SIGNALS THE ISICR NEWSLETTER

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It's been a pleasure to bring you the news

50 ISSUES

This is our last issue of the ISICR newsletter. The next newsletter you will receive will be from the new merged Cytokine and Interferon Society.



Future ISICR Meetings 2012 Meeting Sept. 11-14, 2012 Joint ISICR/ICS Geneva, Switzerland

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& Cytokine Research



A message from the new ISICR President, **Chuck Samuel**

Dear Colleagues,

It is an honor and special privilege to begin my term as President of the International Society for Interferon and Cytokine Research. Leon Platanias, our past president who completed his term at the end of 2011, deserves enormous thanks for his leadership in so ably guiding our Society during the past two years. Among the initiatives that Leon ushered along following the initial efforts of Otto Haller during his presidency is the immensely important one that our membership embraced by vote in January: the merger of ISICR and the International Cytokine Society. The merger between ISICR and ICS to form a society to be known as the Cytokine and Interferon Society was endorsed by a strong majority of both memberships; 89% of the ISICR and 95% of the ICS votes cast were for the merger. During the upcoming year, I will be working with David Wallach, President of ICS, together with our Board of Directors and their Council, as we move to the next phase on the path toward formation of the new society that represents our common interests.

During the formative period of the new society, the ISICR Board of Directors and the ICS Council agreed the merger should take place in a manner that recognizes to the extent possible the aspirations and cultures of both the ISICR and ICS. To help assure an orderly transition during the upcoming period, the current officers of the two societies will remain in position and act and work together as the merger process progresses, prior to election of new Officers by the new society membership in 2013. The plan is for the new President to assume leadership in 2014, along with new committees. During the current year 2012, the ISICR and ICS each will need to elect three members for a Nominations Committee that will play an important role in selection of candidates for our future officers.

Our decision to merge and form the new Cytokine and Interferon Society is an important milestone in the evolution of our society structure. Interferon was the first cytokine discovered, and as many of you know, our society began as the International Society for Interferon Research founded by Bill Stewart. I was a Charter Member of ISIR. As additional cytokines were discovered, we evolved to become the International Society for Interferon and Cytokine Research. Now, driven by the increasing overlap of interests between the ISICR and ICS societies, we are merging to form the Cytokine and Interferon Society.

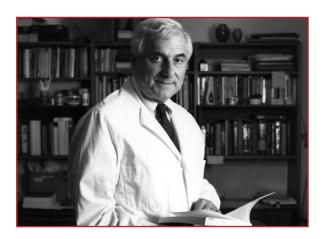
I hold a special place in my scientific heart for interferon, and like many of our ISIR / ISICR members, I have spent most of my scientific career studying aspects of the interferon response, in my case, in the context of viral infection with focus on PKR and then ADAR1. One of the activities that we have enjoyed as society members is the annual meeting. From the early days of meetings in Rotterdam and Heidelberg and Clearwater Beach, Florida, when the science largely concerned biological activities of interferons including their antiviral actions for which they were discovered, to the meetings in Washington, Kyoto, Florence and San Francisco that included the application of recombinant DNA technology for the cloning of type I and II IFNs, the annual meetings have been a main event of the Society. As discoveries then were made in understanding signal transduction and transcriptional control mechanisms, both for the action and the induction of IFNs, increasing overlap emerged between studies with interferons and other cytokines that subsequently led to joint meetings between ISICR and ICS, most recently in Montreal, Chicago, and Florence. In September 2012 the 10th and final Joint meeting prior to merger will be held in Geneva. Exciting science, and also our culture of friendships, has been an important aspect of the annual international meetings and society membership for over three decades.

We hope, and anticipate, that the new Cytokine and Interferon Society borne by the merger will be a vibrant and strong organization, with a collegial culture that captures opportunities that enhance both the basic research and clinical application aspects of interferons and other cytokines. While some challenges exist globally in the research-funding arena, both in academia and the private sector, we are hopeful that the funding climate will soon improve. Our new Society will need to devote enhanced effort for research funding for its members, as well as awareness of science policy issues that impact the work of our members. With bright new investigators entering the cytokine and interferon fields from different paths and backgrounds, and bringing with them new technologies and cross disciplinary approaches, we look forward to exciting new advances in the future.

With best wishes, **Chuck Samuel** *President, ISICR*

A LOOK AT THE HISTORY OF THE





by Bob Friedman

Reviewing in my mind the history of the ISICR (originally the ISIR) in preparing myself to write this short piece, I came to the conclusion that, all things considered it is a story of success. ISICR has, to a large extent, fulfilled the goals its members had for the organization. As stated in its constitution, these are to promote the exchange of knowledge in interferon and cytokine research through meetings, seminars, reports, and publications, and to initiate and participate in programs related to interferon and cytokine research. In addition, the ISICR has taken on the function of insuring that as many of its members as possible are able to attend its meetings. In carrying out its functions, and achieving these objectives, ISICR has managed to maintain a positive financial balance all during its history. Credit for the success of ISICR, I believe, is due to the leadership and the members of the organization. They have been unstinting in their input of time and effort in achieving its goals.

A LOOK AT THE HISTORY OF THE



Although the first meeting that was designated officially as an ISIR function was held in Rotterdam in 1983, it was hardly the first international meeting of scientists interested in interferon research. The credit for that has to go to a session organized by Jan Vilcek and held in 1964 at a rather spooky castle-like location near Bratislava in the then Communistruled Czech Republic. It was attended by a fair percentage of the handful of scientists at the time carrying out research on interferon along with some scientific notables in the fields of microbiology and infectious disease from the US, and Western and Eastern Europe. Attendees included Andre Lwoff, who was awarded a Nobel Prize two years later. It was the first opportunity for many of the early workers on interferon to get to know one another. The meeting was such a success that Jan was granted the privilege of spending a short vacation with his wife in Vienna, rare in Czechoslovakia at that time. They took this opportunity to continue their trip westward, ending up in New York City where they still reside. Thus, even the first international interferon meeting had some very positive, long-term effects.

From that time until the formal organization of the ISIR in 1982, interferon meetings were sporadic and invitations to them seemed capricious. A potential organizer would obtain funds from a pharmaceutical company interested in antiviral research, or from a government, and then put together a meeting, inviting the investigators who it was thought might contribute significantly to the meeting or were pals of the organizer. There was no review of submitted abstracts, but very often, depending on how much money the potential organizer had raised, funds were available to cover the costs of attendance by the invited investigators. Publication of submitted abstracts or of the meeting's proceedings was erratic. Such meetings, held in desirable locations about once year, began to be noticed by the scientific community, and consequently interferon research acquired the reputation of being rather frivolous and of ambiguous merit. At a meeting of The Infectious Disease Advisory Committee of the NIAID I attended in the early 1970s, a distinguished specialist in viral diseases asked whether people were still working on that stuff when the question of whether to support interferon research came up. Remember that in 1980, it had only recently been realized that there were several interferons, none of which had been purified, or cloned, and it was still respectable to believe that antiviral activity was the only biological effect of interferons.

What really sustained the limited interest in interferons in the 1970s and early 80s was a belief that they would eventually prove to be effective antiviral agents, which indeed they did become. This hope was sustained at that time by the production of small amounts of partially purified human interferon in the laboratory of Kari Cantell in Helsinki. Cantell's interferon was used in studies by Tom Merigan with moderate success in the treatment of some viral infections, notably Hepatitis B. In 1974 there was a report (later shown to be flawed) from Sweden that Cantell's interferon was effective in treating cancer patients. This paper prompted great interest in interferons as possible cures for a wide range of tumors, and in response Matilde Krim organized a meeting in New York City in 1975 to increase the level of enthusiasm for the field. The possible anticancer properties of interferons discussed in this meeting were critical, I believe, in moving several leading laboratories into successful efforts to clone the interferon genes.

All of this rather amorphous structure began to be organized at a meeting in 1982 when Bill Stewart suggested the formation of an ISIR and the initiation of the publication by the society of The Journal of Interferon Research. These propositions had a somewhat mixed reception for two major reasons. Many members of the group felt that the new journal and organization would separate interferon scientists to some extent from the mainstreams of research in virology, cell biology, and immunology. Also, although he had a fine record as an investigator, Bill Stewart's character had a rather clouded reputation. Despite the reservations that some investigators had, however, Stewart's suggestions carried the day, and the ISIR and the JIR were born with Bill as its first President and as first Editor-in-Chief of the journal. Plans were made for a first formal meeting of the organization in Rotterdam in 1983. By the time of the second meeting in Heidelberg, a constitution for the organization had been adopted, and a two year length of office for the presidency had been established. The first full-term president was Ed de Maeyer. Stewart took over as Secretary of the organization in 1985, but by 1988 the position was very capably assumed by Sid Pestka, who held the job until 2006 with the exception of 1984-85, the term of Sid's presidency. Ernest Knight served as ISIR's first Treasurer.

A LOOK AT THE HISTORY OF THE



The organization of meetings became more formal with submission of abstracts, and their publication in the JIR. The selection of platform speakers became more of a committee decision rather than depending on the sole caprice of the organizer of the meeting. The Meetings Committee, under the enthusiastic leadership of Kathy Zoon, and later of Chris Czarniecki, began to take a greater role in the planning and financing of meetings. Due to the administrative efforts of the Meetings Committee and of the organizers of the individual meetings, the ISICR was often able to use to whatever profit was accrued from the meetings to further its goals.

By the time of the 1989 meeting in Florence the growing importance of the cytokines was recognized by the organization, its name was changed from ISIR to ISICR, and the title of the journal, from JIR to JICR; in the same year the ICS was formed. Prior to the 1994 meeting in Budapest, Howard Young edited the first issue of The Interferon Newsletter, a regular publication that has proven to be invaluable to the members of the ISICR. By 1996, the administrative and accounting paperwork of the ISICR had become too complex for the Secretary and the Treasurer to continue to undertake, and most of this responsibility was transferred to FASEB, with oversight still residing in the elected officers of the society. It had become quite clear in 1996 that the aims of ISICR and ICS to a large extent coincided, and it made no sense for both organizations to compete by running meetings at separate sites and times, so the first joint meeting of these societies was organized in Geneva that year. The joint meetings have been resounding successes both scientifically and financially for the two organizations.

The first of the Honorary Member Awards was given at the 1984 Heidelberg meeting to Jean Lindenmann and Yasuti Nagano, who might rightly have been considered at the time the original, still- living interferon investigators. In 1988 the first Milstein Award for outstanding research on interferon, initiated by Mr. Seymour Milstein in memory of a dear friend who had carried out research on interferon, was awarded to Tadatsugu Taniguchi. Mr. Milstein had made initial contact with Sid Pestka, and they developed a close

relationship as Mr. Milstein was very intrigued by interferon and its possible clinical use. The Milstein Family, including Seymour's wife Vivian and son Philip, have continued to finance this award every year since, and has in addition contributed significant amounts to the society in the form of travel grants. In recognition of their generosity, ISICR hosted a dinner to honor Mr. and Mrs. Milstein at the 1997 annual meeting in San Diego. Luckily, I was able to obtain funds for this affair from an independent foundation. The timing of this dinner was fortunate as Mr. Milstein died just a few years later.

An additional society award, the ISICR Distinguished Service Award, was in initiated at the 2010 meeting in Chicago. Howard Young and Sid Pestka, whose contributions to the society were previously noted, were its first recipients.

The Awards Committee ably run by Paula Pitha-Rowe, later by Kathy Zoon and Bob Silverman and now by Bob Silverman has carried on the laborious task of selecting the recipients of the Milstein and other awards. Committees of the ISICR also dealt and continue to deal with Nomenclature and Standards relating to interferons. The Proceedings of these committees are recognized internationally. In 1994 Norman Finter and I, during my 1996-7 presidency, urged the society to form an Archives Committee to collect information relating to the early years of interferon research at a time when most of those who had participated were still living. The records collected are now housed at The Wellcome Foundation for the History and Understanding of Medicine at the Wellcome Foundation in London.

The success of the joint meetings of ISICR and ICS naturally led to a movement in both societies to amalgamate, forming a new organization tentatively to be named The Cytokine and Interferon Society. This year the membership of both societies overwhelmingly supported their unification. So, in a way this piece is intended to celebrate the life and honorable demise of ISICR, and to subject it to an autopsy (I am after all a pathologist). Let us hope that the resurrected ISICR in the form of the CIS is at least as successful an entity as were its two precursor organizations.



