACTIONS AND THE CYTOKINE RESPONSE** , Paper 263  
Michael G. Katze  
University of Washington, Seattle, WA
- 2:20 pm      **EVOLUTION OF THE CLASS 2 CYTOKINE RECEPTORS AND THEIR LIGANDS FROM INTERFERON RECEPTORS AND INTERFERON: A GENOMIC AND PHYLOGENETIC ANALYSIS** , Paper 264  
Christopher D. Krause and Sidney Pestka  
Robert Wood Johnson Medical School - University of Medicine and Dentistry of New Jersey, Piscataway, NJ
- 2:35 pm      **TYROSINE 974 WITHIN THE LIF-R CHAIN OF THE GP130/LIF-R HETERODIMERIC RECEPTOR COMPLEX MEDIATES INHIBITION OF LIF-TYPE CYTOKINES**  
Paper 265  
Ute Lehmann, Thomas Clahsen, Radoslaw M. Sobota, Peter C. Heinrich and Fred Schaper  
RWTH Aachen, Germany
- 2:50 pm      **TYROSINE 441 OF IFNGR1 IS REQUIRED FOR SOCS-1-MEDIATED ATTENUATION OF STAT1 ACTIVATION IN RESPONSE TO INTERFERON-  $\gamma$**  , Paper 266  
Yulan Qing<sup>1</sup>, Ana Costa-Pereira<sup>2</sup>, Diane Watling<sup>2</sup>, and George R. Stark<sup>1</sup>  
<sup>1</sup>Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH  
and <sup>2</sup>Cancer Research UK London Research Institute, Lincoln's Inn Laboratories, London, UK
- 3:05 pm      **DIFFERENTIAL ACTIVITY OF ALPHA AND BETA INTERFERON IN THE REGULATION OF OSTEOCLASTOGENESIS** , Paper 267  
Luiz F. Coelho<sup>1</sup>, Franck Mennechet<sup>1</sup>, Anne Blangy<sup>2</sup> and Gilles Uzé<sup>1</sup>.  
<sup>1</sup>CNRS UMR 5124, Montpellier, France. <sup>2</sup>CNRS FRE 2593. Montpellier, France
- 3:20 pm      **HUMAN PLASMACYTOID DENDRITIC CELLS: UNIQUE SENTINELS OF THE INNATE IMMUNE RESPONSE** , Paper 268  
Patricia Fitzgerald-Bocarsly, Sheela Amrute, Stacey Olshalsky, Jihong Dai and Gunjan Gupta  
UMDNJ-New Jersey Medical School and Graduate School of Biomedical Sciences, Newark, NJ
- 3:35 pm      **DIFFERENCES IN SIGNALING PATHWAYS BY INTERLEUKIN -1 $\beta$  AND INTERLEUKIN -18**, Paper 269  
Jae-Kwon Lee, Soo-Hyun Kim, Eli C. Lewis, Tania Azam, Leonid L. Reznikov and Charles A. Dinarello, University of Colorado Health Sciences Center, Denver, CO



- 2:00 - 4:00 pm      **WORKSHOP 12: Cancer Biology**, Papers 270-276      **Las Olas**  
Chairs: **Paula Pitha-Rowe**, Johns Hopkins University School of Medicine,  
Baltimore, Maryland and **Ernest Borden**, Cleveland Clinic Foundation, Cleveland, Ohio
- 2:00pm      **INTERFERON ANTIVIRAL AND ANTITUMOR RESPONSES MEDIATED BY THE  
2-5A/RNase L PATHWAY**, Paper 270  
Robert H. Silverman  
The Cleveland Clinic Foundation, Cleveland, Ohio
- 2:20 pm      **THE GRIMS: A NEW INTERFACE BETWEEN CELL DEATH REGULATION AND  
INTERFERON/RETINOID INDUCED GROWTH INHIBITION**, Paper 271  
Dhan V. Kalvakolanu, Jiadi Hu, Sanjit K. Roy and Abhijit Raha  
University of Maryland School of Medicine, Baltimore, MD
- 2:35 pm      **EFFECTS OF HOST AND TUMOR CELL-DERIVED IL-1  $\alpha$  AND IL-1 $\beta$  ON TUMOR  
INVASIVENESS**, Paper 272  
R.N. Apte<sup>1</sup>, Y.Krelin<sup>1</sup>, S. Dotan<sup>1</sup>, E. Reich<sup>1</sup>, M. Elkabets<sup>1</sup>, R.M. White<sup>1</sup>,  
C.A. Dinarello<sup>2</sup>, and E. Voronov<sup>1</sup>.  
<sup>1</sup>Ben-Gurion University of the Negev, Beer-Sheva, Israel and <sup>2</sup>University of Colorado,  
Health Sciences Center, Denver, CO
- 2:50 pm      **IL-12 INHIBITS AKT ACTIVITY AND INDUCES BID TRANSLOCATION IN  
CONJUNCTION WITH COMPLETE REGRESSION OF ORTHOTOPIC MURINE  
NEUROBLASTOMA TUMORS**, Page 273  
Tahira Khan<sup>1</sup>, Julie A. Hixon<sup>1</sup>, Jimmy K. Stauffer<sup>1</sup>, Erin Lincoln<sup>2</sup>, Timothy Back<sup>2</sup>, and  
Jon M. Wigginton<sup>1</sup>  
<sup>1</sup>Pediatric Oncology Branch, NCI-CCR, and <sup>2</sup>IRSP, SAIC-Frederick, Frederick, MD
- 3:05 pm      **SPECIFIC INHIBITION OF SOLUBLE IL-6 RECEPTOR RESPONSES BY AN  
SOLUBLE GP130-FC FUSION PROTEIN: A THERAPEUTIC STRATEGY FOR  
CHRONIC INFLAMMATION AND CANCER**, Page 274  
Stefan Rose-John, Nicholas Topley, Simon Jones, Marcus Neurath  
Christian-Albrechts-Universität, Kiel, Germany, University of Mainz, Germany,  
and University of Wales College of Medicine, Cardiff University, Cardiff,  
United Kingdom
- ISICR YOUNG INVESTIGATOR AWARD: Albert S. Mellick**
- 3:20 pm      **MOLECULAR PROFILING OF JAK/STAT SIGNALLING IN COLON CANCER  
BIOPSIES AND CELL LINES SUGGESTS DISTINCT MECHANISMS FOR GENE  
ACTIVATION**, Paper 275  
Albert S. Mellick<sup>1</sup>, Karin Franzén<sup>2</sup>, Samuel J. Cutler<sup>1</sup>, Pauline Low<sup>1</sup>,  
Christopher J. Day<sup>1</sup>, James D. Doecke<sup>1</sup>, Lyn R. Griffiths<sup>1</sup>, Peter Söderkvist<sup>2</sup>, and  
Stephen J. Ralph<sup>1</sup>  
<sup>1</sup>Griffith University, Gold Coast Campus, Australia and <sup>2</sup>Linköping University,  
Linköping, Sweden
- 3:35 pm      **IL-12 EXPRESSED FROM DNA OR IN GENE-MODIFIED STEM CELLS AS ANTI-  
CANCER THERAPEUTIC IN ANIMALS AND HUMANS**, Paper 276  
Karin Moelling, Lina Elzaouk, and Jovan Pavlovic  
Institute of Medical Virology, University of Zurich, Switzerland

**Sunday, October 24 Continued**

4:00 - 6:00 pm      **POSTER SESSION 3, Papers 277- 358**  
**with wine and cheese**

**San Cristobal Ballroom**

**RECEPTOR MECHANISMS , Papers 277-283**

**IDENTIFICATION OF THREE BINDING SITES IN LEPTIN, AND DESIGN OF A LEPTIN ANTAGONIST**, Paper 277

Frank Peelman<sup>1</sup>, Lennart Zabeau<sup>1</sup>, Hannes Iserentant<sup>1</sup>, .Katrien Van Beneden<sup>2</sup>, Dirk Elewaut<sup>2</sup> and Jan Tavernier<sup>1</sup>

<sup>1</sup>Flanders Interuniversity Institute for Biotechnology University, Ghent, Belgium,

<sup>2</sup>Faculty of Medicine and Health Sciences, Ghent University, Ghent, Belgium

**TRANSIENT AND KINETICALLY CONTROLLED TYPE I INTERFERON RECEPTOR ASSEMBLING**, Paper 278

Martynas Gavutis, Suman Lata, Peter Lamken and Jacob Piehler

Institute of Biochemistry, Goethe-University, Frankfurt/Main, Germany

**ENHANCEMENT OF HAEMATOPOIETIC CELL FUNCTION BY MUTATION OF TYROSINE 577 IN THE COMMON BETA CHAIN OF THE GM-CSF/IL-3/IL-5 RECEPTORS**, Paper 279

Hayley S.Ramshaw<sup>1</sup>, Frank Stomski<sup>1</sup>, Mark Guthridge<sup>1</sup>, Lisa Ooms<sup>2</sup>, Christina Mitchell<sup>2</sup>, and Angel F. Lopez<sup>1</sup>.

