2010 ISICR MILSTEIN AWARDS

From Dr. Robert Silverman, Chair ISICR Awards Committee
"There is a common theme that links this years' Milstein Awards: both Drs. Fish and Kotenko have elevated the entire IFN and cytokine field through their seminal and groundbreaking research relating to major pathogenic viral infections that have caused epidemics in the human population."

Eleanor Fish

Canada Research Chair in Women's Health & Immunobiology
Director, Arthritis & Autoimmunity Research Centre, University Health Network
Division Head, Cell & Molecular Biology, Toronto General Research Institute
Professor, Dept. of Immunology, University of Toronto

"Eleanor Fish was selected for the Milstein Award based on her distinguished career, characterized by sustained, high quality science on the role of IFNs in viral defense and clinical infections. As an example, she performed cutting edge translational studies during the response to the SARS coronavirus outbreak in 2003 (published in *JAMA*)."

http://www.uhnresearch.ca/researchers/profile.php?lookup=1831

Sergei Kotenko

Associate Professor
Dept. Biochemistry & Molecular Biology
University Hospital Cancer Center
UMDNJ - New Jersey Medical School
Newark, NJ

"Sergei Kotenko was selected for the Milstein Award based on his seminal co-discovery and cloning of the type III IFNs (IFN lambda or IL-28 and IL-29) and their receptors (published in *Nature Immunology*, 2003). The type III IFN discovery is making a major impact in the IFN field as it relates to highly pathogenic viruses, in particular influenza virus and hepatitis C virus."

http://bmb.umdnj.edu/index.php?option=com_content&task=view&id=47&Itemid=102

2010 ISICR HONORARY MEMBERSHIP

Keiko Ozato

Section Head
Section on Molecular Genetics of Immunity
Eunice Kennedy Shriver National Institute of Child Health and Human Development
Bethesda, MD

"Keiko Ozato is recognized for serving as a former president of the ISICR, for her long-standing commitment to the society, and for her many contributions to the science of IFN and cytokines."

http://ozatolab.nichd.nih.gov/

2010 ISICR DISTINGUISHED SERVICE AWARDS

Sidney Pestka

Professor
Dept of Molecular Genetics, Microbiology & Immunology
University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School
Piscataway, NJ

"The Milstein Awards are a direct result of the interactions between Sid Pestka and the Milstein Family. In addition, he has served in a leadership capacity for the ISICR as a past President and Secretary for many years."

http://lifesci.rutgers.edu/~molbiosci/faculty/pestka.html

Howard Young

Principal Investigator & Deputy Lab Chief
Laboratory of Experimental Immunology
Cancer and Inflammation Program
Center for Cancer Research
National Cancer Institute-Frederick
Frederick, MD

"Howard Young is recognized for his many contributions to the ISICR (a past President, he is the "go-to" person for questions on any topic relating to the functioning of the society, he created and published the ISICR newsletter)."

http://ccr.cancer.gov/Staff/staff.asp?profileid=5711

2010 Milstein Young Investigator Award Winners

Saurabh Chattopadhyay, Ph.D.

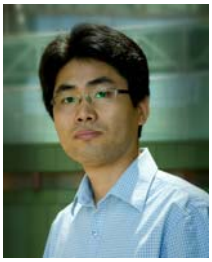
Research Associate
Department of Molecular Genetics
Lerner Research Institute
Cleveland, OH

Dr. Saurabh Chattopadhyay received his Ph.D. in 2002 from the Indian Institute of Technology, Delhi, in Biotechnology. He joined the laboratory of Dr. Ganes Sen in

2005, when he started to work on the role of IRF-3 in mediating virus-induced apoptosis. He is currently working on the newly discovered IRF-3/Bax mediated apoptotic pathway that is activated by cytoplasmic RLH signaling. In this pathway, IRF-3 does not function as a transcription factor, but it binds to Bax through a BH3 domain located near the C-terminus of IRF-3; the two proteins translocate to the mitochondria and trigger apoptosis. His research on this transcription independent role of IRF-3 in mediating virus-induced apoptosis was published in EMBO J (2010). His on-going studies to understand the specific contribution of this IRF-3 induced apoptotic pathway to the host antiviral responses were presented at Cytokine 2010 meeting at Chicago. Currently he is working as a Research Associate in the Department of Molecular Genetics at Lerner Research Institute, Cleveland. Dr. Chattopadhyay is also a recipient of Boltzmann Award, presented jointly by both ISICR and ICS, in 2008 at the Cytokine meeting at Montreal.