We welcome these new members to the ISICR and the CIS. We look forward to their attendance at the annual meeting and to their participation on society committees and in future satellite meetings.

Kaveh Abdi

NIH/NIAID Bethesda, MD

Jeonghyun Ahn

Univ of Miami School of Medicine Miami, FL

Jean-Laurent Casanova

The Rockefeller Univ New York, NY

Jorge Cervantes

Univ of Connecticut Health Ctr Farmington, CT

Java Prakash Chalise

Linkoping Univ Linkoping, Sweden

Jorgen Dahlstrom

Phadia Uppasla, Sweden

Carlo De Salvo

Case Western Reserve Univ Shaker Heights, OH

Patrizia De Sarno

Univ of Alabama at Birmingham Birmingham, AL

Hadar Eini

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Sarah Fardy

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Karin Fink

CRCHUM St. Luc Montreal, Canada

Luis Giavedoni

Texas Biomedical Research Inst San Antonio, TX

Jessica Grieves

The Ohio State Univ Columbus, OH

Ai Harashima

Univ of Miami Miami, FL

Mikkel Ibsen

Aarhus Univ Arhus V, Denmark

Chao Jiang

Natl Inst of Arthrits & Musculoskeletal And Bethesda, MD

Jarrat Jordan

Janssen Research and Development LLC Radnor, PA

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Istituto Clinico Humanitas Rozzano, Milano Italy

Mi Jin Lee

Ajou Univ School of Medicine Suwon, Kyeonggi-do Korea, Rebublic Of

Jieliang Li

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Stefan Lienenklaus

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Helene Minyi Liu

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Mark Livingstone

Institut Pasteur Paris, France

Arun Mankan

Univ of Bonn Bonn, Germany

Takumi Maruhashi

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Gordon Miller

Cell Signaling Technology Danvers, MA

Claudia Nold

Monash Inst of Medical Research Clayton, VIC Australia

Karen O'Connell

USAMRIID Fort Detrick, MD

Rebecca Piganis

Monash Inst of Medical Research VIC Australia

NEW ISICR MEMBERS continued

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Univ of Alabama at Birmingham Birmingham, AL

Ulfert Rand

Helmholtz Ctr for Infection Research Braunschweig, Germany

Elena Riboldi

Univ of Eastern Piedmont Amedeo Avogardro Novara, Italy

Gretja Schnell

Univ of Washington Seattle, WA

John Schoggins

The Rockefeller Univ New York, NY

Suresh Sharma

Pennsylvania State Univ University Park, PA

Clare Slaney

Peter MacCallum Cancer Ctr East Melbourne, VIC Australia

Evgenia Solodova

Helmholtz Centre For Infection Research Braunschweig, Germany

Mehul Suthar

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Nancy Vazquez

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Sonia Ventura

Instituto Gulbenkian de Ciencia Oeiras. Portugal

Gijsbert Versteeg

Mount Sinai School of Medicine New York, NY

Uwe Vinkemeier

University of Nottingham Nottingham, United Kingdom

Sen Wang

Shanghai Med College of Fudan Univ Shanghai, China

Evelyn Zastepa

McGill Univ Montreal, QC Canada

New Member MINIBIOs Contributed by Thomas Tan



Dr. Jean-Laurent CasanovaRockefeller University

Dr. Jean-Laurent Casanova received his M.D. from the University of Paris Descartes in 1987 and his Ph.D. in immunology from the University of Paris Pierre and Marie Curie in 1992. In 1999 he was appointed a professor of pediatrics at Necker, where, with Dr. Abel, he cofounded and co-directed the Laboratory of Human Genetics of Infectious Diseases. He was appointed professor at Rockefeller in 2008. Dr. Casanova studies the human genetic determinism of pediatric infectious diseases. He is interested in identifying monogenic "holes" in the immune defense of otherwise healthy children, who are susceptible to specific infectious diseases, work that has profound implications for and has resulted in a paradigm shift in clinical medicine and fundamental immunology. His team has deciphered the molecular genetic basis of various pediatric infectious diseases, including mycobacterial diseases (mutations in *IFNGR1*, *IFNGR2*, *STAT1*, *IL12B*, *IL12RB1*, *NEMO*, *IRF8*, *CYBB*), invasive pneumococcal disease (*NEMO*, *IKBA*, *IRAK4*, *MYD88*), herpes simplex encephalitis (*UNC93B1*, *TLR3*, *TRAF3*, *TRIF*), and chronic mucocutaneous candidiasis (*IL17F*, *IL17RA*, *STAT1*). For more information please visit: http://www.rockefeller.edu/research/faculty/abstract.php?id=323.

New Member MINIBIOs continued



Dr. Jörgen DahlströmThermo Fisher Scientific, Immuno Diagnostics

Jörgen Dahlström, Ph.D., MBA, is Scientific Director of Pharmaceutical and Healthcare Collaborations (PHC) at Thermo Fisher Scientific, Immuno Diagnostics. In his area of responsibility apart from being scientific director he is managing all of the PHC global strategic marketing activities including scientific support directed to the Biopharmaceutical industry and Healthcare collaborations. Dr Dahlström field of expertise is antibody regulation and measurement of antibodies and their diagnostic use. He is a member of the ISICR International Cytokine Standards Committee. He has a PhD in Immunology from Uppsala University where he studied the regulation of antibody responses and the specific involvement of immunoglobulins and their receptors. Dr Dahlström joined Pharmacia (later Phadia and now Thermo Fisher Scientifc) in 2001 and had since then held several positions including Senior Scientist and Research Manager for early development. Further, he has an Exceutive MBA from the Swedish School of Management.



Dr. Patrizia De SarnoUniversity of Alabama at Birmingham

Dr. De Sarno received her scientific training at the University of Firenze, Firenze, Italy. After completing her doctoral studies under the mentorship of Dr. Giancarlo Pepeu, she became a post-doctoral fellow at Southern Illinois University, School of Medicine, in Springfield, Illinois, USA. Dr. De Sarno is now an Assistant Professor in the Department of Psychiatry and Behavioral Neurobiology. Her research investigates the inflammatory events that lead to neurological damage in neurodegenerative and psychiatric diseases, with a particular emphasis in multiple sclerosis (MS), and the role of glycogen synthase kinase-3 (GSK3), a serine-threonine kinase important in the regulation of cell activation, cell cycle, apoptosis, and the production of cytokines during inflammation. Dr. De Sarno's research demonstrated a prophylactic and therapeutic effect of lithium, a GSK3 inhibitor, and a drug used in the treatment of mood disorders for many years, in the MS mouse model of experimental autoimmune encephalomyelitis (EAE). Recovery from EAE in lithium treated mice was associated with reduced demyelination, microglia activation, infiltration of inflammatory cells in the spinal cord, and altered levels of IFN-γ, IL-6, and IL-17. Dr. De Sarno's current work focuses on the modulating effect of lithium in EAE, analyzing signaling pathways and cell target/s responsible for its action.

New Member MINIBIOs continued



Chander Raman, Ph.D.University of Alabama at Birmingham

Dr. Raman's research focuses on immunopathologic mechanisms in autoimmunity with a major emphasis on multiple sclerosis (MS) and systemic lupus erythematosus (SLE). His research group investigates the cytokine networks involved in the progression and regulation of inflammation in MS and SLE. Dr. Raman and his colleagues recently made the major discovery that MS, based on a cytokine signature, broadly stratifies into a Th1-type or a Th17-type of disease. Importantly, patients with a Th1 disease will respond very effectively to IFN- β therapy and those with Th17 type of disease are likely to be non-responders. Dr. Raman's current studies focuses on the cross-talk between type I and type II IFNs in neuroinflammation and the Janus–like effects of IFN- γ in the pathogenesis of systemic autoimmunity. Dr. Raman obtained his Ph.D. degree from the Southern Illinois University followed by postdoctoral fellowship in the laboratory of Dr. Katherine Knight at Loyola University Stritch School of Medicine in Chicago, IL. He is now Professor of Medicine and Microbiology.



Suresh D. Sharma, Ph.D.The Pennsylvania State University

Suresh Sharma received his Ph.D. in Life Sciences at the University of Mumbai, India. Subsequently he joined the Department of Genetic Engineering at the Cancer Research Institute (now ACTREC) in Mumbai, where he was awarded a prestigious research associateship from the Council of Scientific and Industrial Research (CSIR). At Case School of Medicine at Case Western Reserve University, he investigated the role of peptidylglycinealpha amidating monooxygenase (PAM), an important enzyme involved in neuropeptide maturation during sleep apnea. More recently, Dr. Sharma has been working in the virology field, on hepatitis C and Influenza viruses. Dr. Sharma's work has revealed that the specific protein in HCV, the non-structural protein 5A (NS5A) is an RNA binding protein. He is also interested in understanding mechanisms by which viruses evade innate immune response. In collaboration with the CDC he has published interesting work showing that the 3' untranslated regions of Influenza genomic sequences are 5'PPP-independent ligands for RIG-I.



Cytokines & Cells Online Pathfinder Encyclopaedia

http://www.copewithcytokines.de/

Created, developed, and maintained by Prof Dr H Ibelgaufts Version 29.0 (Spring/Summer 2012 Edition) 29,000+ entries/pages | 77,250+ cited references | 963,000+ internal hyperlinks

dbDEPC 2.0

http://lifecenter.sgst.cn/dbdepc/index.do

dbDEPC 2.0 now contains over 4000 protein entries, curated from 331 experiments across 20 types of human cancers. This resource allows researchers to search whether their interested proteins have been reported changing in certain cancers, to compare their own proteomic discovery with previous studies, to picture selected protein expression heatmap across multiple cancers and to relate protein expression changes with aberrance in other genetic levels.

doRiNA: a database of RNA interactions in posttranscriptional regulation

http://dorina.mdc-berlin.de/rbp_browser/hg18.html

Within doRiNA, we are systematically curating, storing and integrating binding site data for RNA Binding Proteins and miRNAs. We have implemented a database framework with short query response times for complex searches (e.g. asking for all targets of a particular combination of regulators). All search results can be browsed, inspected and analyzed in conjunction with a huge selection of other genome-wide data, because our database is directly linked to a local copy of the UCSC genome browser. At the time of writing, doRiNA encompasses RBP data for the human, mouse and worm genomes

FunCoup

http://FunCoup.sbc.su.se

FunCoup is a database that maintains and visualizes global gene/protein networks of functional coupling that have been constructed by Bayesian integration of diverse high-throughput data. FunCoup achieves high coverage by orthology-based integration of data sources from different model organisms and from different platforms.

GeneSigDB

http://www.genesigdb.org

GeneSigDB is a database of gene signatures that have been extracted and manually curated from the published literature. It provides a standardized resource of published prognostic, diagnostic and other gene signatures of cancer and related disease to the community so they can compare the predictive power of gene signatures or use these in gene set enrichment analysis. Users can analyze GeneSigDB gene signatures, or upload their own gene list, to identify gene signatures with significant gene overlap and results can be viewed on a dynamic editable heatmap that can be downloaded as a publication quality image. All data in GeneSigDB can be downloaded in numerous formats including .gmt file format for gene set enrichment analysis or as a R/Bioconductor data file.

GeneWeaver

http://www.GeneWeaver.org

GeneWeaver, powered by the Ontological Discovery Environment, is a curated repository of genomic experimental results with an accompanying tool set for dynamic integration of these data sets, enabling users to interactively address questions about sets of biological functions and their relations to sets of genes. Thus, large numbers of independently published genomic results can be organized into new conceptual frameworks driven by the underlying, inferred biological relationships rather than a pre-existing semantic framework. An empirical 'ontology' is discovered from the aggregate of experimental knowledge around user-defined areas of biological inquiry.



Continued

GenomeView: a next-generation genome browser

http://genomeview.org/

GenomeView, a stand-alone genome browser specifically designed to visualize and manipulate a multitude of genomics data. GenomeView enables users to dynamically browse high volumes of aligned short-read data, with dynamic navigation and semantic zooming, from the whole genome level to the single nucleotide. At the same time, the tool enables visualization of whole genome alignments of dozens of genomes relative to a reference sequence.