<sup>1</sup>Hanson Institute, I.M.V.S., Adelaide, S.A. Australia <sup>2</sup>Monash University, Victoria, Australia

**ROLE OF THE SOLUBLE INTERFERON RECEPTOR sIFNAR2 IN MODIFYING INTERFERON RESPONSES *IN VIVO***, Paper 280

Shamith A.Samarajiwa, Matthew P. Hardy, Catherine M. Owczarek and Paul J. Hertzog  
Monash Institute of Reproduction and Development, Monash University, Clayton, Victoria, Australia

**POTENTIAL ROLE OF MEMBRANE-ASSOCIATED IL-15 AS A CO-STIMULATORY MOLECULE FOR CD8 T CELLS**, Paper 281

Noriko Sato, Sigrid Dubois, Hisataka Kobayashi, Thomas A. Waldmann and Yutaka Tagaya

Metabolism Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD

**BIPHASIC KINETICS OF CONFORMATINAL CHANGES OF IFN-  $\gamma$  RECEPTOR COMPLEX IN RESPONSE TO IFN-  $\gamma$  BINDING**, Paper 282

Junxia Xie<sup>1</sup>, Christopher D. Krause<sup>1</sup>, Barbara Schwartz<sup>1</sup>, Olga Mirochnitchenko<sup>1</sup>, Yiwei Jia<sup>2</sup> and Sidney Pestka<sup>1</sup>

<sup>1</sup>Robert Wood Johnson Medical School/UMDNJ, Piscataway, NJ and

<sup>2</sup> Olympus America Inc, Melville, NY

**INTERACTION DIFFERENCES BETWEEN INTERFERON-  $\alpha$  a,b,c SUBVARIANTA AND RECEPTOR SUBUNIT IFNAR2-EC**, Paper 283

Hana Schmeisser<sup>1</sup>, Peter Kontsek<sup>2</sup>, Gideon Schreiber<sup>3</sup>, Dominic Esposito<sup>4</sup>, William Gillette<sup>4</sup> and Kathryn C. Zoon<sup>1</sup>

<sup>1</sup>NIH, NCI, CCR, Bethesda, MD, <sup>2</sup> Institute of Neuroimmunology, SAS, Bratislava, Slovak Republic, <sup>3</sup> The Weizmann Institute of Science, Rehovot, Israel and

<sup>4</sup>NCI/SAIC, Frederick, MD

**NEGATIVE REGULATION**, Papers 284-285

**CLONING AND FUNCTIONAL CHARACTERIZATION OF AN ALTERNATIVE SPLICE ISOFORM OF INTERFERON REGULATORY FACTOR 3 (IRF-3B)**, Paper 284

Luis Martínez-Sobrido, Washington Cardenas, Juan Carlos García, Jerome Cros, Christopher F. Basler and Adolfo García-Sastre  
Mount Sinai School of Medicine. New York, NY

**A NATURAL, SOLUBLE HUMAN INTERLEUKIN-15 ALPHA CHAIN RECEPTOR: A HIGH AFFINITY INTERLEUKIN-15 ANTAGONIST THAT IS UP-REGULATED IN VARIOUS DISEASES**, Paper 285

Erwan Mortier, Jérôme Bernard, Ariane Plet and Yannick Jacques  
Groupe de Recherches Cytokines et Récepteurs, Département de Cancérologie, Unité INSERM 601, Nantes, France

**CHEMOKINES**, Papers 286-290

**CHEMOKINE RECEPTORS CXCR3, CCR7, CCR8 AND CX3CR1 IN CHRONIC RELAPSING EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS**, Paper 286

Bartosz Bielecki<sup>1</sup> and Andrzej Glabinski<sup>1</sup>  
<sup>1</sup>Medical University, Lodz, Poland

**CHEMOKINES AND THEIR RECEPTORS IN EXPERIMENTAL IMMUNE-MEDIATED INFLAMMATION IN THE BRAIN**, Paper 287

Andrzej Glabinski<sup>1</sup>, Bartosz Bielecki<sup>1</sup>, Tracey Newman<sup>2</sup>, Richard M. Ransohoff<sup>3</sup> and V. Hugh Perry<sup>2</sup>  
<sup>1</sup>Medical University, Lodz, Poland, <sup>2</sup>University of Southampton, Southampton, UK, <sup>3</sup>Cleveland Clinic Foundation, Cleveland, OH

**CCL18 IS SELECTIVELY EXPRESSED IN ATOPIC DERMATITIS AND MEDIATES SKIN HOMING OF HUMAN MEMORY T CELLS**, Paper 288

Claudia Günther<sup>1</sup>, Concha Bello-Fernandez<sup>2</sup>, Tamara Kopp<sup>3</sup>, Julia Kund<sup>1</sup>, Nicole Carballido-Perrig<sup>1</sup>, Sonja Hinteregger<sup>1</sup>, Antal Rot<sup>1</sup>, Christoph Schwäärzler<sup>1</sup>, Günther Lametschwandtner<sup>1</sup>, Georg Stingl<sup>3</sup>, Tilo Biedermann<sup>1</sup> and Joséé M. Carballido,  
<sup>1</sup>Novartis Institutes for Biomedical Research, Vienna, Austria  
<sup>2</sup>Dept. of Immunology, Vienna International Research Cooperation Center, Vienna, Austria  
<sup>3</sup>Dept. of Dermatology, Vienna Medical University, Vienna, Austria

**SERUM CCL2, CCL11, AND EGF AS DIAGNOSTIC AND PROGNOSTIC BIOMARKERS IN THE SPONDYLOARTHROPATHIES**, Paper 289

Cherie M Chappell<sup>1,2</sup>, Gemma Wallis<sup>1</sup>, Jeanie Osban<sup>1</sup>, Philip Alex<sup>1,2</sup>, Hal Scofield<sup>1</sup>, Robert Morris<sup>3</sup>, Allen Metzger<sup>3</sup>, Tor Magne Madland<sup>4</sup>, Johan Gorgas Brun<sup>4</sup>, Igor Dozmorov<sup>1</sup>, Michael Centola<sup>1</sup>  
<sup>1</sup>Oklahoma Medical Research Foundation, Oklahoma City, OK, <sup>2</sup>University of Oklahoma Health Sciences Center, Oklahoma City, OK; <sup>3</sup>Rheumatology Diagnostics Laboratory, Inc., Los Angeles, CA, <sup>4</sup>University of Bergen, Norway.

**UP-REGULATION OF CHEMOKINE RECEPTOR CXCR5 IN INFLAMMATION**  
Paper 290

Caroline Schmutz<sup>1</sup>, Alison Hulme<sup>1</sup>, Angela Burman<sup>2</sup>, Mike Salmon<sup>2</sup>, Brian Ashton<sup>1,3</sup>, Christopher Buckley<sup>2</sup>, Jim Middleton<sup>1,3</sup>  
<sup>1</sup>Leopold Muller Arthritis Research Centre, Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, Shropshire, UK. <sup>2</sup>Medical Research Council Centre for Immune Regulation, University of Birmingham, Edgbaston, Birmingham, UK <sup>3</sup>Centre for Science and Technology in Medicine, Medical School, Keele University, Stoke-on-Trent, UK

**CANCER BIOLOGY AND CELL PROLIFERATION** , Papers 291-328

**OVEREXPRESSION OF THE UBIQUITIN-LIKE PROTEIN, ISG15, IN BLADDER CANCER PROGRESSION** , Paper 291

Jesper B. Andersen<sup>1</sup>, Mads Aaboe<sup>2</sup>, Marianne Hokland<sup>3</sup>, Ernest C. Borden<sup>4</sup>, Bret A. Hassel<sup>1</sup>, Torben F. Ørntoft<sup>2</sup>

<sup>1</sup>University of Maryland at Baltimore, Greenebaum Cancer Center, Baltimore, MD, <sup>2</sup>Aarhus University Hospital, Aarhus, Denmark, <sup>3</sup>University of Aarhus, Institute of Medical Microbiology & Immunology, Aarhus, Denmark <sup>4</sup>The Cleveland Clinic Foundation, Cleveland, OH

**INTERFERONS ACTIVATE MONOCYTES TO MARKEDLY INHIBIT HUMAN TUMOR CELL GROWTH** , Paper 292

S. Baron<sup>1</sup>, J. Hernandez<sup>2</sup>, J. Bekisz<sup>2</sup>, J. Poast<sup>1</sup>, N. Goldman<sup>2</sup>, K. Clouse<sup>3</sup>, K. Fields<sup>3</sup>, S. Bacot<sup>3</sup>, G. Feldman<sup>3</sup>, J. Wang<sup>3</sup>, and K. Zoon<sup>2</sup>.