Yeonseok Chung, Ph.D.

Institute of Molecular Medicine
University of Texas Medical School at Houston



Dr. Chung received his Ph.D. investigating the balance between tolerance and immunity in the mucosal immune system from the Seoul National University in 2003. Dr. Chung's research demonstrated a unique subset of dendritic cells in the mucosal area responsible for cross-priming of gut antigens. He also demonstrated the compensatory role of TGF-β and regulatory T cells in inducing mucosal tolerance in vivo. These research activities during his PhD course resulted in 10 publications in peer-reviewed journals including Blood and the Journal of Immunology.

Following completion of his doctoral training, Dr. Chung joined Dr. Chen Dong's laboratory at MD Anderson Cancer Center as a post-doctoral fellow, and later a junior faculty from 2005 to 2009. His main research interest is to understand the biology of pathogenic T cells in autoimmune diseases in the context of helper T cell subsets and cytokines. Dr. Chung described how sequential cytokine stimulation and transcription factors shape the generation and maintenance of IL-17-producing-inflammatory T cells and follicular helper T cells, resulting in publication in Immunity, Science and Nature Immunology.

As a result of his expertise in the area of cellular and mucosal immunology, in June 2010 Dr.Chung was offered as an assistant professor at the Institute of Molecular Medicine, the University of Texas Medical School at Houston. As an independent scientist, Dr. Chung's research goal is to understand the cellular and molecular mechanisms whereby immune responses are regulated in healthy and disease status in the context of cytokine involvement. To this aim, Dr. Chung's research team will utilize genetic and immunologic approaches in diverse animal disease models. Outcome of

these studies will help us to better understand our immune system, and to develop novel approaches for treating immune-mediated diseases and cancer.

Michael P. Gantier, PhD

Research Fellow
Centre for Cancer Research
Monash Institute of Medical Research
Melbourne, Australia

Dr. Gantier received his Ph.D. from the University College Dublin (Ireland) in 2006 following his work on *the roles of double stranded RNAs in mammalian cells*, under the supervision of Dr. John Baugh and Dr. Seamas Donnelly. Following his interest in the relationship between the fields of RNA interference and that of innate immunity, Dr. Gantier joined the laboratory of Prof. Bryan Williams in February 2006, in the Monash Institute of Medical Research, Melbourne, Australia.

Accordingly, Dr Gantier's main focus in Prof. Williams' lab has been to characterize the modulation of innate immunity by small RNAs. In particular, Dr. Gantier's work established that human Toll like receptor 7 (TLR7) was involved in the sequence-specific sensing of single stranded RNAs, and that TLR7 and 8 were able to distinguish between different sequences of RNAs. His further studies showed that these findings could be used to design bi-functional short interfering RNAs that can recruit both RNA interference and innate immunity, with possible translational application in the treatment of select cancers. In addition, Dr. Gantier's work has also identified a key role for TLR8 in the sensing of phagosomal bacteria, and demonstrated that human TLR8 response is under genetic regulation. These findings have constituted the grounds for several publications in prestigious journals such as *The Journal of Immunology, Molecular Therapy or Human Mutation*.

Dr Gantier's current studies focus on the regulation of the innate immune response by another class of short RNAs, call microRNAs. Through the use of microRNA-deficient cell models, his research should help elucidate the regulatory roles of microRNAs in the interferon response and could help better characterize the function of many innate immune genes.

Estanislao Nistal Villán, Ph.D.