Henry Stewart Talks

http://hstalks.com/

New Series Added: Cytokines

Prof. Luke O'Neill - Trinity College Dublin - *Toll-like receptor signalling during infection and inflammation*

Prof. Tadamitsu Kishimoto - Osaka University - *Interleukin-6:* back to the future

Prof. Angel Lopez & Dr. Timothy Hercus - Centre for Cancer Biology - *The b common (bc) family of cytokines, receptors and ligands*

Dr. Richard Siegel - National Institutes of Health-Bethesda - *TNF superfamily cytokines and receptors in the healthy and diseased immune system*

Dr. John Sims - Amgen Corp - *An introduction to the interleukin-1 family of cytokines*

Dr. Raphaela Goldbach-Mansky - National Institute of Arthritis and Musculoskeletal and Skin Disorders - I*L-1 as a key inflammatory regulator in autoinflammatory diseases*

Prof. Leonidas Platanias - Northwestern University - *Signaling* for the interferon family of receptors and ligands and clinical implications

Prof. Eleanor Fish - University of Toronto - *Interferons as antivirals: translating basic research into clinical application* **Dr. Joost J. Oppenheim** - National Cancer Institute - *Receptor identification for alarmins and DAMPs*

Prof. Theresa Whiteside - University of Pittsburgh - Assays for cytokines and cytokine assay standardization

MetaBase-the wiki-database of biological databases

http://MetaDatabase.Org

MetaBase (MB) is a community-curated database containing more than 2000 commonly used biological databases. Each entry is structured using templates and can carry various user comments and annotations. Entries can be searched, listed, browsed or queried. The database was created using the same MediaWiki technology that powers Wikipedia, allowing users to contribute on many different levels.

Online GEne Essentiality (OGEE)

http://ogeedb.embl.de

OGEE is an Online GEne Essentiality database. Its main purpose is to enhance our understanding of the essentiality of genes. This is achieved by collecting not only experimentally tested essential and non-essential genes, but also associated gene features such as expression profiles, duplication status, conservation across species, evolutionary origins and involvement in embryonic development. Genes are organized into data sets according to their sources. Genes with variable essentiality status across data sets are tagged as conditionally essential, highlighting the complex interplay between gene functions and environments.

SNPeffect database

http://snpeffect.switchlab.org

The SNPeffect database uses sequence- and structure-based bioinformatics tools to predict the effect of protein-coding SNVs on the structural phenotype of proteins. It integrates aggregation prediction (TANGO), amyloid prediction (WALTZ), chaperone-binding prediction (LIMBO) and protein stability analysis (FoldX) for structural phenotyping. Additionally, SNPeffect holds information on affected catalytic sites and a number of post-translational modifications. The database contains all known human protein variants from UniProt, but users can now also submit custom protein variants for a SNPeffect analysis, including automated structure modeling.



Continued

TranscriptoNet

http://207.150.202.175/

TranscriptoNET is an open-access, online resource developed by Kinexus Bioinformatics Corporation to foster systems proteomics research in academia and industry. It features comprehensive information on the mRNA expression levels of about 23,000 genes in about 600 types of human organs, tissues and cells as measured with gene microarrays. The original data used in TranscriptoNET was retrieved from the National Center for Biotechnology Information Gene Expression Omnibus (NCBI GEO), which serves as a repository of experimental gene microarray results submitted by diverse academic and industrial laboratories around the world. With the aid of our academic collaborators, Kinexus has normalized the data from over

900 different studies with over 6000 biological specimens to permit investigations of gene expression and potential interactions that can only be undertaken with such a large dataset of over 125,000,000 gene expression measurements. This normalization process was based on the identification of 60 genes that were commonly and highly expressed in all of the biological samples.

In the selection of human specimens for inclusion in TranscriptoNET, we have paid special interest to human tumours and cancer cell lines to identify the differential regulation of genes in cancer. We believe that this can uncover new potential oncogenes and tumour suppressor genes that may encode cancer protein biomarkers and drug targets. We invite the biomedical research community to use TranscriptoNET as a powerful tool for discovery of genes that are uniquely or commonly expressed throughout the human body, and to uncover possible functional interactions amongst the 23,000 proteins encoded by the human genome based on their co-expression patterns. The differential expression of genes determines the structures and biochemical activities in cells that define their physiological functions. TranscriptoNET could also be used to aid researchers in understanding how the body's diverse organs, tissues and cells may be developmentally related.

It was Greek to Me!!!!!

A prominent Greek member of the ISICR wanted to correct the Greek spelling of "cytokines" as the word listed in the last newsletter was wrong. Accuracy is important so here is the correct spelling:

cytokines = κυτταροκίνες

REVIEWS OF INTEREST

Balkwill FR. **The chemokine system and cancer.** *J Pathol.* 2012 Jan;226(2):148-57.

Becher B, Segal BM. **T(H)17 cytokines in autoimmune neuro-inflammation.** *Curr Opin Immunol.* 2011 Dec;23(6):707-12.

Berry CM, Hertzog PJ, Mangan NE. Interferons as biomarkers and effectors: lessons learned from animal models. Biomarkers in Medicine In press, 2012.

Fuschiotti P. **Role of IL-13 in systemic sclerosis.** *Cytokine*. 2011 Dec;56(3):544-9.

González-Navajas JM, Lee J, David M & Raz E. Immunomodulatory functions of type I interferons. *Nature Reviews Immunology* 2012 Jan 6;12(2):125-35.

Korkaya H, Liu S, Wicha MS. Regulation of cancer stem cells by cytokine networks: attacking cancer's inflammatory roots. *Clin Cancer Res.* 2011 Oct 1;17(19):6125-9.

Krüttgen A, Rose-John S. Interleukin-6 in sepsis and capillary leakage syndrome. *J Interferon Cytokine Res.* 2012 Feb;32(2):60-5.

Lasfar A, Abushahba W, Balan M, Cohen-Solal KA. Interferon lambda: a new sword in cancer immunotherapy. *Clin Dev Immunol.* 2011;2011:349575.

Parker D, Prince A. **Type I interferon** response to extracellular bacteria in the airway epithelium. *Trends Immunol.* 2011 Dec;32(12):582-8.

Petermann F, Korn T. Cytokines and effector T cell subsets causing autoimmune CNS disease. *FEBS Lett.* 2011 Dec 1;585(23):3747-57.

Schmitz ML, Weber A, Roxlau T, Gaestel M, Kracht M. Signal integration, crosstalk mechanisms and networks in the function of inflammatory cytokines. *Biochim Biophys Acta*. 2011 Dec;1813(12):2165-75.

Sadik CD, Luster AD. Lipid-cytokine-chemokine cascades orchestrate leukocyte recruitment in inflammation. *J Leukoc Biol.* 2012 Feb;91(2):207-15.

Smale ST. **Transcriptional regulation** in the innate immune system. *Curr Opin Immunol.* 2012 Feb;24(1):51-7.

Verbeke H, Struyf S, Laureys G, Van Damme J. **The expression and role of CXC chemokines in colorectal cancer.** *Cytokine Growth Factor* Rev. 2011 Oct-Dec;22(5-6):345-58.

Wang BX, Fish EN. **The yin and yang of viruses and interferons.** *Trends Immunol.* 2012 Feb 7. [Epub ahead of print] PMID: 22321608

Ware CF. The TNF receptor super family in immune regulation. *Immunol Rev.* 2011 Nov;244(1):5-8.

Wilke CM, Wei S, Wang L, Kryczek I, Kao J, Zou W. **Dual biological effects of the cytokines interleukin-10 and interferon-**γ. *Cancer Immunol Immunother*. 2011 Nov:60(11):1529-41.

Wojno ED, Hunter CA. **New directions** in the basic and translational biology of interleukin-27. *Trends Immunol.* 2012 Feb;33(2):91-7.

An Interview with...



Article of special interest

Manry J, Laval G, Patin E, Fornarino S, Itan Y, Fumagalli M, Sironi M, Tichit M, Bouchier C, Casanova JL, Barreiro LB, Quintana-Murci L. **Evolutionary genetic dissection of human interferons.** *J Exp Med.* 2011 Dec 19;208(13):2747-59. Epub 2011 Dec 12.

Personal comments about this work from Lluis Quintana-Murci, senior author

What was your original hypothesis when you started this work?

My original hypothesis was that we wanted to understand why we do have so many type I IFNs...if in theory they should be doing the same thing. We were wondering if all of them were equally (evolutionary) important. Working with gene families is always exciting, and we wanted to study the evolutionary patterns of IFNs to learn about their biological "relevance".

What has surprised you the most?

Some observations were "expected", like the strong conservation of IFNG....it is the only one fulfilling that job, so if the job is important...the molecule will be conserved. A surprise was the extremely contrasting patterns observed for type I IFNs...some are almost intact, with no mutations changing the amino acid sequence...while others can accumulate missense even nonsense mutation at high population frequencies. This clearly showed that some are essential while others are redundant and expendable. This also allowed us to identify those that seem to play the most essential role (at least today). It was also interesting to find

the signatures of positive selection in type III IFNs for some mutations that we know today protect against HCV infection. This was an interesting proof of concept for the other mutations under positive selection and for which the functional consequences are unknown (in IL29 and IL28A). Thus they may have an important role as yet unidentified.

What was the greatest technical challenge?

It was really difficult to amplify type I IFNs...they display a very high sequence identity and the possibility of doing nonspecific amplifications was high. The setup of specific PCRs for each of them was very challenging. Also, the identification of gene conversion events was not at all an easy task!

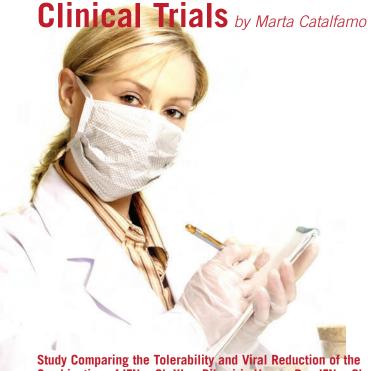
Where are you going with this?

We are trying to understand what's the functional role of the mutations under positive selection in IL29 and IL28A. Understanding why IFNA6/8/13/14 are the most "evolutionary relevant" is much more challenging.



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Study Comparing the Tolerability and Viral Reduction of the Combination of IFN a-2b XL + Ribavirin Versus Peg IFN a-2b + Ribavirin in Patients With Chronic Hepatitis C, Genotype 1 or 4

Principal Investigator: Christian Trepo, MD

Contact: Christian TREPO, MD. Hôpital de la Croix Rousse, Service d'Hépato-Gastro-Entérologie, 69004 Lyon – FRANCE

christian.trepo@chu-lyon.fr

ClinicalTrials.gov Identifier: NCT01010646

Y- Shaped Pegylated Interferon (YPEG-IFN α -2a) Plus Ribavirin in Egyptian Patients With Untreated Chronic Hepatitis C

Principal Investigator: Mohamed Karim f Ashour, MD **Contact:** Mohamed Karim f Ashour, MD. Kasr Alaini School of

Medicine Cairo, Egypt, 11559

drmkarim@gmail.com

ClinicalTrials.gov Identifier: NCT01327729

Open-Labeled Study of PSI-7977 and RBV With and Without PEG-IFN in Treatment-Naïve Patients With HCV GT2 or GT3

Principal Investigator: Ed Gane, Assoc. Prof Auckland

Clinical Studies Ltd.

Contact: Fiona Mackay, BSc. fiona.mackay@beltas.com

ClinicalTrials.gov Identifier: NCT01260350

Pilot Study of IFN α 2b for Melanoma Patients

Principal Investigator: Ahmad A Tarhini, MD. University of

Pittsburgh

Contact: Ahmad A Tarhini, MD

tarhiniaa@upmc.edu

ClinicalTrials.gov Identifier: NCT00871533

Pharmacokinetics and Pharmacodynamics of the Interferon Beta-1a Produced by Laboratorio Quimico Farmaceutico Bergamo Compared to Interferon Beta-1a (Rebif - Merck Serono) in Healthy Subjects

Principal Investigator: Alexandre Frederico

Contact: Alexandre Frederico, Lal Clinica Pesquisa E

Desenvolvimento Ltda

Valinhos, SP, Brazil, 13270000 dr.alexandre@alclinica.com.br

ClinicalTrials.gov Identifier: NCT01074593

Interferon-Gamma in Subjects With Specific Gene Mutation in Chronic Granulomatous Disease

Principal Investigator: Benjamin P. Soule, M.D, National Institute of Allergy and Infectious Diseases, National Institutes of Health

Contact: Patient Recruitment and Public Liaison Office

prpl@mail.cc.nih.gov

ClinicalTrials.gov identifier: NCT01147042

Study to Assess Safety and Efficacy of Anti-Interleukin 6receptor (IL6R) Nanobody in Rheumatoid Arthritis (RA) Patients

Principal Investigator: Josefin-Beate Holz, MD. Ablynx NV

Belgiur

Contact: Recruitment Center – 003292620000

clinicaltrials@ablynx.com

ClinicalTrials.gov Identifier: NCT01284569

Improving the Immune System With Human IL-7 Vaccine in Older Subjects Who Have Had Chemotherapy

Principal Investigator: Claude Sportes, M.D./National Cancer

Institute, National Institutes of Health

Contact: NCI-Referral Office 1-888-NCI-1937

ClinicalTrials.gov identifier: NCT01339000

Efficacy and Safety of IL-11 in DDAVP Unresponsive (IL-11 DDAVP Un)

Principal Investigator: Margaret V. Ragni, MD, MPH.