<sup>1</sup>University of Texas Med. Branch, Galveston, TX, <sup>2</sup>NIH, NCI, Bethesda, MD; <sup>3</sup>FDA, Bethesda, MD

**THE ROLE OF REGULATORY T CELLS IN THE DEVELOPMENT OF MURINE MESOTHELIOMA** , Paper 293

Manfred W. Beilharz<sup>1</sup> and Demelza J. Needham<sup>1</sup>

<sup>1</sup>Discipline of Microbiology, The University of Western Australia, Perth, WA, Australia

**DUFFY ANTIGEN RECEPTOR FOR CHEMOKINE PLAYS A ROLE IN ANGIOGENESIS DURING TUMOR GROWTH** , Paper 294

Asok Chaudhuri, Lili Xu and Annette Ashkenazi

Laboratory of Cell Biology, New York Blood Center, New York, NY

**VDUP1 UP-REGULATED BY TGF- $\beta$ 1 INHIBITS TUMOR CELL GROWTH BY BLOCKING CELL CYCLE PROGRESSION** , Paper 295

Inpyo Choi<sup>1</sup>, Seung Hyun Han<sup>1</sup>, Jun Ho Jeon<sup>1</sup>, Hyang Ran Ju<sup>1</sup>, Uhee Jung<sup>1</sup>, Kun Young Kim<sup>1</sup>, Hyang Sook Yoo<sup>2</sup>, Young Ho Lee<sup>3</sup>, Kyu Sang Song<sup>3</sup>, Ho Myeung Hwang<sup>3</sup>, Yoon Sook Na<sup>3</sup>, Young Yang<sup>1</sup>, Kee Nyung Lee<sup>1</sup>

<sup>1</sup>Laboratory of Immunology, <sup>2</sup>Genome Research Center, Korea Research Institute of Bioscience and Biotechnology, Yusong, Taejeon, <sup>3</sup>College of Medicine, Chungnam National University, Taejeon, Republic of Korea

**ROLE OF INTERLEUKIN-11, INTERLEUKIN-8 AND BONE MARROW STROMAL CELLS IN POLYCYTHEMIA VERA** , Paper 296

Isabelle Corre-Buscaïl<sup>1</sup>, Danielle Pineau<sup>2</sup>, Yannick Jacques<sup>1</sup>, Sylvie Hermouet<sup>1,2</sup>  
Groupe "Cytokines, Récepteurs en Immunocancérologie", INSERM U601<sup>1</sup> and  
Laboratoire d'Hématologie<sup>2</sup>, Institut de Biologie des Hôpitaux de Nantes, Nantes, France

**INTERLEUKIN 6 (IL-6) REGULATES AND MAINTAINS EPIGENETIC SILENCING OF TUMOR SUPPRESSOR AND DNA REPAIR GENES IN HUMAN MULTIPLE MYELOMA CELLS** , Paper 297

William L. Farrar, Benjamin Peng and David Hodge. Laboratory of Molecular Immunoregulation, Center for Cancer Research, National Cancer Institute-Frederick, Frederick, MD

**CANCER BIOLOGY AND CELL PROLIFERATION**

**ANGIOGENESIS SUPPRESSES ICAM-1 EXPRESSION BY INHIBITING NF- $\kappa$  THROUGH ACTIVATION OF P38- MAPK**, Paper 298

Vincenzo Flati<sup>1</sup>, Laura I. Pastore<sup>1</sup>, Arjan W. Griffioen<sup>2</sup>, Sietske Satijn<sup>2</sup>, Elena Toniato<sup>3,5</sup>, Francesco Cipollone<sup>5</sup>, Andrea Mezzetti<sup>5</sup>, Paolo Marchetti<sup>1</sup>, Alberto Gulino<sup>3</sup>, Luigi Frati<sup>3,4</sup> and Stefano Martinotti<sup>5,5</sup>.

<sup>1</sup>University of L'Aquila, L'Aquila, Italy; <sup>2</sup>Maastricht University and University Hospital, Maastricht, The Netherlands, <sup>3</sup>University of Rome "La Sapienza" Rome, Italy; <sup>4</sup>Mediterranean Institute of Neurosciences, Pozzilli, Isernia, Italy <sup>5</sup>University of Chieti, Chieti, Italy, <sup>5</sup>Clinical Research Center - CeSI, Chieti Scalo (Italy)

**COLON CARCINOMA CELLS RESISTANT TO CHEMOTHERAPY OVEREXPRESS INTERFERON STIMULATED GENES: ROLE OF P38 SIGNALING PATHWAY**

Paper 299

C. Gongora, E. Hatchi, N. Vie, V. Copois, L. Candeil, P. Martineau and Del Rio M UMR5160-CRLC. Montpellier. France.

**LEUKOCYTES IN THE SR/CR MICE AS THE SOLE, TRANSFERABLE EFFECTORS FOR RESISTANCE TO CANCER CELLS**, Paper 300

Amy M. Hicks, Mark C. Willingham, Martha A. Alexander-Miller, Zheng Cui  
Wake Forest University School of Medicine, Winston-Salem, NC

**INTERFERON GAMMA-INDUCED S-PHASE GROWTH ARREST OF ORAL CARCINOMA CELLS IS MEDIATED BY DOWNREGULATION OF CYCLIN A AND CDK2 EXPRESSIONS**, Paper 301

Miki Hiroj and Yoshihiro Ohmori

Meikai University School of Dentistry, Sakado, Saitama, Japan

**REGULATION OF THE INTERFERON RESPONSE BY PROMYELOCYTIC LEUKEMIA ZINC FINGER PROTEIN**, Paper 302

Michelle Holko<sup>1,2</sup>, Melanie J. McConnell<sup>3</sup>, Jonathan D. Licht<sup>3</sup>, and Bryan RG Williams<sup>1,2</sup>

<sup>1</sup>Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH

<sup>2</sup>Case Western Reserve University, Cleveland, OH and <sup>3</sup> Mount Sinai School of Medicine, New York, NY

**DEREGULATION OF NOTCH2 SIGNALING IN B- CLL**, Paper 303

Rainer Hubmann<sup>1</sup>, Markus Duechler<sup>1</sup>, Medhat Shehata<sup>1,2</sup>, Martin Hilgarth<sup>1,2</sup>, Dieter Mitteregger<sup>1</sup>, and Josef D. Schwarzmeier<sup>1,2</sup>

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**EXPRESSION OF THE INTERLEUKIN-3 RECEPTOR IN BREAST AND PROSTATE CARCINOMA CELLS**, Paper 304

Edna M. Mora and Daricel Torres

University of Puerto Rico, San Juan, Puerto Rico

**ESSENTIAL INVOLVEMENT OF A CHEMOKINE RECEPTOR, CCR1 AND ITS LIGAND, CCL3 IN HEPATOCELLULAR CARCINOMA PROGRESSION**, Paper 305

Peirong Lu<sup>1</sup>, Chifumi Fujii<sup>1</sup>, Xiaoqin Yang<sup>1</sup>, Yasunari Nakamoto<sup>1</sup>, Ji-Liang Gao<sup>2</sup>, Philip M. Murphy<sup>2</sup>, and Naofumi Mukaida<sup>1</sup>

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<sup>2</sup>Laboratory of Host Defenses, NIAID, NIH, Bethesda, MD

**CANCER BIOLOGY AND CELL PROLIFERATION, continued**

**EXPRESSION AND FUNCTION OF MACROPHAGE MIGRATION INHIBITORY FACTOR IN HUMAN NEUROBLASTOMA**, Paper 306

Yi Ren, Yongxong Chen, Wen Li, Guoping Jiang, Qian Liu, Hiu Man Chan and Paul Kwong Hang Tam  
The University of Hong Kong, Hong Kong SAR, China

**IFN- $\beta$  AFFECTS CELL CYCLE PROGRESSION AND INDUCES APOPTOSIS IN HPV-POSITIVE HUMAN CERVICAL CARCINOMA CELLS. STUDIES ON E6 GENE SILENCED CELLS BY EXPRESSION OF HPV16-E6 SPECIFIC SIRNA**, Paper 307

Maria V. Chiantore<sup>1</sup>, Serena Vannucchi<sup>2</sup>, Zulema A. Percario<sup>2</sup>, Elisabetta Affabris<sup>2</sup>, Gianna Fiorucci<sup>1,3</sup> and Giovanna Romeo<sup>1,3</sup>  
<sup>1</sup>Istituto Superiore di Sanità, <sup>2</sup>University of Rome 3, <sup>3</sup>Institute of Molecular Biology and Pathology, CNR, Rome, Italy

**EFFECT OF TNF- $\alpha$  ON THE CYTOTOXICITY AND APOPTOSIS INDUCING ACTIVITY OF DOXORUBICIN IN TUMOR CELLS: THE DEPENDENCE OF BCL-2 ONCOGENE EXPRESSION**, Paper 308

Elena G. Slavina, Antonina I. Chertkova, Olga V. Korotkova, Anna A. Burkova, Zaira G. Kadagidze  
Russian Cancer Research Center RAMS, Moscow, Russia

**IN VITRO AND IN VIVO INTERFERON-INDUCED INHIBITION OF ANGIOGENESIS**  
Paper 309

Kevin L. Taylor, Rhonda K. Oates, Ron Grane, Daniel J. Lindner, Ernest C. Borden  
Center for Drug Development & Discovery, Taussig Cancer Center, Cleveland Clinic Foundation, Cleveland, OH

**EXPRESSION LEVELS OF INTERLEUKIN-10 RECEPTOR ALPHA ARE RATE-LIMITING FOR IN VIVO GROWTH OF MURINE B-CELL LYMPHOMA: IMPLICATIONS FOR THERAPY**, Paper 310

Duonan Yu, Andrea Park, and Andrei Thomas-Tikhonenko  
University of Pennsylvania, Philadelphia, PA

**INHIBITION OF AURORA-B FUNCTION IS THE CRUCIAL FACTOR OF ANTI-TUMOR EFFECT OBSERVED IN HUMAN INTERFERON- $\beta$  GENE THERAPY**, Paper 311

Takaya Tsuno<sup>1</sup>, Masaaki Mizuno<sup>1</sup>, Mitsugu Fujita<sup>1</sup>, Atsushi Natsume<sup>2</sup>, Norimoto Nakahara<sup>2</sup>, Toshihiko Wakabayashi<sup>2</sup>, Yuichiro Satoh<sup>2</sup>, and Jun Yoshida<sup>1</sup>  
<sup>1</sup>Nagoya University Graduate School of Medicine, and <sup>2</sup>Nagoya University School of Medicine, Aichi, Japan