Research Associate
Center for Applied Medicine (CIMA)
Universidad de Navarra
Pamplona, Spain

Dr. Estanislao Nistal-Villán is originally from Toral de los Guzmanes, León, Spain. He completed his undergraduate studies in Salamanca, Spain. Right after, he moved to Mount Sinai School of Medicine in New York, where he performed his multidisciplinary training in structural, molecular biology and virology in the laboratories of Dr. Aneel Aggarwal and Adolfo García-Sastre. Dr. Nistal-Villán received his Ph.D. in 2010 in the Microbiology Department under the supervision of Dr. García-Sastre. He is currently conducting his postdoctoral research in the laboratory of Dr. Gloria González-Aseguinolaza at the Center for Applied Medical Research at Universidad de Navarra in Pamplona, Spain.

Dr. Nistal-Villán has dedicated his work to study the regulation of IFN-β production, with particular interest in the molecular aspects that mediate the activation of RIG-I by influenza virus infection and the signals that participate in the formation of the IFN-β enhanceosome.

His current research is focused to the study of mechanisms that allow hepatitis B virus (HBV) infection to be detected by cells and how the virus infection escapes detection by the immune system and becomes refractory to interferon treatment. Of particular interest is the molecular mechanisms used by hepadnaviridae to establish chronic liver infections, using woodchuck hepatitis virus (WHV) chronic infection in woodchuck as a model.

Ram Savan, Ph.D.

Senior Fellow
Laboratory of Experimental Immunology
National Cancer Institute-Frederick
Frederick, MD

Dr. Ram Savan received his Ph.D. in 2004 from the United Graduate School of Agriculture Sciences, Kagoshima University, Japan under Dr. Masahiro Sakai where he discovered that fish contain 2 interferon-γ (IFN-γ) genes. Dr. Savan is currently a Senior Fellow in the Laboratory of Experimental Immunology, Cancer and Inflammation Program, National Cancer Institute, NIH in Dr. Howard Young's laboratory. His research is focused on the post-transcriptional regulation of immune genes. He has defined a novel role for microRNAs (miRNAs) in stabilizing IFN-γ mRNA based on changes in the mRNA structure upon interaction with the miRNA. This finding represents a new mechanism of action of miRNAs in regulating gene expression. He also defined the role of miRNAs in controlling HLA-C gene expression in collaboration with Dr. Mary Carrington's laboratory. This work on HLA-C has broad implications for the differential susceptibility of individuals to HIV and psoriatic arthritis. Another area of his research interest has been in defining the importance of IL-22 receptor expression in the pathogenesis of ALK^+ anaplastic large cell lymphoma. He was a recipient of the Japanese Society for Promotion of Science research fellowship. Additionally, Dr. Savan is a two time recipient of the National Cancer Institute Director's Innovation Award (2009-2010).

2010 Christina Fleischman Award Winner

Special thanks to the Fleischmann Foundation for the continuing support of this Award

Xiaoyu Hu
Department of Medicine
Weill Cornell Medical College
New York, NY

Dr. Hu obtained her Ph.D. in Immunology from Weill Graduate School of Medical Sciences of Cornell University in 2004 after receiving her M.D. from Peking University Health Science Center in 1997. After completing her postdoctoral-training at Hospital for Special Surgery, she joined Hospital for Special Surgery Arthritis and Tissue Degeneration Research Program as an Assistant Scientist with a joint academic appointment at Weill Cornell Medical College as an Assistant Professor of Immunology in Medicine. Her research has been published in journals including Nature Immunology and Immunity. Dr. Hu is a recipient of 'Within Our Reach' Rheumatoid Arthritis Research Award from American College of Rheumatology and a principal investigator of a NIH R01 award. The research focus of her laboratory is the role of Notch pathway in regulation of innate immunity and inflammation. Besides research efforts, Dr. Hu is also actively engaged in teaching activities including medical student education.

