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**President** 

Otto Haller

### **President-elect**

Eleanor Fish

### Secretary

Tom Hamilton

### **Treasurer**

Bob Friedman

### **Executive Director**

John Lord

### **Future ISICR Meetings**

2008 Meeting

Joint ISICR/ICS Montreal, Canada Oct. 12-16 www.cytokines2008.org

2009 Meeting

Joint ISICR/ICS/SLB Lisbon, Portugal

2010 Meeting

Joint ISICR/IC Chicago, Illinois

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# INTERNATIONAL SOCIETY FOR INTERFERON AND CYTOKINE RESEARCH

December 2007 Volume 14, No. 3

## A Farewell Note from ISICR President Otto Haller



Dear ISICR Members,

It is evident that the health and strength of a relatively small Society like ISICR lies in its active and diverse membership. I am therefore extremely grateful for your contributions during the last two years. Your participation in important membership votes and in the first web based ISICR survey (see this issue of the Newsletter) is most appreciated.

It has been a wonderful experience to serve as the ISICR President for the past two years. Each year had its own highlights and complexities. The highlight of the first year was the outstanding Annual Meeting in Vienna (organized by Josef Schwarzmeier) which our Society held together with the International and European Cytokine Societies. The joint Conference was a success with great science and superb organization in a beautiful city. The participants agreed that Joint Meetings are an excellent opportunity to bring together the international interferon and cytokine communities. Accordingly, it was agreed by the ISICR Board that all future ISICR Annual Meetings will be held jointly with the International Cytokine Society (ICS) starting with the next Joint Meeting, organized by Dr. John Hiscott, which will take place in Montreal in October 2008. There is an increasing awareness that interferon and cytokine research have many grounds in common. When I took office, the advantages and disadvantages of a merger between the ISICR and the ICS were hotly debated. The Officers of both Societies were in favor of entering into discussions to explore the benefits of a single, strong International Society devoted to interferons and cytokines. I felt that the time had come to ask the general ISICR membership for a mandate to initiate negotiations for a merger.

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### (President Otto Haller, cont. from page 1)

A ballot among the ISICR members concerning such a mandate took place in August 2006. I was impressed by the unequivocal response. The majority of our members responded (55 %), and 91% of the responders were in favour of proceeding with negotiations. Therefore, I asked Eleanor Fish, Kathy Zoon, Howard Young, and Alfons Billiau to form an ad hoc Merger Committee. Together, we prepared a draft of the Constitution and Bylaws for the new merged society. This draft was approved by the ISICR Board of Directors, and was sent to the President of the ICS (Dr. Carl Ware) for consideration. Unfortunately, the initial response of the ICS Council was not positive. It was indicated, however, that discussions will continue. It is understandable that the merger process between the two sister societies needs time. I would like to thank the members of the ad hoc Merger Committee, and in particular Alfons Billiau, for their valuable help in this matter. I am confident that the future joint ISICR/ICS meetings will contribute to an increasing amalgamation of the two societies, and that a time will come when the present draft of the Constitution/Bylaws for the new Society will again be in demand

The second year in office was very special. It marked the 50th Anniversary of the discovery of interferons by Alick Isaacs and Jean Lindenmann. The 2007 ISICR Annual Meeting in Oxford had all the attributes of an anniversary event. It was accompanied by a pre-meeting on the history of interferons. I am most thankful to Graham Foster and Norman Finter. and all the local organizers for making this a most memorable experience. As anticipated, there were many more celebrations over the year, in particular in Europe. Celebrations started in March in Switzerland and ended in November with a special commemorative meeting by the Royal Academy of Medicine of Belgium in Brussels (Alfons Billiau and Erik De Clercq). In between, there were celebrations in Paris (the conference "From Interferon Discovery to Clinical Application" at the Hôtel de Ville de Paris, organized by Mounira Chelby-Alix and Jeanne Wietzerbin), during the Gordon Conference "Viruses and Cells" at the Tilton School in New Hampshire, and during the Third European Congress of Virology in Nuremberg (convened by Otto Haller

and Bernhard Fleckenstein), where co-discoverer Jean Lindenmann was honored by receiving the European Virology Award (EVA; see "Interferon Discovery and Ferret Flu" by Alison Abbott in NATURE, 449:126 (2007)). I know that there were many more celebrations world-wide. As expected, ISICR members lived up to the occasion and promoted interferon research and our Society in public.