**B CELL LYMPHOMA-INDUCED INFECTIOUS TOLERANCE: A NOVEL SUBSET OF TUMOR-INDUCED T CELLS CONVEYS SUPPRESSOR ACTIVITY TO CONVENTIONAL CD4<sup>+</sup> T CELLS**, Paper 312

Anne-Renée van der Vuurst de Vries and Hilary J. McKenna  
Amgen Inc., Seattle, WA

**CARBON MONOXIDE PRODUCED BY HEME OXYGENASE-1 SUPPRESSES T CELL PROLIFERATION VIA INHIBITION OF IL-2 PRODUCTION**, Paper 313

Hun-Taeg Chung, Hyun-Ock Pae, and Gi-Su Oh  
<sup>1</sup>School of Medicine, Wonkwang University, Iksan, Chonbuk, Republic of Korea

**CANCER BIOLOGY AND CELL PROLIFERATION, continued**

**WITHDRAWAL OF IL-7 PREVENTS CELL CYCLE PROGRESSION OF T CELLS BY UP-REGULATING CDK INHIBITOR p27<sup>Kip1</sup> via PKC $\theta$  PATHWAY**, Paper 314

Wenging Li, Qiong Jiang and Scott K. Durum. Laboratory of Molecular Immunoregulation, Center for Cancer Research, National Cancer Institute, Frederick, Maryland

**TELOMERASE ANTISENSE EFFECT FOR THE DIFFERENTIATION OF HEMOPOIETIC STEM CELLS**, Paper 315

Byung Soo Kim, Seok Jin Kim, Kyong Hwa Park, Sang Cheul Oh, Jae Hong Seo, Chul Won Choi, Sang Won Shin, Yeul Hong Kim, and Jun Suk Kim  
College of Medicine, Korea University, Seoul, Korea

**INVESTIGATING THE ROLE OF AN INTERFERON-INDUCIBLE TRANSCRIPTIONAL REGULATOR IN THE HAEMOPOIETIC COMPARTMENT**

Paper 316

Louise E. A. Ludlow<sup>1</sup>, Louise Purton<sup>2</sup>, Stewart Fabb<sup>1</sup>, Carl Walkley<sup>3</sup>, Daniel Gough<sup>1</sup>, Joseph Trapani<sup>1</sup>, Christopher Clarke<sup>1</sup> and Ricky Johnstone<sup>1</sup>

<sup>1</sup>Sir Donald and Lady Trescowthick Research Laboratories, Peter MacCallum Cancer Centre, East Melbourne, Victoria, Australia, <sup>2</sup>Massachusetts General Hospital, Harvard Medical School, Boston, MA, <sup>3</sup>Dana-Faber Cancer Institute and Children's Hospital, Harvard Medical School, Boston, MA

**IRF-1 AND IRF-2 DRIVES SPECIFIC LINEAGE DEVELOPMENT DURING MYELOID DIFFERENTIATION**, Paper 317

Emilia Stellacci, Ugo Testa, and Angela Battistini  
Istituto Superiore di Sanità, Rome, Italy

**LIMITIN, A TYPE-I INTERFERON-LIKE CYTOKINE, INHIBITS OSTEOCLASTOGENESIS WITHOUT AFFECTING MACROPHAGE AND T CELL PROLIFERATIONS AND FUNCTIONS**, Paper 318

Takuya Sato, Masaaki-Masuhara, and Yoshiyuki Hakeda  
Meikai University School of Dentistry, Sakado, Saitama, Japan

**INDUCTION OF NOVEL IRF-8 TARGET GENES THROUGH A UNIQUE CIS-ELEMENT DURING MACROPHAGE DIFFERENTIATION**, Paper 319

Tomohiko Tamura<sup>1</sup>, Pratima Thotakura<sup>1</sup>, Tetsuya S. Tanaka<sup>2</sup>, Minoru S.H. Ko<sup>2</sup>, and Keiko Ozato<sup>1</sup>

<sup>1</sup>Lab. of Molecular Growth Regulation, NICHD, NIH, Bethesda, MD, USA; <sup>2</sup>Lab. of Genetics, NIA, NIH, Baltimore, MD

**CYTOKINE SECRETION, A COMMON CAUSE OF CONSTITUTIVE Nf $\kappa$ B ACTIVATION IN CANCER: TRANSFORMING GROWTH FACTOR  $\beta$ 2 AS AN EXAMPLE**, Paper 320

Tao Lu, Lyudmila G. Burdelya, Swati S. Sathe, Shannon M. Swiatkowski, Alexander D. Boiko, Philip H. Howe, Andrei V. Gudkov, and George R. Stark, Lerner Research Institute, The Cleveland Clinic Foundation, Cleveland, OH

**MECHANISM OF IL-4-MEDIATED PROTECTION OF CH31 B-LYMPHOMAS FROM ANTI-IgM-INDUCED GROWTH ARREST AND APOPTOSIS**, Paper 321

Gregory B. Carey<sup>2</sup>, Elena Semenova<sup>1</sup>, Xiulan Qi<sup>1</sup>, and Achsah D. Keegan<sup>1,2</sup>

<sup>1</sup>Greenebaum Cancer Center, and <sup>2</sup>University of Maryland School of Medicine Baltimore, MD

**CANCER BIOLOGY AND CELL PROLIFERATION continued**

**CYTOKIN`S LEVEL IL-1 $\beta$ , IL-6, IL-10 and TNF- $\alpha$  FROM PATIENTS WITH AUTOIMMUNE AND ONCOLOGY THYROID DISEASES** , Paper 322

Sergey P. Kazakov<sup>1</sup> and Nikolay Ye. Kushlinsky<sup>2</sup>

<sup>1</sup>N.N.Burdenko Main Military Clinical Hospital, Moscow, Russia and <sup>2</sup>N.N. Blokhin Center for Oncology Research, Russian Academy of Medical Sciences, Moscow, Russia

**TWEAK INDUCES LIVER PROGENITOR CELL PROLIFERATION** , Paper 323

Aniela Jakubowski<sup>1</sup>, Christine Ambrose<sup>1</sup>, Michael Parr<sup>1</sup>, John Lincecum<sup>1</sup>, Monica Wang<sup>1</sup>, Timothy Zheng<sup>1</sup>, Beth Browning<sup>1</sup>, Manfred Baestcher<sup>2</sup>, Bruce Wang<sup>3</sup>, Montgomery Bissell<sup>3</sup>, and Linda C Burkly<sup>1</sup>

<sup>1</sup>Biogen Idec Inc., Depts of Exploratory Science, Discovery Biology and Validation Biology, Cambridge , MA , <sup>2</sup>Department of Molecular and Medical Genetics, Oregon Health Sciences University, Portland, OR, <sup>3</sup>Division of Gastroenterology and Liver Center, UCSF, San Francisco, CA

**ENHANCEMENT OF INTERLEUKIN-12 GENE-BASED TUMOR IMMUNOTHERAPY BY THE REDUCED SECRETION OF p40 SUBUNIT AND THE COMBINATION WITH FARNESYLTRANSFERASE INHIBITOR** , Paper 324

Hyun-Tak Jin, Je-In Youn, Jee-Bung Lee, Hye-Ju Kim, and Young -Chul Sung  
Pohang University of Science & Technology, Pohang, Kyungbuk, Korea

**ALTERED RESPONSIVENESS OF EPITHELIAL TUMOR CELLS TO INFLAMMATORY MEDIATORS** , Paper 325

Erin Tracy, Kristin Huntoon, Heinz Baumann  
Roswell Park Cancer Institute, Buffalo, NY

**DISTURBED IMMUNE AND INTERFERON STATUS IN PATIENTS WITH IDIOPATHIC CAPOSI'S SARCOMA AND ITS CORRECTION** , Paper 326

<sup>1,3</sup>V. Malinovskaya, <sup>2</sup>V. Molochkov, <sup>2</sup>M. Kartashova, <sup>1,3</sup>N. Delenyan, <sup>3</sup>T. Tareeva

<sup>1</sup>Gamaleya Institute for Epidemiology and Microbiology RAMS, <sup>2</sup>Moscow Regional Clinical Research Institute, <sup>3</sup>Feron Company, Moscow, Russia

**PROSTATE SPECIFIC ANTIGEN (PSA) MODULATES THE EXPRESSION OF GENES INVOLVED IN PROSTATE TUMOR GROWTH** , Paper 327

Bindu Kumar<sup>1,2</sup> Stanley A. Schwartz<sup>2</sup>, Madhavan P.N. Nair<sup>2</sup>, Ravikumar Aalinkeel<sup>2</sup> and Kailash C. Chadha<sup>1</sup>

<sup>1</sup>Roswell Park Cancer Institute, Buffalo, NY and <sup>2</sup>University of New York at Buffalo, Buffalo General Hospital, Buffalo, NY

**INVESTIGATING THE ROLE OF TYPE I INTERFERONS IN TUMOR IMMUNITY USING IFNAR1 AND IFNAR2 KNOCKOUT MICE** , Paper 328

Bernadette Scott, Ellie Thompson, Xiang Liu, Annett Grimm and Paul J Hertzog  
Monash Institute of Reproduction and Development, Monash University, Clayton, Victoria, Australia



**NEW TECHNOLOGIES**, Papers 329-349

**PROTEOMIC ANALYSIS OF INTERFERON-TREATED DAUDI CELLS USING ISOTOPE-CODED AFFINITY TAGS (ICAT) METHODOLOGY**, Paper 329  
Joseph B. Bekisz<sup>1</sup>, Jessica Hernandez<sup>1</sup>, Brian Hood<sup>2</sup>, D. Aaron Lucas<sup>2</sup>, Thomas P. Conrads<sup>2</sup>, Timothy D. Veenstra<sup>2</sup> and Kathryn C. Zoon<sup>1</sup>  
<sup>1</sup>National Cancer Institute, National Institutes of Health, Bethesda, MD and  
<sup>2</sup>SAIC-Frederick, National Cancer Institute at Frederick, Frederick, MD

**HISPIG: A PROGRAM FOR THE IDENTIFICATION OF ISRE AND GAS SEQUENCES IN DNA**, Paper 330  
Takuma Tsukahara<sup>1</sup>, Sun Kim<sup>1</sup> and Milton.W. Taylor<sup>2</sup>. <sup>1</sup>School of Informatics and  
<sup>2</sup>Department of Biology, Indiana University, Bloomington, IN USA.