2010 Sidney & Joan Pestka Award Winners

The Sidney & Joan Pestka Post-Graduate Award

Dr. Anette H. H. van Boxel-Dezaire
The Cleveland Clinic Foundation
Lerner Research Institute
Cleveland, OH

Dr. Anette H. H. van Boxel-Dezaire is an immunologist who received her Ph.D. degree from the Faculty of Medicine at the Vrije Universiteit (VU), Amsterdam, The Netherlands, in 2001. She has a longstanding interest in the involvement of cytokines in the pathogenesis and treatment of autoimmune diseases, in particular multiple sclerosis (MS). To obtain more knowledge of molecular biology and of interferon signaling pathways, she joined the laboratory of Dr. George R. Stark (Cleveland Clinic Foundation) in 2003. She employed a phospho-flow cytometry technique to study IFN-β-induced signaling in primary human B cells, T cells and monocytes in whole blood cultures, and found major differences in the activation of STAT1, STAT3 and STAT5 between these leukocyte subsets. In B cells and especially in $CD4^+$ T cells IFN-β activated STAT5 in addition to STAT3, but only few primary human B cells activated STAT1, a finding that could not be explained by decreased levels of IFNAR2 or STAT1 or enhanced levels of SOCS1 or relevant protein tyrosine phosphatases in B cells. The observed differential activation of STATs by IFN-β finally provides more insight how IFN-α/β increase the survival of primary human B cells and $CD4^+$ T cells, but enhance the apoptosis of monocytes. Besides the cell type-specific signaling responses induced by IFN-β *in vitro* and by IFN-β injection in MS patients, she also found differences in signal transduction between MS patients within given leukocyte subsets. Supported by the Career Transition Fellowship Award from the National Multiple Sclerosis Society, Dr. Van Boxel-Dezaire is currently testing the hypothesis that, due to more inflammatory disease, clinically non-responsive MS patients have a distinct signaling response in certain leukocyte subsets compared to responders to IFN-β therapy.

The Sidney & Joan Pestka Graduate Award

Seth G Thacker
Graduate Research Associate
Immunology Program
University of Michigan
Ann Arbor, MI

Seth G Thacker is a Ph.D student in the immunology program at the University of Michigan. He is currently doing his thesis research in the lab of Mariana J. Kaplan. His interest in immunology and particularly autoimmunity started when from an early age he was exposed to devastating effects of rheumatoid arthritis. This directed his interest into doing research tha t could improve the wellbeing of those suffering from autoimmune diseases. His current project is exploring Type I IFNs role in the increased risk of cardiovascular disease in patients with systemic lupus erythematosus (SLE). Utilizing a microarray technology he has discovered a novel pathway by which IFN-α inhibits vascular repair in endothelial progenitor cells (EPCs) through the modulation of IL-1β and IL-1 associated molecules and inhibition of VEGF. Seth has also characterized several lupus-prone mouse models and demonstrated, that in those models that are dependent on type I IFNs, they also demonstrate an abnormal vascular phenotype. This abnormal phenotype mirrors that seen in human SLE patients and is characterized by decreased numbers of EPC, endothelial dysfunction and impaired vascular repair mediated by EPCs. His current studies are examining the direct role of type I IFNs in the aberrant vascular phenotype observed in the lupus-prone mice.

2010 Milstein Travel Award Winners

This year winners have come from 16 countries

Yasuhiro Abe
National Institute of Biomedical Innovation, Ibaraki, Japan

Aoi Akitsu
The University of Tokyo, Minato-ku, Japan

Shuvojit Banerjee
Cleveland Clinic Foundation, Cleveland OH

Petra Baresova
1st Medical Faculty of Charles University, Prague, Czech Republic

Angela Battistini
Istituto Superiore di Sanità, Rome, Italy

Daniel Burke
University of Toronto, Toronto, Canada

Arindam Chakrabarti
Cleveland Clinic Foundation, Cleveland OH

Olivia Chan
University of Toronto, Toronto, Canada

Mounira Chelbi-Alix
CNRS, Université Paris Descartes, Paris, France

HyeonJoo Cheon
Cleveland Clinic Foundation, Cleveland OH

Soo-hyun Chung
University of Tokyo, Tokyo, Japan

Sara Colpitts
University of Connecticut, Farmington CT

Helena Costa
Instituto Gulbenkian de Ciencia, Oeiras, Portugal

Ana Costa-Pereira
Imperial College London, London, UK

Thomas Decker
University of Vienna, Vienna, Austria

Brian Doehle
University of Washington, Seattle WA
Chee-Mun Fang
Johns Hopkins University, Baltimore MD