University of Pittsburgh

Contact: Margaret V. Ragni, MD, MPH

ragni@dom.pitt.edu

ClinicalTrials.gov Identifier: NCT00994929

Safety of and Immune Response to an Investigational HIV-1 Vaccine With or Without Interleukin-12 (IL-12) in HIV-1 Infected Adults

Principal Investigator: Jeffrey Jacobson, MD. Division of Infectious Diseases and HIV Medicine. Drexel University

College of Medicine

Contact: Jeffrey Jacobson, MD

ClinicalTrials.gov Identifier: NCT01266616

Safety Study of IL-21/Ipilimumab Combination in the Treatment of Melanoma

Principal Investigator: Bristol-Myers Squibb

Contact: Bristol-Myers Squibb

ClinicalTrials.gov Identifier: NCT01489059





At the heart of the Vilcek Foundation mission is our awards program; it is through the presentation of the Vilcek Prizes and the Creative Promise Prizes each spring that we most directly fulfill our guiding purpose, to raise public awareness of the outstanding contributions of foreign-born scientists and artists living and working in the United States. And so, as we prepare in earnest for our seventh annual awards dinner, to be held this year on April 2, it is with great pride and genuine pleasure that we introduce you to our four 2012 prize recipients, each of whom is a stellar addition to the Vilcek Foundation "alumni."



Mikhail Baryshnikov

As the recipient of the 2012 Vilcek Prize in the Arts – this year recognizing the field of dance – our jury chose the man known the world over as "Misha." From his first appearance on an American stage, in 1974, Mikhail Baryshnikov literally thrilled audiences, bringing them to their feet night after night and making ballet tickets as hard to come by as those for championship sporting events. Not content to rest on his laurels, which are plentiful, this Renaissance man has never stopped extending his reach, both in the dance world and throughout the arts community. Today, he continues to perform, dancing and acting, and oversees the Baryshnikov Arts Center, in New York City.



Carlos Bustamante, PhD

Carlos Bustamante, PhD, is our 2012 recipient of Vilcek Prize for Biomedical Science. The Foundation's science jury selected him in recognition of his groundbreaking research into the inner workings of the cell and for inventing tools to study life-sustaining cellular processes at the level of single molecules. In breakthrough experiments he devised, the Lima, Peruborn scientist showed it is possible to visualize and manipulate single molecules of DNA, RNA and protein inside cells. As an HHMI Investigator today, Dr. Bustamante continues to develop novel methods of single molecule manipulation; his dream is to one day build a living cell from mitochondria.





Alice Ting, PhD

Michel Kouakou

The Creative Promise Prizes, established by the Foundation in 2009 to honor earlier-stage career achievement, this year we present to Alice Ting, PhD, in Biomedical Science, and Michel Kouakou, in Dance. Taiwan native Dr. Ting was raised in Texas, where an early interest in math was supplanted by a passion for organic chemistry. Cited by the science jury in particular for her dedication to solving the problem of specific protein functioning, through site-specific protein labeling, today she is Associate Professor with Tenure, at MIT, where she heads her own lab and plans to "tackle other extremely important and difficult problems at the chemistry-biology interface." Mr. Kouakou, chosen by the Creative Promise arts jury for his creative use of dance to build bridges of cultural understanding worldwide, is from Ivory Coast. He "speaks" the language of dance from Africa, Asia, Europe, and America, though his dance aesthetic remains firmly rooted in Africa, the source of his earliest experiences with, and studies in, movement.

Because the Creative Promise Prize is a competitive award—applicants are required to submit essays, letters of recommendation, and examples of their best work—we also ask our juries to select winners of four finalist awards in both the Biomedical Science and Arts categories. This year's finalists in Biomedical Science are: Konrad Hochedlinger, PhD, Andreas Hochwagen, PhD, Benjamin tenOever, PhD, and Songhai Shi, PhD. The 2012 finalists in Dance are: Fanny Ara, Thang Dao, Alice Gosti, and Pontus Lidberg.

In reviewing the extraordinary accomplishments of this year's Vilcek Prize and Creative Promise Prize winners, Dr. Jan Vilcek, President, also took note of the Foundation's own achievements in the seven years since the initiation of the awards program, with an eye on the future. "Even as our efforts have become more widely recognized," he said, "we feel the import of our mission more intensely. For every foreign-born scientist and artist we pay tribute to, in the form

of these prizes, we never forget there are thousands more all over this country who also deserve acknowledgment, even if it is just from the communities where they live and work. It is with that knowledge that we recommit ourselves each year to spreading the word about the immigrant contributions to American science and culture."

Each of the Vilcek Prize winners receives a \$100,000 cash award and a commemorative trophy, designed by Stefan Sagmeister. The Creative Promise Prize winners are awarded \$25,000 and a commemorative plaque, also designed by Mr. Sagmeister. The Creative Promise finalists each receive a \$5,000 cash award and a diploma. The Vilcek Foundation is most grateful to the members of the four juries that selected the 2012 prizewinners.

The 2012 Vilcek Foundation awards will be bestowed during a special ceremony to be held in New York City on April 2.



DONTOLOGY CORNER

YELL-SELL OR THE ART OF ABSTRACT MAINTENANCE

An essay on publishing by Horst Ibelgaufts

COPE - Cytokines & Cells Online Pathfinder Encyclopedia 29,000+ pages of fully referenced communication biology www.copewithcytokines.org

Prof H Ibelgaufts, Biocommunication/Immunobiology Consultant

Market vendors often shout out their goods. This kind of Yell-Sell is strict to the point. In a way, scientific findings are not very different from the goods in the markets. We have spent a lot of time, efforts, and money in obtaining our results and it is only fair and judicious that we should try to sell our data as best we can. Often we don't. The difference between market vendors and scientists is that scientist don't yell out their goods (well, mostly), AND they are often not really strict and careful about what they say in their abstracts.

The following are examples taken from scientific abstracts that I have encountered during my work as a dictionary maker. This list of Don'ts (hence dontoloy; I am old-fashioned enough NOT to call it dontomics) will illustrate that common sense and discipline often go awry and make life difficult for everyone. Given the fact that abstracts are not only a visiting card/entry portal to our work and of prime importance as substrates of data mining, this lack of attention and consideration we give to abstracts is most astonishing. Many more examples and references can be found on my website (www.copewithcytokines.org - the entry term in this encyclopaedia is Zzzz ... zzzz ... zzzz). There is no particular order in my selection (I have my favorites, though). Drop me a line if you come across other noteworthy specimens.

Be brief, I ask you

- 1123 out of 1772 characters in the abstract taken up by an explanations of acronyms used
- almost 50 % of the abstract text taken up by references Chokingly, I refrain from making any comment on this

Long live Acronymania

- try to query a databank to find follow-up articles dealing with MICE. The same goes for LIGHT, DARK, LICE, ICE, TACTILE, to name just a few.
- my all-time favourite is UGF [unidentified growth factor] I wonder how many of us do quick-and-dirty freetext pubmed searches without bothering to use MESH terms (we

don't trust the indexers, don't we, and often there are things out there that are of importance to us but simply fall through the MESH indexing net. Why not check databanks before creating a new acronym that already has multiple other meanings. Do we want to be funny or do we want to be found?

Broader views are a bloody nuisance

 hematopoietic cells, brain cells, liver cells, gut cells, glial cells, blood cells, leukocytes, lymphocytes, granulocytes etc etc et blah cetera

Thanks for giving me a broader view by using such collective terms. Now you know why police officers cringe when they are being told by the witness that the "bank robber got away with a car". Period. If we can't be more precise the broader views don't really help. I mean, there are markers for practically all of these cell types. (Do we not have the funds anymore to employ them? Are we too unscientifically lazy? Did the paper just HAVE to get out?)

Hey-you nomenclature

• nIL-1F [novel IL-1 family]

"It is a sad truth, but we have lost the faculty of giving lovely names to things. Names are everything" says Oscar Wilde in his 'The Picture of Dorian Gray'.

Nebulous or not so nebulous irrelevancies

• 'the relevance or significance of the reported findings will be discussed'.

Surely, something of significance not stated explicitly in the abstract cannot be of that much significance?

Called to the bar

 reports of serum levels of cytokines, growth factors, or interleukins, etc etc with data presented in a bar diagram with error bars and no mention of the real figures in the entire publication

Now this is one thing that positively makes me cringe.

I suppose printing out the graph, magnify it by photocopying and applying a ruler as best as you can will give you a crude estimate, of course. Always makes me wonder whether the reviewers ever had a closer look at the manuscript.

Déjà vue

surprising observation

I have seen abstracts reporting such observations Indeed, I am surprised when I realize that the same surprising observation was made in the same lab (and published) some years earlier.

• identical abstracts

Yes. In two different journals with a bit of exon shuffling among the authors. What was that about 'publish or perish'?

Inverse linguistic insults

- factor XYZ expression is inversely correlated ... correlation with whatever (lethality, mortality, malignancy), or negatives (repression, inhibition, downregulation) sounds frightfully learned. There are many ways to make this much clearer.
- 'receptor expression correlated reciprocally with an ongoing unresponsiveness to receptor agonists'

Maybe I am the stupid one. I admit that my command of English is so poor that I have to read the statement several times to understand its implications

A guess in time saves nine?

• 'factor XYZ modulates/affects/influences (expression or something else, cell functions, etc)'

Three of the most uninformative words in a scientific abstract that I can think of and worthy of politicians who want to say something without showing colour. Whatever effect there is, it is either positive or negative (increases, decreases, shortens, prolonged, etc etc). This should be made clear by using appropriate terms.

- 'Opposite regulation of tissue factor expression by calcineurin in monocytes and endothelial cells'

 To me this sounds like a newspaper headline: 'President and Opposition leader shot. One dead.'
- 'we have studied the expression of a wide range of proand anti-inflammatory cytokines and their receptors...'

 I am sure that two lines would have sufficed to name the cytokines studied.
- "chemoattractant expression induced by cytokines" and then you find out that the article is only about the effects of IL1 on the expression of MCP-1

A knife without a blade from which the handle is missing

• her plasma histidine-rich glycoprotein level was only 21 % of the normal level of 109.5 ± 51.5 % (mean +/- 2 SD)' What? micrograms, milligrams, grams? Per what?

Whodunnits

- 'expression of hepatocyte growth factor is induced by the interaction between human mesangial cells and monocytes'
- 'Interaction between human monocytes and vascular smooth muscle cells induces vascular endothelial growth factor expression'.

Why keep me wondering which cell type does what?

Pomposity

• 'cytokine-stimulated human Müller cells' obviously a title like this adds more weight even though the only cytokine studied was IL1-beta

Vanity Fair

I have no respect for people who, without necessity, invent a new name (cartonectin) for something that has already a given name (cartducin) and is known also under other names.

Or should I just lean back and say 'who cares?' After all, another dictionary entry for the factor-collecting lexicologist.

When in Rome do as the Romans do?

I am old-fashioned. Numbers are numbers and letters are letters. I positively loathe Roman numerals. Designations containing them should be banned from biomedical literature.

Get a free drink if you read my paper 1

 "Since these tissues consist of a variety of cells, we sought to identify the primary cell(s) responsible for LGR7 expression and relaxin responsiveness"

Well, if the abstract containing this sentence does not qualify for an entry here, nothing does.