**MAMMALIAN CASEINS REDUCE THE HYDROPHOBIC INTERACTION OF HUMAN INTERFERON BETA WITH GLASS OR PLASTIC AND STABILISE ITS ACTIVITY IN SOLUTION**, Paper 331  
Tony Meager  
The National Institute for Biological Standards and Control, Blanche Lane, South Mimms, Herts, United Kingdom

**DETECTION OF LOW- AND HIGH-FREQUENCY ANALYTE RESPONSES FROM HUMAN AND NON HUMAN PRIMATE PBMC UTILIZING THE ELISPOT ASSAY**  
Paper 332  
Qi Guan<sup>1</sup>, Stephanie Widmann<sup>1</sup>, Wingman Ma<sup>1</sup>, Lalita Shivraj<sup>1</sup>, Oscar Guerra<sup>1</sup>, Amitabh Gaur<sup>1</sup>, Paul V. Lehmann<sup>2</sup>, Magdalena Tary-Lehmann<sup>2</sup>, Edward L. Morgan<sup>1</sup>  
<sup>1</sup>BD-Biosciences San Diego, CA and <sup>2</sup>Case Western Reserve University School of Medicine, Cleveland, OH, USA.

**PRE-B-CELL COLONY ENHANCING FACTOR (PBEF) IN RHEUMATOID ARTHRITIS (RA)**, Paper 333  
Mari A Nowell<sup>1</sup>, Simona Ognjanovic<sup>2</sup>, Sugar Mejia<sup>3</sup>, Chris Saris<sup>3</sup>, Nick Topley<sup>4</sup>, Anwen Williams<sup>4</sup>, Gillian Bryant-Greenwood<sup>2</sup>, Simon Jones<sup>1</sup>  
<sup>1</sup>Cardiff School of Biosciences, Cardiff, U.K., <sup>2</sup>John A Burns School of Medicine, Hawaii, <sup>3</sup>Amgen, California and <sup>4</sup>UWCM, Cardiff, United Kingdom

**DRUG INTERACTION MECHANISM THAT POTENTIATES THE EFFECT OF CYTOKINE ANTAGONISTS**, Paper 334  
Theresa C. Peterson and Marc R. Peterson  
Dalhousie University, Halifax, Nova Scotia, Canada.

**EFFECT OF FETUIN, A TGF  $\beta$  ANTAGONIST AND PENTOXIFYLLINE, A CYTOKINE ANTAGONIST ON FIBROTIC PARAMETERS IN HCV FIBROSIS**, Paper 335  
Marc R. Peterson, Amy Murphy and Theresa C. Peterson. Departments of Medicine and Pharmacology, Dalhousie University, Halifax, Nova Scotia, Canada

**ENHANCED APOPTOSIS IN LUNG CELLS IN THE ABSENCE OF TNF RECEPTOR ASSOCIATED FACTOR 1**, Paper 336  
Gloria S. Pryhuber, Heidie L. Huyck, Judith Cornejo, and R.H. Pierce  
Strong Children's Research Center, University of Rochester School of Medicine, Rochester, NY

**NEW TECHNOLOGIES, continued**

**MAJOR GREEN TEA CATECHIN EGCG MODULATES CYTOKINE PRODUCTION IN IMMUNE CELLS: IMPLICATIONS FOR MECHANISM OF ANTI-TUMOR ACTIVITY**, Paper 337

James L. Rogers, Izabella Perkins, Catherine A. Newton, Nicholas Burdash, Thomas W. Klein, and Herman Friedman,  
University of South Florida College of Medicine, Tampa, FL

**ROLE OF TUMOR NECROSIS FACTOR RECEPTORS IN AN ANIMAL MODEL OF INTESTINAL ENDOMETRIOSIS**, Paper 338

C. Rojas, C.B. Appleyard, O.I. Santiago, and I Flores  
Ponce School of Medicine, Ponce, Puerto Rico

**LIGAND SELECTIVE INDUCTION OF IL-10 IN DENDRITIC CELLS FOLLOWING TOLL-LIKE RECEPTOR SIGNALLING**, Paper 339

Ranmal Samarasinghe, Prafullakumar Tailor, Tomohiko Tamura, and Keiko Ozato  
Laboratory of Molecular Growth Regulation, National Institute of Child Health and Human Development, NIH. Bethesda, MD, USA

**IMMUNOLOGICAL PROFILING OF MONONUCLEOCYTES IN RESPONSE TO MITOGENIC STIMULATION**, Paper 340

Hans Beernink, Judith Zhu-Shimoni, Michele Malit, Melinda Yu, and Sophie Allauzen  
Life Science Group, Bio-Rad Laboratories, Hercules, CA

**RECEPTOR LIGAND-INDUCED SECRETION OF CYTOKINES BY A MACROPHAGE CELL LINE**, Paper 341

Ruth Levitz<sup>1</sup>, Robert Hsueh<sup>1</sup>, Lonnie Sorrells<sup>1</sup>, Robert Sinkovits<sup>2</sup>, Heping Han<sup>1</sup>, Ron Taussig<sup>1</sup>, Judith Zhu-Shimoni<sup>3</sup>

<sup>1</sup>The Antibody Laboratory and the Cell Preparation and Analysis Laboratory of the Alliance for Cellular Signaling (AfCS), University of Texas Southwestern Medical Center, Dallas, TX, USA; <sup>2</sup>AfCS Bioinformatics and Data Coordination Laboratory, University of California at San Diego, CA, USA; <sup>3</sup>Life Science Group of Bio-Rad Laboratories, Hercules, CA, USA;

**SIMULTANEOUS DETECTION AND QUANTIFICATION OF MULTIPLE CYTOKINES USING THE BIO-PLEX SUSPENSION ARRAY SYSTEM**, Paper 342

Judith Zhu-Shimoni, Hans Beernink, Michele Malit, Melinda Yu, Frank Yu, Maria Mariano, and Sophie Allauzen  
Life Science Group, Bio-Rad Laboratories, Hercules, CA

**THE I $\kappa$ B KINASE BETA HAS A CRITICAL ROLE IN THE TRANSCRIPTION OF MANY INTERFERON-STIMULATED GENES (ISGS)**, Paper 343

David B. Shultz and George R. Stark,  
Cleveland Clinic Foundation, Cleveland, OH

**ICSBP/IRF-8 IS CRITICAL FOR TYPE I INTERFERON INDUCTION IN DENDRITIC CELLS MEDIATED BY THE INTERFERON FEED BACK LOOP**, Paper 344

Prafullakumar B Tailor<sup>1</sup>, Lucia Gabriele<sup>2</sup>, Tomohiko Tamura<sup>1</sup>, and Keiko Ozato<sup>1</sup>

<sup>1</sup>Laboratory of Molecular Growth Regulation, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD and

<sup>2</sup>Laboratory of Virology, Istituto Superiore di Sanita., Rome, Italy

**NEW TECHNOLOGIES, continued**

**EUKARYOTIC TRANSLATION INITIATION FACTOR 5A REGULATES INTERFERON GAMMA-STIMULATED NF- $\kappa$ B ACTIVATION AND CYTOKINE SECRETION IN HT-29**, Paper 345

Catherine A. Taylor<sup>1</sup>, Leonid Reznikov<sup>2</sup>, Adrienne N. Boone<sup>1</sup>, Marianne T. Hopkins<sup>1</sup>, Charles A. Dinarello<sup>2</sup>, and John E. Thompson<sup>1</sup>

<sup>1</sup>University of Waterloo, Waterloo, ON, Canada and <sup>2</sup>University of Colorado, Health Sciences Center, Denver, CO

**FUNCTIONAL SIGNIFICANCE OF IL-18 PROMOTER POLYMORPHISMS IN INFLAMMATORY BOWEL DISEASE (IBD)**, Paper 346

Truc T. Trinh, Xiao-Ming Wang, Mark T. Worthington and Theresa T. Pizarro  
University of Virginia Health System, Charlottesville, VA

**IMAGING OF CYTOKINE-INDUCED ALTERATIONS IN THE GROWTH, METASTASIS, NEOVASCULARIZATION AND APOPTOSIS OF MURINE NEUROBLASTOMA TUMORS**, Paper 347