Di Feng
UMDNJ, Newark NJ

Jamie Flammer
Weill Cornell Medical College, New York NY

Padmaja Gade
University of Maryland, Baltimore MD

Carole Galligan
Toronto General Research Institute, Toronto, Canada

Kate Goossens
CSIRO, Geelong, Australia

Ismar Haga
Ludwig Institute for Cancer Research, Sao Paulo,Brazil

Kristan Hagan
UT Southwestern Medical Center, Dallas TX

Craig Hawkshaw
University of Toronto, Toronto, Canada

Philippa Hillyer
CBER, FDA, Bethesda MD

Deborah Hodge
NCI-Frederick, NIH, Frederick MD

Wei-Chun HuangFu
University of Pennsylvania, Philadelphia PA

Satoshi Ikeda
IMSUT, Shirokanedai, Japan

Aaron Irving
Monash Institute of Medical Research, Clayton, Australia

Brendan Jenkins
Monash Institute of Medical Research, Clayton, Australia

Babal Jha
Cleveland Clinic Foundation, Cleveland OH

Vladimir Jurisic
Univ of Kragujevac, Kragujevac, Serbia

Sudhakar Kalakonda
University of Maryland, Baltimore MD

Archontoula Kavrochorianou
Hellenic Pasteur Institute, Athens, Greece

Catherine Kennedy
Monash Institute of Medical Research, Clayton, Australia

Kevin Kotredes
Temple University, Philadelphia PA

Christopher Krause
UMDNJ, Piscataway NJ

Arun Kumar
University of Helsinki, Helsinki, Finland

Chien-Kuo Lee

National Taiwan University, Taipei, Taiwan

Zhi Li
Institut Pasteur, Paris, France

Niamh Mangan
Monash Institute of Medical Research, Clayton, Australia

Latifa Mohamed
King Faisal Specialist Hospital, Riyadh, Saudi Arabia

Mira Patel
NICHD, NIH, Bethesda MD

Sandra Pellegrini
Institut Pasteur, Paris, France

Leesa Pennell
University of Toronto, Toronto, Canada

Tracy Putoczki
Ludwig Institite for Cancer Research, Melbourne, Australia

Hilario Ramos
University of Washington, Seattle WA

Giovanna Romeo
Sapienza University of Rome, Rome, Italy
Sujayita Roy
Johns Hopkins University, Baltimore MD

Anthony Sadler
Monash University of Medical Research, Clayton, Australia

Shinobu Saijo
University of Tokyo, Tokyo, Japan

Aristobolo Silva
Federal University of Minas Gerais, Belo Horizonte, Brazil

Madhurima Singh
University of South Carolina, Columbia SC

Håkan Steen
Temple University, Philadelphia PA

Rivka Stone
UMDNJ, Newark NJ

Leslie Summers deLuca

University of Toronto, Toronto, Canada

Dongxu Sun
Cleveland Clinic Foundation, Cleveland OH

Emmanuel Thomas
NIDDK, NIH, Bethesda MD

Chafia Touil-Boukoffa
University of Sciences & Technology, Algiers, Algeria

Anette van Boxel-Dezaire
Cleveland Clinic Foundation, Cleveland OH

Deborah Vestal
University of Toledo, Toledo OH

Ben Wang
University of Toronto, Toronto, Canada

Dakang Xu
Monash University of Medical Research, Clayton, Australia

Haixia Xu
Hospital for Special Surgery, New York NY

Chanyu Yue
Temple University, Philadelphia PA

Xing Zhang
SAIC-Frederick Inc., NCI-Frederick, Frederick MD