Finally, I would like to say a few words of thanks. During my term, I have relied heavily on the ISICR Board of Directors, who helped me to deal with Society Business in a cooperative manner. I particularly thank past-President Howard Young and incoming President Eleanor Fish for continued support and advice. Likewise, I am indebted to Bob Friedman for advice in financial matters. It was a pleasure to work with the Executive Directors, Debra Weinstein and later with John Lord as her successor. I also thank Paula Pitha-Rowe and her Awards Committee for their work. Paula has requested to step down as the Chair of the Awards Committee after many years of outstanding service to the ISICR. I am grateful to Robert Silverman for having accepted to succeed Paula in this important position. In addition, Dr. Norman Finter requested to resign as the Chair of the Archives Committee. I thank him and Bob Friedman for their enthusiasm in preserving the history of interferon research. The ISICR Board of Directors decided that the Archives Committee had fulfilled its task and will not be continued as a standing committee. I am indebted to the Meetings Committee and its Chairperson, Christine Czarniecki, for their input which guarantees the high standard and the continuity of the ISICR Annual Meetings. I extend my gratitude to all the Standing Committees and their Chairs, and welcome the new members who have been elected during my presidency. My gratitude goes to Sid Pestka and the Milstein Family for their continued financial support of the Milstein Award and the Travel Awards. Finally, I congratulate Leonidas Platanias on his election as President Elect and welcome Nancy Reich, Keiko Ozato and George Stark as new members of the Board of Directors.

This is my last presidential report. Being in office has been an honor and a privilege. I wish my successor, Eleanor Fish all the best. - Otto Haller

### **ISICR** election results:



For President 2010-2011: Leon Platanias

Roard of Directors 2008-2010

Keiko Ozato

Nancy Reich

George Stark

### **ISICR** Awards

# **2007 Milstein Young Investigator Award Winners**

The Milstein Young Investigator Awards are presented to ISICR members who have made notable contributions to either basic or clinical research within 8 years after receiving their Ph.D or M.D. This award is provided by a generous gift of the Milstein Family.



Andrea Erickson University of Texas Southwestern Medical Center Dallas, Texas Email: Andrea.Erickson @UTSouthwestern.edu

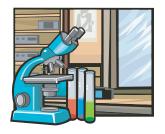
I received my Bachelor of Science Degree in Biochemistry from The University of Texas at Austin in 2001. I am currently completing my Ph.D. at the University of Texas Southwestern Medical Center in Dallas. My dissertation research is focused on defining the biological actions of α/β IFNs against HCV.



Brenda Fredericksen University of Maryland College Park, Maryland Email: bfreder@umd.edu

My laboratory is interested in defining the molecular mechanism(s) by which flaviviruses

evade and/or block the innate antiviral response. The ability of viruses to control and/or evade the host antiviral response is critical to the establishment of a productive infection. As eukaryotic anti-viral programs evolved to combat invading pathogens, viruses evolved processes to escape the anti-viral effects of these programs. Using West Nile virus (WNV) as a model system, we have begun to identify the molecular mechanisms by which this virus overcomes the host cell antiviral response. Pathogenic stains of West Nile virus utilize multiple strategies to both evade and circumvent the innate antiviral response. I have demonstrated that WNV evades detection by the host cells at early times postinfection, allowing the virus to replicate to high levels early in infection. However, once a productive infection has been established, the antiviral pathways become activated and WNV must then utilize a second mechanism to control the cellular environment. Several WNV proteins have been shown to impede signaling through the JAK/STAT pathway. Therefore, expression of high levels of these proteins late in infection would presumably attenuate JAK/STAT signaling and thereby prevent the induction of a robust antiviral response. By combining multiple mechanisms WNV is able to successfully control both the kinetics of induction and the overall gene expression profile of the innate antiviral response, thus, enabling the virus to establish a productive infection.





### Vladimir Hurgin

Weizmann Institute of Science Rehovot, Israel Email: vladimir.hurgin@weizmann.ac.il.

In 1999 I started my Ph.D under the supervision of Prof.