Jimmy K Stauffer<sup>1</sup>, Julie A Hixon<sup>1</sup>, Timothy C Back<sup>2</sup>, Erin Lincoln<sup>2</sup>, Tahira Khan<sup>1</sup>, and Jon M Wigginton<sup>1</sup>

<sup>1</sup>Pediatric Oncology Branch, NCI-CCR and <sup>2</sup>IRSP, SAIC Frederick, Frederick, MD

**HYPER PRODUCTION OF PRO-INFLAMMATORY CYTOKINES BY WSX-1-DEFICIENT NKT CELLS IN CON A-INDUCED HEPATITIS**, Paper 348

Hiroki Yoshida<sup>1,2,3</sup>, Shinjiro Hamano<sup>4</sup>, Yoshiyuki Miyazaki<sup>1,2,3</sup>, Kazunari Ishii<sup>4</sup>, Atsunobu Takeda<sup>1,2,4</sup>, Tak W. Mak<sup>5</sup>, Kunisuke Himeno<sup>4</sup>, Akihiko Yoshimura<sup>2</sup>, and Atsushi Yamanaka<sup>1,2</sup>

<sup>1</sup>PRESTO, Japan Science and Technology Agency, Saitama, Japan, <sup>2</sup>Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan, <sup>3</sup>Faculty of Medicine, Saga University, Saga, Japan. <sup>4</sup>Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, <sup>5</sup>University of Toronto, Toronto, Ontario, Canada

**DETECTION OF MOUSE VEGF PROTEIN IN NATURAL SAMPLES USING A NEW ENZYME-LINKED IMMUNOSORBENT ASSAY**, Paper 349

Mitra Azadeh, Tao Li, Maribeth A. Raines-Casselmann, and Kevin J. Reagan  
BIOSOURCE, Camarillo, CA, US

**APOPTOSIS**, Papers 350-358

**INDUCTION OF APOPTOSIS IN OCULAR MELANOMA CELL LINES BY INTERFERONS IN COMBINATION WITH AZIDOTHYIMIDINE**, Paper 350

Soo In Bae, Mamta Chawla-Sarkar, Frederic J. Reu, Barbara S. Jacobs, and Ernest C. Borden

Center for Drug Discovery and Development, Taussig Cancer Center, Cleveland Clinic Foundation, Cleveland, Ohio

**INVOLVEMENT OF THE SERPIN PAI-2 IN REGULATION OF IFN INDUCED APOPTOSIS**, Paper 351

Jeanette Blomberg, Kristina Ruuth, Ingrid Dacklin, Rima Sulniute, Lennart Carlsson and Erik Lundgren

Umeå University, Umeå, Sweden

**NEW TECHNOLOGIES, continued**

**INTERFERON- $\gamma$  PRIMING OF BREAST CANCER CELL LINES IN FAS AND TRAIL DEATH RECEPTOR MEDIATED APOPTOSIS** , Paper 352

Judith M. Connett, Linda N. Badri, Eve L. Bingham, Gerard M. Doherty  
University of Michigan, Ann Arbor, MI

**IL-7 REGULATION OF APOPTOSIS AND CELL CYCLE** , Paper 353

Scott K. Durum<sup>1</sup>, Wenqing Li<sup>1</sup>, Kyungjae Kim<sup>1</sup>, Dmitry Bulavin<sup>2</sup>, Albert J. Fornace<sup>2</sup>, Howard Young<sup>3</sup>, Michelle Alvarez<sup>4</sup> and Annette Khaled<sup>1,4</sup>.

<sup>1</sup>Laboratory of Molecular Immunoregulation, National Cancer Institute, NIH, Frederick, MD, <sup>2</sup>DBS, National Cancer Institute, NIH, Bethesda, MD <sup>3</sup>Laboratory of Experimental Immunology, National Cancer Institute, NIH, Frederick, MD, <sup>4</sup>Department of Molecular Microbiology, University of Central Florida, Orlando, FL

**IDENTIFICATION OF AN APOPTOTIC SWITCH IN THE SH2 DOMAIN OF THE STAT FAMILY OF TRANSCRIPTION FACTORS** , Paper 354

Ana M. Gamero and Anthony Scarzello

Laboratory of Experimental Immunology, National Cancer Institute, Frederick, MD

**INTERLEUKIN-19 AND INTERLUKIN-20 GENE EXPRESSION IS INCREASED IN LESIONAL PSORIATIC SKIN COMPARED TO NON-LESIONAL SKIN** , Paper 355

Kristian Otkjaer<sup>1</sup>, Knud Kragballe<sup>1</sup>, Anne Funding<sup>1</sup>, Peder Nørby<sup>2</sup>, Erik Hasselager<sup>2</sup>, Jes T. Clausen<sup>2</sup>, and Lars Iversen<sup>2</sup>

<sup>1</sup>University of Aarhus, Aarhus, Denmark and <sup>2</sup>Novo Nordisk A/S, Bagsvaerd, Denmark

**APOPTOSIS INDUCED BY PROTEASOME INHIBITORS IN B-CLL CELLS IS ASSOCIATED WITH DOWNREGULATION OF CD23 AND INACTIVATION OF NOTCH2**, Paper 356

Markus Döchler<sup>2</sup>, Josef D. Schwarzmeier<sup>1,2</sup>, Medhat Shehata<sup>2</sup>, Martin Hilgarth<sup>1</sup>, and Rainer Hubmann<sup>2</sup>.

<sup>1</sup>University of Vienna, Clinic of Internal Medicine I., Dept. Hematology, Waehringer Vienna, Austria, <sup>2</sup>Ludwig Boltzmann Institute for Cytokine Research, University of Vienna, Vienna, Austria.

**STAT 2 IS A PIVOTAL PLAYER IN MEDIATING TYPE I INTERFERONS INDUCED APOPTOSIS**, Paper 357

Ana L. Romero, and Ana M. Gamero

National Cancer Institute. Laboratory of Experimental Immunology. Frederick, MD

**TNF-ALPHA INDUCED SWITCH IN INTRACELLULAR LDH ISOTYPE FOLLOWING APOPTOSIS INDUCTION IN PBL OF NHL PATIENTS** , Paper 358

Jurisc V<sup>1</sup>, Bumbasirevic V<sup>2</sup>, Djuricic B<sup>3</sup>, Konjevic G<sup>4</sup>, Spuzic I<sup>4</sup>.

<sup>1</sup>School of Medicine University of Kragujevac, <sup>2</sup>Institute of Histology, <sup>3</sup>Biochemistry and <sup>4</sup>OInstitute of Oncology & Radiology, University of Belgrade, Serbia, Yugoslavia

**Sunday, October 24 Continued**

6:00 - 7:30 pm **CONCURRENT SYMPOSIA**

6:00 - 7:30 pm **SYMPOSIUM 4: Apoptosis**, Papers 359-360 **Flamingo A-D**  
Chair: **Nancy Ruddle**, Yale University School of Medicine, New Haven, Connecticut

6:00 pm **APOPTOSIS, TRAIL, AND THE IMMUNE RESPONSE**  
Douglas Green  
Ottawa Regional Cancer Centre  
Ottawa, Canada

6:30 pm **TARGETING INTERFERON DEFECTS WITH VESICULAR STOMATITIS VIRUS**  
Paper 359  
D.F. Stojdl, B.D. Lichty, B.R. TenOver, J.M. Patterson, A.T. Power, S. Knowles,  
R. Marius, J. Reynard, L. Poliquin, H. Atkins, E.G. Brown, R.K. Durbin, J.E. Durbin,  
J. Hiscott and John Bell  
Ottawa Regional Cancer Center, Ottawa, Canada and McGill University, Montreal,  
Canada

7:00 pm **CYTOKINE REGULATION OF CASPASE-8 APOPTOTIC AND NON-APOPTOTIC FUNCTIONS**, Paper 360  
Tae-Bong Kang<sup>1</sup>, Tehila Ben-Moshe<sup>1</sup>, Eugene E. Varfolomeev<sup>1</sup>, Jin Chul Kim<sup>1</sup>,  
Andrei Kovalenko<sup>1</sup>, Yael Pewzner-Jung<sup>1</sup>, Nir Yogev<sup>1</sup>, Anna Jurewicz<sup>2</sup>, Ari Waisman<sup>3</sup>,  
Ori Brenner<sup>1</sup>, Rebecca Haffner<sup>1</sup>, Erika Gustafsson<sup>4</sup>, Parameswaran Ramakrishnan<sup>1</sup>,  
Tsvee Lapidot<sup>1</sup> and David Wallach<sup>1</sup>  
<sup>1</sup>The Weizmann Institute of Science, Rehovot, Israel, <sup>2</sup>Medical University of Lodz,  
Lodz, Poland, <sup>3</sup>Institute for Genetics, University of Cologne, Cologne, Germany  
and <sup>4</sup>Lund University Hospital, Lund, Sweden

6:00 - 7:30 pm **SYMPOSIUM 5: Hematopoiesis and Stem Cells** **Tropical A-C**  
Paper 361  
Chair: **Matthew J. Fenton**, University of Maryland School of Medicine, Baltimore, MD

6:00 pm **PURIFICATION AND EX VIVO EXPANSION OF HEMATOPOIETIC STEM CELLS**  
Harvey Lodish  
Whitehead Institute of Biomedical Research, Cambridge, MA

6:30 pm **HYPOXIC REGULATION OF CYTOKINE PRODUCTION DURING DEVELOPMENT AND DISEASE**, Paper 361  
M. Celeste Simon  
University of Pennsylvania Cancer Center, Philadelphia, PA