- 'the marker spectrum of these cells will be described' *And why not mention this in the abstract?*
- 'a number of cytokine mRNAs are expressed de novo' oh well, we all know that there are only a few cytokines anyway. So an educated guess cannot be far from the truth, right?
- 'Obvious differences were observed in proteinases' expression pattern between the investigated cell types.' Well, three different cell types and quite a few peptidases were studied. These are all listed in the Methods section of the abstract. It would have been much more informative had they been listed with the cell types.

Get a free drink if you read my paper 2

One of the memories I have from the time of being a budding frustrated PhD student (having switched from bacterial genetics to virus-induced brain tumours) is that postdoctoral fellow in the lab who would not answer my questions but just told me to read her paper. I did, only to find another reference in the Materials & Methods section of

her publication to describe a tyrosine hydroxylase assay. I got that publication also. Needless to say that it referred to yet another publication. To cut it short: the last publication in the chain cited the assay as "so and so, personal communication".

To be or not to be

• 'Is the effect of IL1 on glutathione oxidation in cultured human fibroblasts involved in transcription factor NFkappa-B activation?'

Well, is it? Why use a question mark in the title when the abstract states that there is no effect?

• Is the transient secretory response of chromaffin cells due to inactivation of calcium channels?' the abstract tells you that it isn't

I always wonder if Isaac Newton ever considered publishing his findings under the title 'Do all apples fall if dropped?'

Saying one thing but meaning another

- 'Expressions of CD1a and CD83 of Langerhans cells in the local lesions of epidermodysplasia verruciformis patients' sounds all ok before you discover that the abstract states that no CD83(+) Langerhans cells are detected
- 'functional analysis and expression of CXCR1 and CXCR2 on human eosinophils'

Nice title. Only, the abstract clearly states that the two receptors are NOT expressed by these cells either before or after cytokine stimulation.

• 'Expression of stem cell factor and c-kit mRNA in cultured endothelial cells, monocytes and cloned human bone marrow stromal cells'.

Increasingly, I find, article titles following such a pattern have a meaning that deviates from normal English usage, which would suggest that all cells mentioned express all factors. Reading the abstract one frequently finds out that some cells do, other don't express one or the other of the factors mentioned. Hence the meaning of such phrases is "We studied the expression of blah blah blah but you have to read the abstract (or worse: the article) to find out who expresses what"

• 'Detection of this and that in so and so cells' says the title. The abstract tells you explicitly that this and that is NOT detected.

Respectively yours

'Mean ± SEM values in patients with grade 0 (n=23), grade 1 (n=12), grade 2 (n=14), grade 3 (n=16), and grade 4 (n=9) were 4.50 ± 0.46, 9.10 ± 1.0, 12.98 ± 1.22, 21.51 ± 2.63, and 58.26 ± 19.7 pg/mL, respectively'

No comment really. Oh well, one glance at the sentence and you have the full picture, eh?

Don't include me

• ... 'including MMP-1, MMP-3, MMP-5, MMP-11, and MMP-13'

Phrases like this always make me wonder whether the authors wanted to say "those are the only metalloproteinases we found" or, if not, why they did not name the other factors that, presumably, were expressed also.

Find me if you can

• '... can be induced in vitro, by coculture with a stromal line and a mixture of interleukins 3, 6, and 7, to differentiate into T-lymphocyte (Joro75(+)) and B-lymphocyte (B220(+)) progenitors and other hemopoietic precursors.' Surely, sentences such as the one above, can be rephrased conveniently to facilitate freetext searches in databanks. Mentioning the stromal cell line by name would have been much more informative. IL3, IL6, IL7 are lost in a freetext search. The same goes for searches for T-cells and B-cells. The point is that one cannot rely on all these terms having been incorporated into the MeSH indexing of the article.

Prefixed fix

• mEGF, hIAP, rlan-5 etc

Many prefixes have a variety of meanings other than referring to species. I'd rather NOT use such designations in an abstract

Brazen it out

Expression array information are often a disgrace. Tables often give you just the gene symbol, all which we know by heart, of course. I get truly mad when authors are too lazy to provide the one and only reliable bit of information: the databank accession number! The same goes for authors who present jpg images for their expression profile data and only list the gene symbol. Equally maddening: supplementary tables with all the expression information as a pdf file with tables on umpteenth pages in portrait mode. One up: AND one cannot copy/paste.

Publish and damn the publishers

I observe that publishers are quick in establishing inline links from their online publications to providers of biological reagents, "buy this article at Infotrieve" buttons, and other entities, selling us our own articles. Probably they call this functionality and "service".

I hazard the opinion that we, as scientists, would like to see quite different functionalities provided by online publications. Full citations, for one thing.

I always wonder why scientists have not rebelled at all against the stupidity of having umpteenth forms of reference formats (I know makers of citation managers will hate this) Surely, it would not hurt publishers much to make available, through PubMed, at least articles dealing with nomenclature issues. After all, the academic proletariat (a.k.a. the scientific community) mostly pays to have their results published.

A Note from FOCIS

(Federation of Clinical Immunology Societies)

Dear FOCIS Member Society Representatives,

Thank you for confirming your societies' interest in submitting clinical trials for aggregation in the FOCIS ePublication, *Translational Immunology Update*.

Trials may be submitted online at http://translationalimmunology.pbworks.com/Clinical-Trial-Contributions. Please see the sample submission format below.

Citation	Disease	Study design: Phase 1 or Phase 2	Drug	Safety and/or efficacy outcome of interest to FOCIS community	•	Submitted by
Pescovitz, et al, NEJM Nov 26, 361;22: 2143-2152, 2009 [PMID: 19940299].	Type 1 diabetes	Placebo controlled, double masked Phase 2	Rituximab, anti-CD20	Preservation of beta cell function No major safety concerns	Anti B cell therapy appears similarly efficacious to anti-T cell therapy in early onset type 1 diabetes	Carla Greenbaum MD (Benaroya Research Institute, Seattle, WA) cjgreen@bneaoyares earch.org

We look forward to your contributions. Please contact us with any questions.

Kind regards, Sarah



Improving human health through immunology June 20-23 in Vancouver, BC, Canada

Sarah J. Martis, CAE Associate Executive Director, FOCIS

Federation of Clinical Immunology Societies 11950 W Lake Park Dr Ste 320 Milwaukee, WI 53224 ph 414.359.1670 fx 414.359.1671 www.focisnet.org

LEAP YEAR

Did you know that 2012 is a Leap Year? For the first time since 2008, February had 29 days.

A leap year has 366 days instead of the usual 365 days. An extra day is added in a leap year—February 29 —which is called an intercalary day or a leap day. Leap years are added to the calendar to keep it working properly. The 365 days of the annual calendar are meant to match up with the solar year. A solar year is the time it takes the Earth to complete its orbit around the Sun—about one year. But the actual time it takes for the Earth to travel around the Sun is in fact a little longer than that—about 365 ¼ days (365 days, 5 hours, 48 minutes, and 46 seconds, to be precise). So the calendar and the solar year don't completely match—the calendar year is a touch shorter than the solar year.

Julius Caesar was behind the origin of leap year in 45 BC. The early Romans had a 355 day calendar and to keep festivals occurring around the same season each year, a 22 or 23 day month was created every second year. Julius Caesar decided to simplify things and added days to different months of the year to create the 365 day calendar, the actual calculation were made by Caesar's astronomer, Sosigenes. Every fourth year following the 28th day of Februarius (February 29th) one day was to be added, making every fourth year a leap year.

In 1582, Pope Gregory XIII further refined the calendar with the rule that leap day would occur in any year divisible by 4 as described above. A century year cannot be a leap year unless it is divisible by 400. Thus 1700, 1800, and 1900 were not leap years, but 1600, 2000, and 2400 are leap years. Infoplease.com

The staff of the Scientific Library is observing Leap Year 2012 by recognizing the many amazing scientific accomplishments that occurred during past Leap Years. For example,

- > In 1600, William Gilbert observed that the Earth behaves as if it has a magnet inside it.
- > In 1620, Francis Bacon published his famous work Novum Organum.
- > In 1676, Antony van Leeuwenhoek discovered bacteria using his newly-created microscope.
- In 1752, Benjamin Franklin's kite experiment demonstrated that lightning is an electrical phenomenon.
- > In 1784, Henry Cavendish reveals the composition of water in his paper "Experiments on Air."
- In 1844, Samuel Morse sent the first message using Morse Code.
- > In 1856, Gregor Mendel began his genetics research.
- In 1880, the American Association for the Advancement of Science (AAAS) published the first issue of the journal *Science*.
- In 1912, Casimir Funk introduced the concept of vitamins.
- In 1964, Michael Epstein, Bert Achong, and Yvonne Barr published the first journal article describing the Epstein-Barr virus.
- In 1972, the first public demonstration of ARPAnet, a precursor of the Internet, occurred.
- > In 1996, Dolly, the first cloned sheep, was born.
- In 2000, U.S. President Bill Clinton announced the rough draft of the Human Genome Project.

We wonder what wonderful scientific accomplishments will occur in Leap Year 2012? Information provided courtesy of the NCI-Frederick Library, Frederick, MD USA

ISICR AWARDS: CALL FOR NOMINATIONS



Seymour Milstein (1920-2001)

The Seymour and Vivian Milstein Award for Excellence in Interferon and Cytokine Research

commonly known as The Milstein Award, represents the pinnacle of scientific achievement in interferon and cytokine research. The Milstein Award is bestowed upon a leading biomedical research scientist who has made outstanding contributions to interferon and cytokine research, either in a basic or applied field. Many laureates have made seminal advancements that have enabled the successful treatment of disease or have the potential to lead to significant health benefits for humanity.

The Milstein Young Investigator Awards

ISICR members who attend the 2012 ISICR/ICS meeting in Geneva and who have received a Ph.D or M.D. within the previous 8 years are eligible. Every year up to five awards are granted to individuals who have made notable contributions to either basic or clinical research. This award is provided by

a generous gift of the Milstein Family. We urge every eligible individual to apply for the awards. ISICR members may apply themselves or nominate other members for Milstein Young Investigator Awards. A CV and letter of recommendation should accompany the application. We also ask more senior laboratory advisers to encourage their associates to apply.

The Milstein Travel Awards

ISICR members who attend the annual meeting are eligible for Travel Awards. They are provided through a grant from the Milstein Family based on the scientific merit of the abstract and financial necessity. However, this award does not exempt payment of the registration fee. A CV should accompany the application for this award. Please note that there are no age restrictions to this award. However if both senior and junior members from the same laboratory apply for an award, preference is given to the junior member.

The Christina Fleischmann Award to Young Women Investigators

The rules for this ISICR award are the same as for the Seymour and Vivian Milstein Young Investigator Award (see above) except for gender and the candidate must have received a Ph.D or M.D. degree within the previous 10 years. This award is made possible through the generosity of the Fleischmann Foundation and is dedicated to the memory of ISICR member and outstanding interferon research scientist Christina Fleischmann

The Sidney & Joan Pestka Graduate and Post-Graduate Award for Excellence in Interferon Research Sponsored by PBL InterferonSource

The Sidney & Joan Pestka Graduate and Post-Graduate Awards are targeted to graduate students and post-doctoral fellows who have begun to make an impact in interferon research. The Awards are designed to fill the gap among the awards currently offered by the ISICR to more senior investigators—The Seymour and Vivian Milstein Young Investigator Award, the Christina Fleishmann Award, Honorary Membership, and The Seymour & Vivian Milstein Award.

ISICR AWARDS: CALL FOR NOMINATIONS coninued

Candidates must be actively working in interferon research but need not be ISICR members. This is an annual award. and a recipient may receive an award only once. However, an individual who receives the Graduate Award remains eligible for the Post-Graduate Award. One award will be given to a graduate student and one award to a post-doctoral fellow where candidates of suitable caliber are identified. In years where a suitable candidate is not identified, an award will not be bestowed. Awards application package consists of a nomination form completed by an active ISICR member (NOT the nominee). Applicants should submit a statement describing his/her current interferon-related research, as well as a curriculum vitae. Additional supporting materials, such as posters and publications, are welcome. No proprietary or confidential information can be included in the application.

The Journal of Biological Chemistry/Herbert **Tabor Young Investigator Award**

The Journal of Biological Chemistry/Herbert Tabor Young Investigator Award will be presented at the Joint ISICR and ICS meeting in Geneva. The award, that includes a crystal award and cash prize, honors Herb Tabor, who served for 40 years as the distinguished Editor in Chief of The JBC, and recognizes a young investigator who exemplifies Herb Tabor's values of creativity and scientific excellence. The award will be made to a Geneva meeting participant based on the excellence of their presentation. Postdoctoral researchers and junior faculty members who have not yet received tenure are eligible.