Menachem Rubinstein shortly after IL-18 Binding Protein (IL-18BP) was isolated by a member of the lab, Dr. Daniela Novick. IL-18BP is a unique high affinity binding protein of IL-18 (IFN-y inducing factor) and is distinct from a classical soluble receptor. IL-18BP neutralizes IL-18 biological activities and is induced by IFN-γ, suggesting that it serves as a negative feedback inhibitor of the IL-18-mediated immune response. In my Ph.D., I characterized the promoter of IL-18BP. I demonstrated that the rapid IFN-γ-induced JAK-STAT signaling pathway did not mediate IL-18BP induction but rather the induction required de novo synthesis of the transcription factor IRF-1, which together with C/EBPβ activates the IL-18BP promoter, thus providing a time window for IL-18 activity. I found that the gene coding for IL-18BP, which seems to have a rather limited role as an inhibitor of IL-18, is regulated by a very complex mechanism that is required for maintaining specificity and enabling more precise control of gene activity.

In view of these results pointing to a tight regulation of IFN-γ expression, I hypothesized that it is cytokine interplay that is responsible for the prevention of an excessive hazardous IFN-y activity. Indeed, in our research we describe such a safety mechanism where the signaling by IFN-γ is dependent on expression of IL-1α to allow its full array of signaling to occur. IFN-γ binding to its cognate receptor results in two separate events that occur in concert. One is rapid IRF-1 expression followed by its translocation to the nucleus, and the second is activation of membrane-associated IL-1α. Membrane IL-1 $\alpha$  activates neighboring cells that harbor the type I IL-1 receptor to cause rapid translocation of NF-κB to the nucleus. When IRF-1 and NF-kB are activated in unison, a 10-fold enhancement in IFN-y's ability

to induce an antiviral state is seen. Indeed, blocking IL-1α causes a 90% reduction in the IFN-γ-induced antiviral state. It is remarkable that the dependence of the antiviral state on basal IL-1 was unique to IFN- $\gamma$  and was not observed with type I IFNs ( $\alpha$  and β) which are less pleotropic and less potentially toxic. The critical role of IL-1α in IFN-γ action combined with the ability of IFN-y to induce further production of IL  $1\alpha$  raises the possibility that infiltrating macrophages or dendritic cells bearing surfaceexpressed IL 1α interact with keratinocytes, rendering them more responsive to T cell-derived IFN-y. Such a cascade of events may be the underlying mechanism of chronic skin inflammation. In summary we have demonstrated that what was considered to be intrinsic IFN-y activities in fact depends on constitutively expressed IL-1α.



**Luis Martinez-Sobrido** 

Mount Sinai School of medicine New York, New York Email:

Luis.Martinez@mssm.edu.

I received my Ph.D. in the field of virology under the supervision of Dr. Jose Antonio Melero in Madrid, Spain. After my Ph.D., I joined Dr. Adolfo García-Sastre's laboratory at Mount Sinai School of Medicine (2000), New York. My work has focused on reverse genetics systems for DNA and RNA viruses as it relates to the characterization of interferon antagonist proteins encoded by several viruses. I developed recombinant DNA and RNA viruses to study virus-cell interactions. These viruses have been an essential tool in our laboratories for the discovery and characterization of interferon antagonist proteins. I was involved in studies to more fully understand the underlying mechanisms used by negative strand RNA viruses (Ebola viruses, influenza viruses, Thogoto virus, arenaviruses) as well as positive-strand RNA viruses (mouse hepatitis virus, severe acute respiratory syndrome (SARS) coronavirus, and flaviviruses) to counteract the type I IFN response. In collaboration with Dr. Basler, we have

found that Ebola virus VP35 binds double-stranded

(Awards, cont. from page 1)

RNA and inhibits interferon production induced by RIG-I signaling. I also found that the influenza NS1 protein inhibits the RIG-I mediated induction of beta interferon and, recently, I characterized multiple anti-interferon actions of this viral protein. In collaboration with Dr. Kochs, we found that the interferon antagonist protein encoded by Thogoto virus (ML) inhibits type I interferon production by inhibiting the transcriptional activity of IRF-3. In collaboration with Dr. Weber and Dr. Palese we found inhibition of beta interferon induction by SARS coronavirus and the viral proteins that counteract the host response, respectively. Inhibition of the interferon response by mouse hepatitis virus at multiple levels was initiated in collaboration with Dr. Weiss. Together with Dr. Munoz-Jordan we identified the inhibition of interferon signaling by the NS4B protein of flaviviruses. Recently, in collaboration with Dr. de la Torre, we have found for the first time an interferon antagonist activity associated with the nucleoprotein of arenaviruses.