7:00 pm **TRANSCRIPTION FACTORS AND CYTOKINE RECEPTOR REGULATION: ROLE IN HEMATOPOIESIS AND LEUKEMIA**  
Daniel Tenen  
Harvard Institutes of Medicine, Boston, MA

## Sunday, October 24 Continued

- 6:00 - 7:30 pm      **SYMPOSIUM 6: Tumor Immunity**      **Las Olas Room**  
**Dhan Kavlvakolanu**, University of Maryland School of Medicine, Baltimore, MD
- 6:00 pm      **MOLECULAR AND CELL BIOLOGY OF CANCER IMMUNOEDITING**  
Robert Schreiber  
Washington University, St. Louis, MO
- 6:30 pm      **CYTOKINE PROFILING IN CANCER PATIENTS**  
Monica Panelli  
National Institutes of Health, Bethesda, MD
- 7:00 pm      **IL-12 FAMILY CYTOKINE GENE THERAPY OF CANCER**  
Walter Storkus  
University of Pittsburgh School of Medicine, Pittsburgh, PA
- 8:00 - 11:00 pm      **BANQUET AND ENTERTAINMENT**      **San Geronimo Ballroom**

## MONDAY, OCTOBER 25, 2004

- 8:00am - 8:45 am      **REGULATION OF INFLAMMATION AND IMMUNITY BY CYTOKINES**, Paper 362      **San Geronimo Ballroom**  
Richard Flavell  
Yale University School of Medicine, New Haven, CT
- 9:00am - 10:30 am      **CONCURRENT WORKSHOPS**
- 9:00 - 10:30 am      **WORKSHOP 13: New Cytokines**, Papers 363-367      **Flamingo A-D**  
Chairs: **Warren Leonard**, National Institute of Health, Bethesda, Maryland and **Fabio Cominelli**, University of Virginia, Charlottesville, Virginia
- 9:00 am      **The Biology of IL-21**  
Warren Leonard  
National Institutes of Health, Bethesda, MD
- 9:15 am      **IDENTIFICATION OF THE IL-17 RECEPTOR-RELATED MOLECULE, IL-17RC AS A RECEPTOR FOR IL-17A AND IL-17F**, Paper 363  
Rolf Kuestner, Cameron Brandt, Zeren Gao, Craig Ostrander, Susan Bort, David Taft, Janine Bilsborough, Katherine Lewis, Steve Jaspers, Stacey Dillon, Patsy Lewis, Stavros Topouzis, Mark Rixon, Chung Chan, Margaret Moore, Brian Reardon, Tom Bukowski, Betsy Moore, Jim West, Julia Parrish-Novak, and Steven D. Levin  
ZymoGenetics Inc., Seattle, Washington
- 9:30 am      **CHARACTERIZATION OF THE MOUSE INTERFERON- $\gamma$  ANTIVIRAL SYSTEM**  
Paper 364  
Anita Lewis-Antes<sup>1</sup>, Nital K. Shah<sup>1</sup>, Shubha Anantha<sup>1</sup>, Vitaliy V. Baurin<sup>1</sup>, Wei Li<sup>1</sup>, Sergey V. Smirnov<sup>1</sup>, Faruk Sheikh<sup>2</sup>, Raymond P. Donnelly<sup>2</sup> and Sergei V. Kotenko<sup>1</sup>  
<sup>1</sup>UMDNJ - New Jersey Medical School, Newark, NJ and Food and Drug Administration, Bethesda, MD

**ICS YOUNG INVESTIGATOR AWARD: George Bamias, 3<sup>rd</sup> Place**

- 9:45 am **TL1A, A NOVEL TNF-LIKE CYTOKINE, CO-STIMULATES TCR- OR IL-12/IL-18-INDUCED IFN- $\gamma$  SECRETION BY MURINE LYMPHOCYTES**, Paper 365  
Giorgos Bamias<sup>1</sup>, Charles T. Martin III<sup>1</sup>, Margarita Mishina<sup>1</sup>, and Fabio Cominelli<sup>1</sup>,  
<sup>1</sup>University of Virginia, Charlottesville, VA
- 10:00 am **EFFECT OF INTERFERON-TAU ON EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS IN MICE HAS NO DIRECT CORRELATION WITH ITS ANTIVIRAL ACTIVITY**, Paper 366  
Andrei P. Alexenko, Craig L. Franklin, Habib Zaghouni and R. Michael Roberts  
University of Missouri, Columbia, MO
- 10:15 am **IL-27 ENHANCES TUMOR-SPECIFIC T CELL REACTIVITY AND MEDIATES CD8+ T-CELL DEPENDENT REGRESSION OF ORTHOTOPIC PRIMARY AND/OR METASTATIC MURINE NEUROBLASTOMA TUMORS**, Paper 367  
Rosalba Salcedo<sup>1</sup>, Cynthia Hahn<sup>1</sup>, Jimmy Stauffer<sup>1</sup>, Erin Lincoln<sup>2</sup>, Julie Hixon<sup>1</sup>, Kimberly Shafer-Weaver<sup>3</sup>, Anatoli Malyguine<sup>3</sup>, Robert Kastelein<sup>4</sup>, and Jon M. Wigginton<sup>1</sup>. <sup>1</sup>Pediatric Oncology Branch, NCI-CCR, <sup>2</sup>IRSP and <sup>3</sup>LCMI, SAIC-Frederick, Frederick, MD, and <sup>4</sup>DNAX Research Institute, Palo Alto, CA
- 9:00 -10:30 am **WORKSHOP 14: Genomics, Proteomics and New Technologies**, Papers 368-372 **Tropical A-C**  
Chairs: **Amanda Proudfoot**, Serono, Geneva, Switzerland and **Manuel Vega**, Nautilus Biotech SA, Evry, France
- 9:00 am **To be Announced**
- 9:15 am **GENOMIC AND PROTEOMIC ANALYSES OF RHEUMATOID ARTHRITIS TISSUES IDENTIFY BIOMARKERS OF DISEASE**, Paper 368  
Sarah E. Ward<sup>2</sup>, Thomas Burian<sup>2</sup>, Igor Jurisica<sup>3</sup>, Andrew Emili<sup>4</sup>, and Katherine Siminovitch<sup>5</sup> and Eleanor N. Fish<sup>1,2</sup>  
<sup>1</sup>Department of Immunology, University of Toronto, <sup>2</sup>Toronto General Research Institute, University Health Network, Toronto, Ontario, Canada,  
<sup>3</sup>Ontario Cancer Institute, University Health Network, Toronto, Ontario, Canada,  
<sup>4</sup>Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario, Canada, <sup>5</sup>Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto, Ontario, Canada
- 9:30 am **NOVEL HAPLOTYPES IN THE IL-6 PROMOTER AND DISEASE ASSOCIATION**  
Paper 369  
Mark S Fife, Emma M Ogilvie, Daniel Kelberman, Jane Samuel and Patricia Woo  
University College London, United Kingdom
- 9:45 am **DIFFERENTIAL GENE EXPRESSION INDUCED BY ENGINEERED IFN- $\alpha$ s USING DNA MICROARRAY**, Paper 370  
Renqiu Hu<sup>1</sup>, Amy Xiaoyen Yang<sup>2</sup>, Raj K.Puri<sup>2</sup>, Hana Schmeisser<sup>1</sup> and Kathryn Zoon<sup>1</sup>  
<sup>1</sup>National Cancer Institute, National Institute of Health, Bethesda MD and  
<sup>2</sup>CBER, Food and Drug Administration, Bethesda, MD