Honorary Membership

Nominees should be individuals who have made substantive contributions to the interferon/cytokine field over much of their careers, either in basic, clinical or applied research. Honorary members are the treasures of the society and provide us with an historical perspective and valued research tradition.

ISICR Distinguished Service Award

The ISICR will on occasion bestow this honor on an ISICR member who has made an extraordinary contribution to the society. The individual will have devoted significant time and energy over a period of years to elevating the goals of the society in furthering research on interferon, cytokines and chemokines.

2012 Seymour and Vivian Milstein Award, ISICR Distinguished Service Award and ISICR Honorary Membership Award Nominations should be sent by June 1, 2012 to:

Dr. Charles E. Samuel President, ISICR c/o Lisa Hetherington, FASEB isicr@faseb.org

Nominations received by the President for these Awards will be passed on to the Chair of the Awards Committee in June. This committee will carefully consider all of the applications and vote for those applicants most qualified for the awards. As specified in the ISICR Bylaws, the final vote of the Awards Committee is subject to the approval of the ISICR Board of Directors.

For other Awards, applications should be made through the meeting website www.cytokines2012.com

CYTOKINES 2012: Important Dates and Deadlines

Opening of Registration: 15 February 2012

Opening of Abstract Submission: 15 February 2012

Closing of Abstract Submission: 11 May 2012,

Midnight, CET

Early Registration deadline: 11 May 2012

Free App: Cytokines 2012

Available now in both Apple and Android versions



Reagents available from the Developmental **Studies Hybridoma Bank**

I bring to your attention newly banked monoclonals against fusion protein tags that have been recently contributed to the DSHB. These monoclonals and select hybridomas are of the highest quality and can be purchased at cost. See our catalog online at our website: http://dshb.biology.uiowa.edu.

New Fusion Protein Tag Monoclonals				
Name	Antigen	Name	Antigen	
P2F3	green fluorescent protein (GFP)	P1A12	glutathione-S-transferase	
40-1a	beta-galactosidase	P2F1	maltose-binding protein (MBP)	
9E 10	с-тус	P5A11	6X His peptide	
AMV-3C2	avian myoblastosis virus	P5G12	wheat germ agglutinin (WGA)	
JIE7	beta-galactosidase	fluorescein	fluorescein isothiocyanate	

Best regards, David R. Soll, Director Developmental Studies Hybridoma Bank, an NIH National Resource University of Iowa, Department of Biology, 028 BBE Iowa City, Iowa 52242-1324

Phone: 319 335-1117 Phone: 319 335-3826 Fax: 319 335-2077 Email: dshb@uiowa.edu

LETTER TO THE EDITOR: CORRECTIONS ABOUT FLORENCE

A note from Ferdinando Dianzani



Dear Howard,

A few days ago I received the ISICR Newsletter, Vol 18.2. Nice as ever, but this time it contained a sentence with which I have some disagreement. To support my response, let me point out that often I have been considered in our scientific community as a "philosopher" because of my humanistic approach to the other side of life. So, I was surprised in reading the "Quick Facts about Florence", that the Medici Family was considered "infamous". This was a bit shocking, as in fact we are talking here of the main initiators and supporters of the Italian Renaissance.

The fortune of the family started with Giovanni dei Medici (1360-1429) who decided to invest most of the profits gradually accumulated by his ancestors, mostly merchants, in founding a bank, the famous Banca Medici. He was clever enough to expand the Bank to the point that it became the "Bank of the Popes". When he died, he left the whole fortune to his first son Cosimus, later known as Cosimus the Elder, who soon showed to be a manager even more skillful than his father. He made the bank one of the most important in the world, doing business with the Popes and with most of the Courts and Governments ruling in Europe at that time. However, he was aware that possessing so much money could be dangerous in terms of envy by the other leading families in Florence and he decided to enhance his popularity by financing an enormous amount of artwork. In order to acquire political support for his activities, but he did not ask for any official credit in exchange for his generosity.

Nevertheless, his suspicions were well founded; in fact, due to false accusations of wrongdoing on his part by members of the Albizi Family (another of the prominent families in Florence), he had to leave the city. However less than a year later the Florentines realized which kind of man they had banished and Cosimus triumphantly returned to Florence. When he died (1464) he was acclaimed as the "founding father" and he is now considered as the pioneer of the tremendous artistic and cultural movement known as the "Italian Renaissance".

His son and nephews became Signori (heads) of the town and continued Cosimus's liberal philosophy, not only towards arts, but also in political management and economic success. The most famous was of his descendants, Lorenzo (1449-1492), was called "The Magnificent". Besides being a great political leader, he was also an excellent poet and a promoter and strong supporter of the arts. In fact, he was able to attract artists to Florence such as Michelangelo, Botticelli, and many others. To his considerable credit, he also favored their work elsewhere, e.g. in Rome, thus expanding the Florentine Renaissance to the rest of the world. Moreover, his love for arts and literature, including philosophy and other expressions of the human soul, made him one of the first nurturers of the cultural movement now called "Humanism".

After Lorenzo's death, other members of the Family ruled the town, increasing its beauty and prestige. During this period, the Medici's gave Italy two (good) Popes, Leon the tenth and Clement the seventh. Pope Leon managed to move to Rome both Raphael and Michelangelo, thus greatly enhancing the artistic splendor of the city. Among the females of the Medici Family, two became Queens of France and these women used their political skills to heighten the "grandeur" of Florence.

The apex of the Medici was reached with Cosimus the second who, by building a strong political and military power, conquered the whole of Tuscany. Florence became the Capital of the Grand Ducate of Tuscany that, through political maneuvering with Spain, France, and Austria, became one of the leading courts in Europe. His successors continued Cosimus's liberal philosophy not only in the arts, but also in politics and economics. Thus the Grand Dukes kept the traditional magnificence of the culture without oppressing their citizens. This lasted up to the point when the Family started its personal debacle, from the mid-600s, till the early 700s when the family finally collapsed.

Obviously we have to keep in mind that the Middle Age still had some reminiscence of its pragmatic philosophy and that modern ethics was still a long time away. However, considering what is now going on in many parts of our world, I can frankly say that I would not object to being governed today by such "infamous" leaders

Happy New Year to all friends and readers,

Ferdinando Dianzani

ISICR COMMITTEES MINUTES



ISICR Board of Director's Meeting

October 9, 2011 Firenze, Italy

Attending:

Charles Samuel Tom Hamilton Robert Silverman Ganes Sen Howard Young

- The primary discussion was about the pending merger and what issues were causing concern from the ISICR side. These concerns were to be related to the ICS in the joint BOD meeting
- 2. There was discussion about providing greater authority to the Meetings Committee with respect to the logistics of meeting organization (website, common organizer, etc). It was agreed that a common website for all future meetings as well as having the same people involved in organization and fund raising from year to year, beginning in 2013, would be highly desirable.
- 3. Bob Silverman presented 3 requests from the Awards committee. A motion to provide a \$1000 travel award to the Distinguished Service Awardee was discussed and approved. Two additional recommendations from the Awards Committee (see minutes from the Awards Committee) were deferred pending resolution of the vote on merging with the ICS.

Respectfully submitted, **Tom Hamilton**Secretary, ISICR

ISICR Awards Committee Meeting Minutes

10:00 am – 11:30 am Sunday October 9, 2011 SALA 4, Pallazzo Dei Congressi, Firenze, Italy

Attending:	Absent:
Robert Silverman (Chairperson)	Takashi Fujita
Ganes Sen	Eleanor Fish
Peter Staeheli	
Nancy Reich	
Dhan Kalvakolanu	
Paul Hertzog	
Bryan Williams	

Review of 2010 awards

In 2011 \$60,000 (Milstein Family) and \$10,000 (PBL InterferonSource) was received in support of the ISICR Awards. Amounts of the Milstein Travel Awards (a total of \$44,350 to 70 individuals, an average of \$634 each) were based on the quality of the abstracts and the distance the person had to travel.

The awardees (other than travel awards) were:

The Seymour and Vivian Milstein Award for Excellence in Interferon and Cytokine Research: Douglas Hilton

Honorary Member: Ara Hovanessian

Distinguished Service Award: Philip Marcus

Milstein Young Investigator Awards:

Volker Fensterl, Cleveland USA Ole J. Hamming, Aarhus, Denmark Yueh-Ming Loo, Seattle, USA Mehul S. Suthar, Seattle, USA Gils A. Versteeg, New York, USA

Christina Fleischmann Award to Young Women Investigators: Claudia A. Nold-Petry, Clayton, Australia

The Journal of Biological Chemistry/Herbert Tabor Young Investigator Award:

Niamh E. Mangan, Clayton, Australia

The Sidney & Joan Pestka Graduate and Post-Graduate Award and Post-Graduate Award for Excellence in Interferon Research (Sponsored by PBL InterferonSource). This year the Awards Committee reviewed and selected the winners. Postgraduate: John W. Schoggins, New York, USA Student: Nicole L. Messina, East Melbourne, Australia

Discussion of Milstein Award criteria

A review of the criteria for the Milstein Award was done based on historical information supplied by Howard Young. The award can be given to individuals working on interferon and/or other cytokines provided that exceptional contributions were made in either a basic or applied field. Awardees must be members of the ISICR.

Other business

There were three motions that were voted on. (All motions are subject to approval by the Board of Directors).

Motion 1: Travel awards should be offered to recipients of the Honorary Membership and Distinguished Service awardees depending on availability of funding. The motion was unanimously passed.

Motion 2: Recipients of the Milstein Young Investigator Awards, the Christina Fleischmann Award, the Tabor Awards and the Pestka Awards should have a separate table at the banquet if possible to allow them to interact. The motion was unanimously passed.

Motion 3: It was proposed that those who served as President of the ISICR not be required to pay for membership in the ISICR. The motion passed with a vote of 8 in favor and 1 abstention.

It was also suggested that there should be an open nomination process for the Milstein Award.

Respectfully submitted, Robert Silverman Chair ISICR Awards Committee

Joint ISICR/ICS Meetings Committee Minutes

October 9, 2011 Firenze, Italy

The meeting was called to order on Sunday, October 9, 2011. The meeting was well-attended. The following voting members represented the ISICR: Paul Hertzog, John Hiscott, Santo Landolfo, Nancy Reich, Chuck Samuels, Michael Tovey and Committee Co-Chair Christine Czarniecki. The following voting members represented the ICS: Alberto Mantovani, Luke O'Neill, Amanda Proudfoot, Stefan Rose-John, Nancy Ruddle, John Schrader, Gordon Duff and Acting Committee Co-Chair (for Carl Ware) David Wallach. A quorum of voting members was present. Also attending were the following invited guests: Brendan Jenkins, Cem Gabay, Sarah Gaffen, Sherwood Reichard, Bryan Williams, Kingston Mills, Linda Burkly.

2010 - Chicago, Illinois USA



Leon Platanias (ISICR) was not able to attend this meeting. The final report that he provided to each of the Societies summarized the 2010 Chicago Joint ISICR/ICS meeting. The meeting titled "Cytokines in Infectious Diseases, Autoimmune Disorders and Cancer" took place at the Hyatt Regency on Chicago's "Magnificent Mile", October 3-7, 2010. The final number of registered attendees was approximately 600 with the largest number of attendees coming from the United States. The final accounting indicated that each Society received: (i) a refund of the \$20,000 provided by each Society as seed funds; and (ii) a profit of \$60,000 each. The Committee thanks Leon, and his organizing committees for their efforts towards a meeting that was both scientifically and organizationally successful.

2011 - Florence, Italy

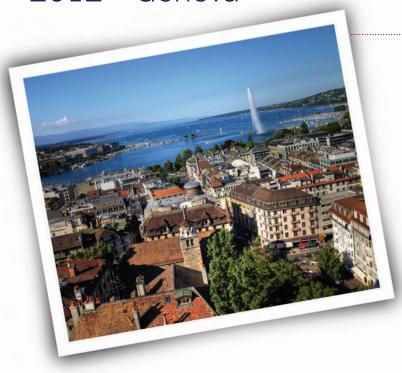
Santo Landolfo (ISICR) presented the update report of the current 9th Joint ISICR/ICS Conference titled "Cytokines and Interferons: from the bench to the bedside" (Firenzi Fiera, Florence, Italy on October 9-12, 2011). The Committee thanks Santo and his organizing committees for their efforts as we look forward to a scientifically stimulating meeting in a beautiful city. Santo indicated that the estimated total number of attendees is 600, broken down as 500 paying registrants and the organizers estimate a current deficit of 8-9000 Euros. They hope to be able to reduce that deficit with the final accounting and they are planning to make adjustments to cut costs where they can during the conference. The status report indicates that there was an increase in the number of students attending this meeting and while it is good to see an increase in student attendance, a concomitant decrease is full paying registrations has led to a decrease in overall income.