My current interests include the development of new state-of-art techniques to identify and characterize viral proteins that counteract the interferon response as well as the development of new antiviral drugs that target the anti-IFN function of these interferon antagonist proteins.

I became a faculty member in the department of Microbiology at Mount Sinai in 2007. Additionally, I am a technology-development-component co-Investigator at CIVIA (an NIAID sponsored Center for Investigating Viral Immunity and Antagonism) as well a member of the Emerging Pathogens Institute at Mount Sinai School of Medicine, New York.





Jesper B. Andersen Laboratory of Experimental Carcinogenesis National Cancer Institute Bethesda, Maryland Email: andersej@mail.nih.gov

I received my Cand. Scient. degree in Molecular Biology in 2003 from the laboratory of Dr. Just Justesen at the University of Aarhus, Denmark. My pre-doctoral work (1999-2003) focused on the 2-5A system as a mediator of interferon action. My thesis work demonstrated a novel role for the OAS-like protein, p59 OASL, through a protein-protein interaction with the transcriptional repressor Methyl-CpG Binding Protein 1, MBD1.

I joined Dr. Bret Hassel's laboratory at the University of Maryland, Baltimore, Marlene & Stewart Greenebaum Cancer Center in 2003 for my Ph.D. research where I discovered a novel role for RNase-L in senescence. In collaboration with Dr. Robert H. Silverman at the Cleveland Clinic, I was able to demonstrate the in vivo role for RNase-L in longevity. In another study, in collaboration with Dr. Torben F. Orntoft at the University Hospital, Skejby, Denmark, I conducted the first detailed study of ISG15 expression in a human cancer which revealed a stage-specific expression of ISG15 in bladder cancer. I received my Ph.D. based on these studies from the University of Aarhus, Denmark in 2006.

I am currently a post-doctoral fellow at the National Cancer Institute, NIH. In February 2007 I joined Dr. Snorri S. Thorgeirsson's Laboratory of Experimental Carcinogenesis. My current research involves several aspects of liver tumorigenesis and I am currently studying the epigenetics and transcriptome of cholangiocarcinoma, a rare and lethal subtype of liver cancer of the biliary tree. Moreover, I am involved in the characterization of novel cancer stem cells in hepatocellular carcinoma.

I have been a member of the ISICR since 2000, at the very early beginning of my carrier, and since then actively participated in five of the past meetings. It is my opinion that ISICR gives its younger members, students and post-doc, a unique chance to "show their flag".

### 2007 Christina Fleischmann Memorial Award Winner

Dedicated to the memory of outstanding IFN research scientist, Dr. Christina Fleischmann



Nancy Jewell
Columbus Children's Rsch
Inst
Dept of Pediatrics
Columbus, OH 43205
Email: jewelln@ccri.net

I am currently a postdoctoral fellow in Dr. Joan Durbin's lab in the Center for Vaccines and Immunity at Columbus Children's Research Institute. I was trained as a molecular virologist in the laboratory of Dr. Louis Mansky where I studied the RNA packaging, infectivity and drug susceptibility of bovine leukemia virus (BLV) and human T-cell leukemia virus types 1 and 2 (HTLV-1 and HTLV-2). I am now completing my post-doctoral studies in Dr. Durbin's laboratory where I am investigating the innate immune response to respiratory viruses, specifically respiratory syncytial virus (RSV) and influenza A virus. I have shown that while the infected epithelial cells are a major source of IFN-α/β production following influenza A virus or RSV infection in the BALB/c mouse, only influenza A virus induces significant IFN- $\alpha/\beta$  production by plasmacytoid dendritic cells (pDCs). Moreover, while type I IFN levels decreased by > 60% in pDCdepleted, influenza virus-infected animals, no such decrease was seen in RSV infected mice. This observation is consistent with the specificity of TLR-ligand interactions and suggests that mechanisms of pathogenesis and host response will be specific to each virus and cannot be inferred from the study of other pathogens.