**Monday, October 25 Continued**

- 10:00 am **GENOME-WIDE ANALYSIS OF MOLECULAR CHANGES IN INTERLEUKIN-12-INDUCED CONTROL OF MAMMARY CARCINOMA VIA INTERFERON- $\gamma$ -INDEPENDENT MECHANISMS** , Paper 371  
Xiaoyan Shi, Shanjin Cao, Maki Mitsuhashi, Zhaoying Xiang and Xiaoqing Ma  
Weill Medical College of Cornell University, New York, NY
- 10:15 am **IMPROVEMENT OF BIOPHARMACEUTICALS BY RATIONAL PROTEIN EVOLUTION**  
Paper 372  
T.Guyon, G.Borrelly , R Gantier and Drittanti  
Nautilus Biotech SA, Evry, France
- 9:00 - 10:30 am **WORKSHOP 15: Infectious Diseases** , Papers 373-378 **Las Olas Room**  
Chairs: **Bryan R.G Williams**, Cleveland Clinic Foundation, Cleveland, Ohio  
and **Douglas Golenbock**, University of Massachusetts Medical Center,  
Worcester, Massachusetts
- 9:00 am **CYTOKINES AND REGULATOR T CELLS IN MURINE AIDS** , Paper 373  
Manfred W. Beilharz<sup>1</sup> and Andrea Paun<sup>1</sup>  
<sup>1</sup>University of Western Australia, Perth, WA, Australia
- 9:15 am **IFN- $\alpha$ 1 TRANSGENE ANTAGONIZES VAGINAL HSV-2 INFECTION THROUGH THE PKR PATHWAY and CD8  $\alpha$ -EXPRESSING CELLS** , Paper 374  
Daniel J.J. Carr<sup>1</sup>, Robert H. Silverman<sup>2</sup>, and Bryan R.G. Williams<sup>2</sup>  
<sup>1</sup>The University of Oklahoma Health Sciences Center, Oklahoma City, OK and  
<sup>2</sup>The Cleveland Clinic Foundation, Cleveland, OH
- 9:30 am **REGULATION OF AN INTRACELLULAR ANTIVIRAL RESPONSE PATHWAY BY THE HEPATITIS C VIRUS NS3/4A PROTEASE** , Paper 375  
Eileen Foy<sup>1</sup>, Rhea Sumpter Jr<sup>1</sup>, Kui Li<sup>2</sup>, Yueh-Ming Loo<sup>1</sup>, Stanley M. Lemon<sup>2</sup>,  
Mitsutoshi Yoneyama<sup>3</sup>, Takashi Fujita<sup>3</sup>, Michael Gale Jr<sup>1</sup>.  
<sup>1</sup>University of Texas, Southwestern Medical Center, Dallas, TX, <sup>2</sup>University of Texas  
Medical Branch, Galveston, TX, <sup>3</sup>Tokyo Metropolitan Institute of Medical Science,  
Tokyo Metropolitan Organization for Medical Research, Tokyo, Japan,
- 9:45 am **INHIBITION OF INTERFERON SIGNALING BY DENGUE VIRUS** , Paper 376  
Jorge L. Muñoz-Jordán<sup>1</sup>, Maudry Laurent-Rolle<sup>2</sup>, Joseph Ashour<sup>2</sup>, and  
Adolfo García-Sastre<sup>2</sup>  
<sup>1</sup>Centers for Disease Control and Prevention, San Juan, Puerto Rico and <sup>2</sup> Mount Sinai  
School of Medicine, New York, NY
- 10:00 am **INHIBITION OF INTERFERON ALPHA-STIMULATED GENE EXPRESSION BY M. TUBERCULOSIS** , Paper 377  
S. Prabhakar<sup>1</sup>, Y. Qiao<sup>1</sup>, A. Canova<sup>1</sup>, D. Tse<sup>2</sup>, and R. Pine<sup>1</sup>  
<sup>1</sup>Public Health Research Institute, Newark, NJ and <sup>2</sup>New York University School of  
Medicine, New York, NY



**SHELDON WOLFF PRIZE: Ceri Fielding**

- 10:15 am **HUMAN HERPESVIRUS 8-ENCODED VIRAL INTERLEUKIN 6 SUPPRESSES THE INDUCTION OF CXCL8 BY INTERLEUKIN 1  $\beta$  AND NEUTROPHIL RECRUITMENT**  
Paper 378  
Ceri A. Fielding<sup>1</sup>, Rachel M. McLoughlin<sup>1</sup>, Chantal Colmont<sup>2</sup>, Dean A. Harris<sup>2</sup>, Stefan Rose-John<sup>3</sup>, Nick Topley<sup>2</sup> and Simon A. Jones<sup>1</sup>  
<sup>1</sup>Cardiff University, Cardiff, Wales, UK, <sup>2</sup>University of Wales College of Medicine, Cardiff, Wales, UK, <sup>3</sup>Christian-Albrechts-Universitaet, Kiel, Germany
- 9:00 - 10:30 am **WORKSHOP 16: Inflammation, Papers 379 -384** **San Geronimo Ballroom**  
Chairs: **Byoung S. Kwon**, University of Ulsan, Ulsan, Korea  
and **Nancy Ruddle**, Yale University School of Medicine, New Haven, Connecticut
- 9:00 am **TARGETING PI3K SIGNALLING AS A NOVEL THERAPEUTIC STRATEGY FOR RHEUMATOID ARTHRITIS**, Paper 379  
Vittoria Ardisson<sup>1</sup>, Chiara Ferrandi<sup>1</sup>, Elena Ammannati<sup>1</sup>, Thomas Ruckle<sup>2</sup>, Matthias Schwarz, Montserrat Camps<sup>2</sup>, Christian Rommel<sup>2</sup> and Rocco Cirillo<sup>1</sup>  
<sup>1</sup>Experimental Pharmacology Unit RBM/Serono, Turin, Italy <sup>2</sup>Serono Pharmacological Research Institute, Geneva, Switzerland
- EDWARD LEONARD PRIZE FOR CHEMOTAXIS/CHEMOKINE RESEARCH:**  
**Rachel McLoughlin**
- 9:15 am **IL-6 SIGNALLING SPECIFICALLY REGULATES T-CELL TRAFFICKING BUT NOT ACTIVATION STATE DURING ACUTE INFLAMMATION**, Paper 380  
Rachel M McLoughlin<sup>1,2</sup>, Clare Parker<sup>1</sup>, Brendan Jenkins<sup>3</sup>, Matthias Ernst<sup>3</sup>, Nicholas Topley<sup>1</sup> & Simon A Jones<sup>2</sup>  
<sup>1</sup>Cardiff University, Cardiff, <sup>2</sup>Institute of Nephrology, UWCM, Cardiff, UK and <sup>3</sup>Ludwig Institute for Cancer Research, Royal Melbourne Hospital, Melbourne, Australia
- 9:30 am **IFN- $\gamma$  CONTROLS COMPLETE FREUND 'S ADJUVANT-INDUCED DOWNREGULATION OF FOXP3 EXPRESSION AND REGULATORY T CELL ACTIVITY**, Paper 381  
Hilde Kelchtermans<sup>1</sup>, Bert De Klerck<sup>1</sup>, Tania Mitera<sup>1</sup>, Maarten Van Balen<sup>1</sup>, Dominique Bullens<sup>2</sup>, Alfons Billiau<sup>1</sup>, Georges Leclercq<sup>3</sup>, and Patrick Matthys<sup>1</sup>  
<sup>1</sup>Rega Institute for Medical Research, and <sup>2</sup>Katholieke Universiteit Leuven (KULeuven), Leuven, Belgium, <sup>3</sup>Ghent University Hospital, Ghent, Belgium
- 9:45 am **4-1BB-MEDIATED EXPANSION OF CD11C<sup>+</sup>CD8<sup>+</sup> T CELLS AMELIORATES A COLLAGEN-INDUCED RHEUMATOID ARTHRITIS BY IDO-DEPENDENT MECHANISMS**, Paper 382  
Su K. Seo<sup>1</sup>, Jae H. Choi<sup>1</sup>, Young H. Kim<sup>1</sup>, Woo J. Kang<sup>1</sup>, Hye Y. Park<sup>1</sup>, Jae H. Suh<sup>2</sup>, Beom K. Choi<sup>1</sup>, Dass S. Vinay<sup>3</sup>, and Byoung S. Kwon<sup>1,3</sup>  
<sup>1</sup>University of Ulsan, Ulsan, Korea, <sup>2</sup>Ulsan University Hospital, University of Ulsan College of Medicine, and <sup>3</sup>LSU Eye Center, Louisiana State University Health Sciences Center, New Orleans, LA

## **Monday, October 25 Continued**

- 10:00 am **CHARACTERISATION OF HTRA1 AND ITS POTENTIAL ROLE IN ARTHRITIS**  
Paper 383  
Sandra Grau<sup>1</sup>, Peter J. Richards<sup>1</sup>, Anwen S. Williams<sup>2</sup>, Simon A. Jones<sup>1</sup>,  
Michael Ehrmann<sup>1</sup>  
<sup>1</sup>Cardiff University, Cardiff, UK, <sup>2</sup>UWCM, Cardiff, United Kingdom
- ICS YOUNG INVESTIGATOR, 2<sup>nd</sup> Place**
- 10:15 am **GENE TARGETS OF INTERLEUKIN-17 RECEPTOR SIGNALING: RELATIONSHIP TO INFLAMMATORY BONE DISEASE**, Paper 384  
Matt Ruddy<sup>1</sup>, Fang Shen<sup>1</sup>, Grace Wong<sup>1</sup>, Pamela J. Baker<sup>2</sup>, Richard T. Evans<sup>1</sup>, and Sarah L. Gaffen<sup>1</sup>  
<sup>1</sup>University at Buffalo, State University of New York, Buffalo, NY and <sup>2</sup>Bates College, Lewiston ME
- 11:00am - 1:00 pm **PLENARY SESSION 4: Host Defense** **San Geronimo Ballroom**  
Paper 385  
Chairs: **Nancy Reich**, Stony Brook University, Stony Brook, New York and  
**Bryan R.G. Williams**, Cleveland Clinic Foundation, Cleveland, Ohio
- 11:00 am **THE TLR7,8 AND 9 FAMILY OF NUCLEOTIDE RECEPTORS**  
Douglas Golenbock  
University of Massachusetts Medical School, Worcester, MA
- 11:30 am **LINKS BETWEEN INNATE AND ADAPTIVE IMMUNITY DURING ACUTE INFECTIONS**  
Christine Biron  
Brown University, Providence, RI
- 12:00 pm **TOLL-LIKE RECEPTOR SIGNALING AND GENE REGULATION**, Paper 385  
Shizuo Akira, Hiroaki Hemmi, and Masahiro Yamamoto  
Research Institute for Microbial Diseases, Osaka University, Osaka, Japan
- 12:30 pm **ROLE OF A CYTOPLASMIC COMPLEX INVOLVING MyD88, IRAK4, TRAF6 AND IRF-7 IN TLR9/7-MEDIATED HOST DEFENSE**  
Tadatsugu Taniguchi  
University of Tokyo, Tokyo, Japan
- 1:00 pm **CLOSING REMARKS**