The organizers also noted a significant decrease in participants from Japan, in comparison to previous years. There was some discussion that for future meeting planning the use of estimates of 700 attendees for budget planning may be too high, and future meeting organizers should decrease that estimate to 500-600. Another item discussed was the request for WIFI access for the length of the meeting. Santo made a request for 1000 Euros to cover this cost. Since representatives of the ISICR and ICS Board of Directors were present at this committee meeting, the decision was made to have the Societies split the cost. There was an excellent discussion of critical factors that influence individuals to come to scientific meetings and there was general agreement on the following factors: Interesting topics, the opportunity to present



one's work, and opportunities to interact with other scientific investigators. Obviously all of these factors should be considered by organizers when planning meetings. Two additional recommendations made in that discussion were: (i) the chairs of the yearly meetings should undertake to report regularly to the chairs of our societies about their progress in publicizing the meeting and raising money for it and of the rate of registration to the meeting. This will allow the chairs of the societies to provide assistance, when necessary; and (ii) the organizers of each yearly meeting should take care to forward to those of the pursuant meeting all those details that can help them in planning (e.g. the list of the donors that contributed to their meeting).

2012 - Geneva



Cem Gabay (ICS) presented an update on the planning for the 10th Joint ISICR/ICS Conference which will take place in Geneva, Switzerland on September 11-15, 2012. The scientific theme for this conference is "Cytokines: From Basic Biology to Clinical Application." The Organizing Committee has been established with Cem Gabay as the Chair and Amanda Proudfoot as Co-Chair.

The current working budget is based on expense estimates of 620,000 Swiss Francs and income estimates of 634,500 Swiss Francs (current exchange rate is Swiss Franc vs US Dollar = 1:1). The organizers have received seed funds of \$20,000 (US) from each society (ICS and ISICR). Cem presented the following registration fee structure: Students 350-500 CHF; Academia 600-850 CHF; Industry 750-1100.

There was significant concern raised by committee members that the European Immunology Conference will take place September 5-8, 2012 in Glasgow Scotland and may therefore have a negative impact on attendance at our meeting. The committee recommended that the organizers review their working budgets in light of the possibility of fewer registrants and focus on the challenges of keeping the costs down.

2013 – San Francisco, CA, USA

Sarah Gaffen presented an update on the planning for the 2013 Joint Society Conference in San Francisco, California, USA. The dates are Sunday, September 29 – Thursday, October 3, 2013 and it will take place at the Hyatt Regency, Embarcadero located in the heart of San Francisco, California. A scientific organizing committee has been established with the following members: Warren Leonard (NIH, USA); Sarah Gaffen (University of Pittsburgh, USA); Robert Schreiber (Washington University, USA); and Karen Mossman (McMaster University, Ontario Canada). The proposed budget was based on approximately 700 registrants and 50 invited speakers. This budget estimated needed income of \$581,000 for equal expenses and included proposed registration fees ranging from \$350 for students to \$800 for Industry nonmembers. The Committee strongly recommended that the organizers review their working budget based on the previously-discussed meetings.



2014 - Melbourne, Australia



Brendan Jenkins re-summarized the proposal that he and Paul Hertzog have made in previous Joint Meetings Committee Meetings and emphasized that this meeting needs to be organized as a joint meeting with both Societies supporting it. The proposed dates are October 26 – 30, 2014 and the proposed venue is the Melbourne Convention and Exhibition Centre which is located on the banks of the Yarra River in central Melbourne. The plan is to reserve a block of rooms at the Hilton Hotel.

The Organizers have obtained a confirmed commitment of AUD\$65,000 / USD\$61,465 from Melbourne Convention & Visitors Bureau (MCVB), and Melbourne Convention & Exhibition Centre (MCEC). Assistance with the strategic planning and professional running of the conference will be provided by ASN Events, an Australian-based company with over 15 years of experience at successfully costing, managing and organizing conferences, scientific meetings and public events ranging in size from 100 to 25,000 participants, throughout Australia and overseas. Brendan agreed to revise the working budgets for an estimate of 500 registrants based on earlier discussions. There was some discussion of travel costs to Australia from various parts of the globe and Brendan showed some current airfares which, all agreed, seemed reasonable.

Beyond 2014

There was some discussion of the need for new proposals for meetings beyond 2014 and all agreed that the message needs to be communicated to the membership of the societies. Anyone interested in submitting a proposal should contact Christine Czarniecki or Carl Ware and a copy of the Meetings Proposal Guidelines will be provided to them.

Summaries of Other Meetings:

The committee meeting attendees agreed that it is useful to get an idea of other meetings being sponsored by each of the Societies and with that in mind, brief reports for the following meetings were presented:

- 2010 Midyear Clearwater Conference (IL-1 Family of Cytokines) – Cem Gabay – 109 registrants and 24 speakers; and resulted in a profit of \$26,000.
- 2011 Prato Satellite Meeting October 13-14, 2011– (Interferon Stimulated Genes and their Protein Products) – Bryan Williams – estimated 80-90 registrants.
- 2012 Midyear Dublin Conference June 18-21, 2012 (IL-17 and related Cytokines: Basic Biology and Clinical Applications) - Kingston Mills - 25 speakers confirmed.
- 4. 2013 International TNF Meeting July 2013 Quebec City Linda Burkly. This will be the 14th in the series of biennial

international conferences about the TNF family, yet the first to be run under the auspices of the ICS society, with the plan of having all pursuant meetings in this series also run under the auspices the ICS. As with the other mid-year ICS-supported meetings, this TNF meeting received \$20,000 (US) as seed funds from the ICS that will be returned to the society. The ICS agreed that any profit that the meeting, beyond the surplus remaining from the prior TNF meeting, will be distributed half to the ICS and half to the TNF Conference.

There was no other business to discuss and the Meeting was adjourned.

Respectfully submitted,

Christine Czarniecki

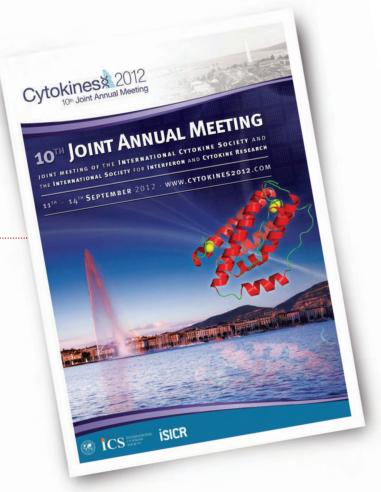
Co-Chair of the Joint ISICR/ICS Meetings Committee

Cytokines 2012 Geneva, Switzerland Sept. 11-14, 2012

Dear Meeting Attendees,

We would like to welcome you to the 10th Joint Annual Meeting of the International Cytokine Society (ICS) and the International Society for Interferon and Cytokine Research (ISICR), which will take place in Geneva in 2012. The objective of the meeting is to promote interactions between scientists performing cutting-edge studies of the molecular mechanisms of cytokine function, signal transduction, and gene expression, and those working in drug discovery and in the clinic to translate this knowledge into novel therapies for human diseases. The therapeutic potential of targeting cytokines and of modulating their signaling pathways enforce the need for enhanced interactions between basic, translational, and clinical researchers. For this purpose, the sessions will include presentations of cutting edge basic science and clinical science both in plenary and concurrent sessions.

The broad themes proposed will incorporate basic and clinical research on innate immunity, host-pathogen interactions, inflammation, autoimmunity, cell signaling, transcriptional and post-transcriptional gene regulation and tumor immunity. These themes are consistent with the well-recognized strengths of many of the world-class research institutions in Switzerland, as well as the research interests of both the ICS and ISICR societies. In addition, we have also included sessions focused on osteoimmunology, tissue repair, and the link between inflammation and metabolism.



In addition to this exciting scientific program we hope that you will take the time to visit Geneva and its beautiful countryside. Geneva is a lively international city located in the middle of Europe close to the Swiss and French Alps with many possibilities for pleasant day trips for those who wish to extend their stay after the meeting.

On behalf of all participants, we would like to express our gratitude to the meeting's Sponsors and Exhibitors. The dissemination of knowledge that takes place at such meetings and the interactions and collaborations that are established are essential for future advances in biomedical research. Successful meetings simply would not be possible without substantial support from corporations, foundations, and institutes.

We look forward to seeing you in what promises to be an exciting and timely meeting.

Cem Gabay *Chairman*

Amanda Proudfoot

Co-Chair

ISICR Membership Committee Meeting Minutes

October 9, 2011 Firenze, Italy

- Reviewed membership for 2010-2011 (attached). Noted that membership numbers remain stable.
- Discussion focused on recruitment of new members. One approach that has been discussed on several occasions is to review the literature (PubMed, key words: interferon, cytokine) every 6 months and identify authors of publications that are not Society members. A letter from the President to invite them to join ISICR. Action item: Given the commitments of the Membership Committee, the suggestion was made to approach FASEB to enquire what the fee would be to assume responsibility for screening the literature and collecting contact information on non-members.
- Action item: Circulate email to all member PIs to remind them that their trainees are invited to join the ISICR – with the associated benefit of travel awards to the Geneva Meeting in 2012.
- Howard needs help with the many duties he performs for the Society. Action item: effort has to be made to identify individuals willing to become involved with the Newsletter, website management (both ISICR and Milstein websites), slide repository, Meeting App, etc.

ISICR Nomenclature Committee Minutes

October 9, 2011 Firenze, Italy

Members present:

Antonina Dole, Isabelle Marie, Sergei Kotenko, Gideon Schneider, Erik Lundgren

AD was chosen to take the minutes. The minutes were distributed to the all members for information and input.

The minutes from the previous meeting (Chicago, October 2010) have been distributed. A letter responding to a request from the Hugo Nomenclature committee concerning the numbering of IFN genes with a specific Greek letter in different species has been formulated and sent.

A proposal from Dr Eva Wattrang, Swedish University of Agricultural Sciences, was discussed. A preliminary manuscript was presented on the genomic organisation of type I interferons in horse. Three gene sequences clustered to the IFN- $\alpha\omega$ group, a designation suggested by Krause and Pestka (2005) to be due to an ancestral fusion event. The cluster comprises members from cat, dog, sheep, hedgehog, marsupials, armadillo besides horse. So far only one member from pig in the cluster has been shown to be functionally active, based on an antiviral response on porcine and monkey cells, and on effect on Mx1 and IRF-7 expression (Sang et al., 2010). Dr Wattrang proposes that the designation IFN- $\alpha\omega$ should be changed to IFN- μ .

The committee referred to previous decisions that each case should be decided ad hoc, based on the data presented. So far genomic information has not been considered sufficient, thus receptor binding, signalling events, demonstration of functional activity of a protein is necessary (e.g. antiviral activity and at least one of the cell-modulating activities of the interferons). The committee acknowledges the claim by Dr. Wattrang of renaming

IFN- $\alpha\omega$ to IFN- μ , and decides that IFN- μ should be the putative designation, awaiting functional data.

Furthermore the committee discussed criteria for giving a cluster of IFN genes from different species a Greek letter. The committee decided that clustering should be based on a validated bioinformatics method, and the final decision should be based on functional data.

Previous information from Dr Herzog on genomic sequences from mouse, with the previous putative designation IFN- ϵ , was now complemented with functional data on receptor binding, antiviral activity and signalling along the type I signalling pathway. The committee decided that IFN- ϵ is an appropriate designation, thus the gene should be annotated IFNE and the protein IFN- ϵ .

The committee discussed its future in relation to potential plans to fuse ISC and ISICR. It was unanimously decided to recommend the board of directors to keep the present committee. This was based on the success of previous decisions (type III IFNs, and greek letter designations) as they have been accepted by the scientific community. Moreover, with expected more sequences coming up from more species, there is a need to formulate and maintain rules for designations, to avoid confusion and help scientific communication.