I am a member of the ISICR, the International Cytokine Society and the American Society for Investigative Pathology.

### **2007 Milstein Travel Award Winners**

**Betsy Barnes - USA** Danielle Brabant - Canada Daniel Burke - Canada Venugopalan Cheriyath - USA **Troy Cline - USA** Eliana Coccia - Italy **Ana Costa-Pereira** - UK Blossom Damania - USA **Raymond Donnelly - USA Deborah Hodge - USA** Markus Hofer - Australia Xiaoyu Hu - USA Cvnthia Johnson - USA Ricardo Khouri - Brazil Yi-Ling Lin - China Yueh-Ming Loo - USA Barbora Lubvova - Czech Republic Giorgio Mangino - Italy Zora Melkova - Czech Republic Susie-Jane Noppert - Australia Yann Percherancier - France Ramtin Rahbar - Canada M R Sandhya Rani - USA Maria Bena Remoli - Italy Giovana Romeo - USA Shamith Samarajiwa - Australia Saumendra Sarkar - USA Chafia Touil-Boukof - Algeria **Anette Van Boxel-Dezaire - USA** Johan Van Weyenbergh - Brazil **Deborah Vestal** - USA Mark Walter - USA **Christine White - USA** Dakang Xu - Australia Jae-Kwang Yoo - Canada



The ISICR wishes to express its' deepest appreciation to the Milstein Family for their continuous support of the Society. The ISICR is honored by the generosity of the Milstein Family in being able to recognize the scientists whose work has been instrumental in understanding the role of Interferon in the host response to infectious disease and cancer, through the Milstein Award and Milstein Young Investigator Awards. Furthermore, the Milstein Travel Awards provide an important mechanism for enabling the future generation of scientists to attend and participate in the society, thus ensuring a continuum of scientific excellence in interferon and cytokine research.

# NEW ISICR MEMBERS

### **Joined from August - October 2007**

We welcome these new members to the ISICR and look forward their participation in society affairs and the annual meeting. We hope to see you all in Montreal!!!!!

### Askar M. Akimzhanov

MD Anderson Cancer Center, USA

### Karishma Bavisi

Univ of London, UK

### **Chantal Broers**

VU Univ of Med Ctr., Netherlands

### Elizabeth A. Eklund

Northwestern Univ, USA

### Sam Forster

MIMR, Australia

### **Dennis J. Goussetis**

Northwestern Univ, USA

### **Ajith Joseph**

Northwestern Univ, USA

### Sonali S. Joshi

Northwestern Univ, USA

### Suman Kambhampati

Univ of Kansas Med Ctr, USA

### **Prasanna Krishnamurthy**

Northwestern Univ, USA

### **Aseem Kumar**

Laurentian Univ, Canada

### Jean-Francois Meritet

St. Vincent De Paul Hosp, France

### Yong-Kai Mo

Albert Einstein Col of Med, USA

### Markus Mordstein

Univ of Freiburg, Germany

### Ryan Noyce

McMaster Univ, Canada

### **Jerry Parrott**

Human Genome Sciences, USA

### **Christian Ross**

Rigshospitalet, Denmark

(New Members, cont. from page 6)

### **Kate Rubins**

Whitehead Inst, USA

### David W. Sehy

EBioscience Corp, USA

### Shahab Uddin

King Faisal Specialist Hosp & Rsch, Saudi Arabia

### **Amit Verma**

Albert Einstein Col of Med, USA

### Sagie Wagage

NCI, USA

### **Courtney Walker**

Edelman, USA

# **New Member Minibios**

Thomas Tan

# Rhiannon Lowe, BSc. Senior Scientist and part time PhD student (Safety Assessment,

GlaxoSmithKline, Ware, UK and Imperial College, London).