Respectfully submitted

Antonina Dolei, Erik Lundgren

ISICR Publications Committee Minutes

October 9, 2011 Firenze, Italy

Attending:	 Apologies:
Bryan Williams Chair	Karen Mos

Cassandra Berry
Deborah Vestal
Tom Hamilton, ex-officio
Ganes Sen. ex-officio

Karen Mossman Anthony Sadler

There were three agenda items:

- A report from the Editors on the Journal, "Interferon and Cytokine Research"
- The possible impact on the journal of a merger with the Cytokine Society
- Relationship of the Society with Mary Ann Leibert publishing company

Report from the Editors:

The journal has had more special issues and reviews that have helped to raise the impact factor from 1.6 to 2.57 within the last year. The rates of submission have remained steady. The chronic problem of the general membership and the members of the editorial board not submitting manuscripts to the journal remains a problem. It was suggested that more active dialogue with the publisher is needed in order to foster a more interactive and supportive relationship.

Questions of future directions to improve the journal were raised. For example, should the journal move to a format of only reviews? Should it increase the number of special issues? If not a format of only reviews, should it change to predominantly reviews with a few research papers? The primary question that must be answered is "what does the society want from this journal"? Is it serving the needs of the society?

An issue that currently demands a significant amount of time for the Editors is self-plagarism. Right now controlling for this problem is something that the Editors are responsible for. What

the journal policy constitutes as self-plagarism needs to be defined. It would also be helpful if the publishing company took more of the responsibility for this.

Impact of a merger:

Decisions will at some point need to be made about whether to maintain two official journals for the new merged society (if this happens) or to move to a single journal. It was pointed out that some societies "self publish" their own journals. As the societies move forward these issues will need to be resolved.

Relationship with Mary Ann Liebert:

It was suggested that there are some issues of the relative roles and boundaries between the Society and the publisher. This has made for some difficulties in the past. There is also an issue of lack of "institutional" memory of the publisher by the Society, especially regarding meetings.

On behalf of ourselves, and the general membership, the Publication Committee would like to thank Tom Hamilton and Ganes Sen for their tireless dedication to improving the Journal of Interferon and Cytokine Research and for their roles in raising the journal's impact factor this last year.

Respectfully submitted,

Bryan Williams

Chair, ISICR Publications Committee

ISICR Standards Committee Minutes

October 9, 2011 Firenze, Italy

Present:	:	Excused

Jorgen Dahlstrom Susan Kirshner (representing Amy Rosenberg) Robin Thorpe Michael Tovey (chair) Anna Costa-Pereira Huub Schellekens Martin Schiestl Steve Swanson Meena Subramanyam

The following topics were discussed:

1. New Cytokine Reference Preparations

Robin Thorpe, NIBSC, UK, submitted a report on new & replacement cytokine reference preparations.

Replacement standards

- G-CSF 2nd IS (09/236) Study completed; 13 labs from 9 countries (WHO ECBS Oct'10)
- IL-2 2nd IS (for endorsement by WHO ECBS-Oct'11)
- TNF- α 3rd IS (to be submitted to WHO ECBS-Oct'12)

2. New standards

- TGF-beta3, 1st IS (09/234). Study completed; 8 participants (for endorsement by WHO ECBS-Oct'11).
- IL-29 (2 candidate preparations lyophilised not pegylated), Collaborative study ongoing. Due to the limited number of participants likely to be a WHO Reference Reagent rather than IS (to be submitted to WHO ECBS-Oct'12)
- TNF soluble receptor II Fc fusion protein need identified as many manufacturers worldwide developing products; negotiations for procurement of material ongoing. Proposal for 1st IS to be submitted to WHO ECBS-Oct'12.
- IL-23 (1 candidate lyophilised, development of NIBSC ref reagent) - ongoing
- BLyS (1 candidate lyophilised, development of NIBSC ref reagent) - ongoing

3. Standards in development

Donations & Collaborations required Provision of Novel cytokines

- IL-21, IL-27 etc
- Provision of cytokines for replacement standards
- GM-CSF, IL-8
- Provision of Growth factors
- Placental growth Factor, soluble VEGFRI
- Provision of therapeutic antagonists/antibodies eg, TNF, VEGF
 ?
- Participation in Collaborative Studies
- TNF- α , TNF- α soluble receptor II Fc

Those interested in participating in the studies outlined above please contact: Meenu.Wadhwa@nibsc.hpa.org.uk

II. - Initiatives to promote the use of cytokine standards

The Committee discussed initiatives to promote the use of cytokine standards including the recent publication in the journals Cytokine, JICR, and JLB of an editorial outlining the role of the ISICR Standards Committee, the WHO, and the NIBSC in the establishment of international cytokine standards and reference preparations together with a list of reagents available from the NIBSC.

III. – Establishment of Standardized Assays and Reference Preparations for Human Anti-drug Antibodies

Patients treated with cytokines such as interferon-beta or growth factors such as erythropoietin may produce antibodies against the product that can adversely affect the efficacy of treatment. There is a need to standardize immunogenicity data obtained in different clinical studies using different drugs and different assays.

Ongoing initiatives:

- The establishment of a standardized neutralizing antibody assay for detection of antibodies against IFN-beta (EMA/CHMP/BWP/580136). The monoclonal anti-MxA antibodies required to undertake the ELISA for the detection of the MxA protein using the standardized assay will be made available in the near future by the NIBSC.
- Provision of antibody reference standard for the standardization of anti-galactosidase antibody assays (FASI Consortium – Huub Schellekens, Shire, Genzyme, NIBSC and clinical/academic groups). Collaborative study is to be initiated soon.
- The establishment of an antibody reference panel for the standardization of EPO antibody assays (WHO – ECBS proposal endorsed, Oct 2010). A panel of human antibodies of different characteristics (isotypes, affinities) for use as performance indicators for different EPO antibody assays is currently being established. Issues remain regarding the MTA.

New initiatives:

 Jorgen Dahlstrom, Thermo Fisher, Sweden, presented a report on the occurrence of type I IgE mediated hypersensitivity observed in patients treated with therapeutic proteins and the question of whether patients should be tested for pre-existing or therapy induced/enhanced anti-drug IgE antibodies. The Committee discussed the need for a suitable standard for such assays.

ISICR Standards Committee Minutes coninued

October 9, 2011 Firenze, Italy

Excused:
Anna Costa-Pereira
Huub Schellekens
Martin Schiestl
Steve Swanson
Meena Subramanyam,

• Michael Tovey, INSERM, France presented a report on the need for the establishment of a common standardized cellbased assay for neutralizing antibodies (NAbs) against TNF α antagonists. Such drugs are used widely to treat a number of inflammatory and autoimmune diseases and there are numerous reports of the formation of neutralizing anti-drug antibodies against such products. He suggested that a luciferase reporter gene assay could be a suitable type of assay format to consider as the basis for a standardized assay for such products. Susan Kirshner, FDA USA, emphasized the importance of choosing a type of NAb assay that was as drug tolerant as possible given the high circulating levels of drug present in patients treated with such products. The Committee agreed that an appropriate approach would be to establish an international collaborative study to compare the performance of suitable assay platforms.

IV. - Other Business

Co-ordination of the Committee's initiatives with other bodies such as World Health Organization (WHO), the National Institute for Biological Standards and Control (NIBSC), the U.S. National Institutes of Health (NIH), the Biodefense and Emerging Infections Resources Repository (BEI Resources), the International Alliance for Biological Standardization (IABS), pharmaceutical manufacturers, and regulatory agencies (FDA, EMA, JPMDA) was also discussed.

Respectfully submitted, **Michael Tovey**Chair, ISICR Standards Committee

International Society for Interferon & Cytokine Research, Inc.

Statements of Financial Position
As of December 31, 2011 and December 31, 2010

ASSETS	December 31, 2011	December 31, 2010
Cash - Bank of America	\$ 35,997.86	\$ (2,743.44
Cash - Business Interest Maximizer	-	56.83
Cash - Bank of America CD	109,743.30	109,401.12
Accrued Interest Receivable	-	· -
Accounts Receivable - General	-	-
Accounts Receivable - Annual Meeting Income	10,000.00	64,030.00
Advances - Annual Meeting	-	20,000.00
TOTAL ASSETS	\$ 155,741.16	\$ 190,744.51
LIABILITIES and NET ASSETS		
Due to Publisher-Print Only	-	909.00
Due to Publisher-Print & Online	-	-
Due to Publisher-Online Only	690.00	342.00
Accounts Payable	3,848.60	8,516.62
Deferred Dues - 2011	-	11,170.00
Deferred Dues - 2012	12,975.00	4,975.00
Deferred Dues - 2013	4,608.00	2,020.00
Deferred Dues - 2014	1,820.00	1,040.00
Deferred Dues - 2015	640.00	200.00
Deferred Dues - 2016	80.00	-
23902 - Temporary Restricted Contribution Recorded		
n Prior Year	-	-
TOTAL LIABILITIES	24,661.60	29,172.62
NET ASSETS		
Unrestricted	131,079.56	156,681.89
Temporarily restricted	-	4,890.00
TOTAL NET ASSETS	131,079.56	161,571.89
TOTAL LIABILITIES & NET ASSETS	\$ 155,741.16	\$ 190,744.51
REVENUE	December 31, 2011	December 31, 2010
Interest - Savings Accounts and CDs	\$ 342.33	531.02
Dues - Regular Member	17,800.00	17,427.00
Dues - Post Doc	400.00	330.00
Dues - Student	1,840.00	1,340.00
Dues - Emeritus	160.00	210.00
Corporate Sponsorships	12,000.00	-
		10 000 00
Corporate Contributions	5,000.00	10,000.0

International Society for Interferon & Cytokine Research, Inc. continued

Statements of Financial Position
As of December 31, 2011 and December 31, 2010

REVENUE	December 31, 2011	December 31, 2010
Milstein and Fleischman Contributions	61,500.00	-
Miscellaneous Income	1,564.00	9.28
Income from Spring Meeting	-	49,030.00
Satisfactions of Temp Restricted Contributions	4,890.00	66,610.00
TOTAL REVENUE	105,496.33	145,487.30
EXPENSES		
Addressing, Mailing, and Shipping	65.72	68.45
Awards - Cost of Awards	2,002.06	1,710.57
Awards - Other	0.00	10,000.00
Bank Charges	182.95	241.48
Computer Services Expense	4,154.00	282.00
Committee Meeting Meals	0.00	
Contracted Priority Shipping	187.43	67.71
Contracted Services	910.00	-
Copy Editing	1,250.00	450.00
Credit Card Discount	1,580.32	804.43
Email-Internet Charges	129.77	-
Financial Services	16,530.00	16,189.60
Handling Fees	212.80	454.10
Membership Management Expense	0.00	9,697.17
Hotel and Travel - Others	3,727.98	2,072.47
Miscellaneous Expenses	524.25	261.25
Milstein Award	10,000.00	10,000.00
Milstein Travel Award	44,350.00	49,210.00
Awards - Other	0.00	
Milstein Young Investigator Awards	7,500.00	7,500.00
Christina Fleischmann Award	1,500.00	1,500.00
Miscellaneous Grants and Contributions	250.00	
Printing and Graphics	3,439.09	2,733.54
Professional Services	16,275.00	15,504.00
Subscription Fulfillment Services	13,350.00	-
Telephone Expense	422.49	421.24
Web Related Charges	2,554.80	6,685.00
TOTAL EXPENSES	131,098.66	135,853.01
CHANGE IN NET ASSETS	(25,602.33)	9,634.29
NET ASSETS AT BEGINNING OF YEAR	156,681.89	147,047.60
NET ASSETS AT DECEMBER 31	\$ 131,079.56	\$ 156,681.89

How people in science see each other



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INTERNATIONAL SOCIETY FOR INTERFERON AND CYTOKINE RESEARCH

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Editor's note: I asked the artist, Dave Coverly, how he happened to choose this topic for the cartoon. He responded:

"That topic actually came from hearing friends and acquaintances lamenting the cuts in their own research. I live in Ann Arbor, and know quite a few people who work in or with the UM Hospital, or in labs connected to it (and, related to your line of work, one of our closest friends is an oncologist there). I guess my job is to pay attention and observe other people's concerns, and/or the things we all have in common, so this topic made its way onto my sketch pad and stayed there until I came up with a way to address it with a little humor (or at least I hoped it was humorous - you never know)."

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