Initially after BSc graduation in 1995 Ms. Lowe worked as a research assistant to Mark Thursz and Graham Foster, Imperial College, St Marys Hospital, Paddington in the fascinating area of Hepatitis B and C. Her role included working as a member of RIO (Roche, Imperial, and Oxford Collaboration) to study genetic susceptibility within hepatitis populations. In 1999 she took up a position

in Safety Assessment at SmithKline Beecham, now GlaxoSmithKline. Her position is very varied and includes working to develop an AIDS vaccine using nonhuman primate adenovirus vector technology and ascertaining the safety of monoclonal antibody therapy which encompasses several cytokines in a variety of disease areas.

Co-currently since 2004, Ms. Lowe has also been studying for a parttime PhD looking at the role of Interferon Lambdas in the treatment of viral diseases at Imperial College with Mark Thursz as her supervisor. The PhD project has involved working with Graham Foster, Melerie Jones and Linda Hibbert looking into the antiviral effects of the lambdas on Dengue Fever virus and with Peter Karayiannis and Mike McGarvey on Hepatitis B.

Reason for joining ISICR: "I wanted to be part of the 50th anniversary of the discovery of interferon celebrations and to share ideas in cytokine research, especially in the area of the relatively new interferon lambdas".

### Professor Stephen Locarnini,

Head, Research & Molecular Development, Director, World Health

Organization Collaborating Centre for Virus Reference & Research,

Victorian Infectious Diseases Reference Laboratory (VIDRL), 10 Wreckyn Street, North Melbourne, Vic 3051, Australia



Professor Stephen Locarnini, BSc(Hons), PhD, MBBS, FRC(Path) is from the Victorian Infectious Diseases Reference Laboratory (VIDRL, originally Fairfield Hospital Laboratory) where he has worked since 1989. He was Director of Laboratory Services from 1990-1998 and then assumed the position of Head, Research & Molecular Development of VIDRL. He is also Director of World Health Organization Collaborating Centre for Virus Reference & Research. His current major research interests include viral hepatitis and antiviral

### (Mini Bios, cont. from page 8)

chemotherapy with an emphasis on the basic virology of the various agents of hepatitis, the molecular pathogenesis of hepatitis, as well as prevention and public health control measures. The treatment of hepatitis B and C infections with antiviral agents represents the greatest challenge. Other research interests include SARS, sexually transmitted diseases of man especially infections associated with the AIDS virus, herpes virus and the human papillomaviruses. He is also interested in intellectual property issues when applied to clinical virology.

Professor Locarnini is the recipient of numerous awards including the Third Malaysian Liver Foundation Award. He is author of more than 140 peer-reviewed articles, 10 invited editorials and over 50 book chapters and reviews and has delivered a number of invited and plenary lectures at major conferences.

Professor Locarnini has appointments at both Melbourne and Monash Universities, as well as Hong Kong University. He is on a number of Scientific Advisory Boards of a number of pharmaceutical and biotechnology companies. He is an Editor for Antiviral Therapy and on the Editorial Board of Antiviral Chemistry and Chemotherapy, Antiviral Research and Antimicrobial Agents & Chemotherapy

Shahab Uddin, Ph.D. Senior Scientist King Faisal Specialist Hospital & Research Center Riyadh, Saudi Arabia

Dr. Shahab Uddin is a Senior Scientist at King Faisal Specialist Hospital and Research Center, Riyadh 000

Saudi Arabia. He obtained his Ph.D. from Aligarh Muslim University, India. He obtained postdoctoral training at Ohio State University in Columbus, Ohio, USA and Loyola University of Chicago, Maywood, Illinois, USA. He worked at the Research Faculty in

the Department of Medicine at University of Illinois and University of Chicago, Illinois and Department of Medicine, University of Chicago. USA. Currently he is working as a Senior Scientist at King Faisal Specialist Hospital and Research Center, Riyadh Saudi Arabia. His field of research interest is cytokines and growth factor mediated signal transduction. He is also working on therapeutic potentials of curcumin and other plant products in malignancies, especially involved in the oxidative stress pathway. He has authored more than 90 original papers and 9 reviews. He has recently received the Sheikh Hamdan Bin Rashid award, Dubai UAE for his research.

### Amit Verma, MD

Assistant Professor, Medicine (Oncology), Developmental and Molecular Biology Albert Einstein College of Medicine 1300 Morris Park Ave, Chanin 302B Bronx, NY 10461

Dr. Verma obtained his MD from the All India Institute of Medical Sciences, New Delhi and performed postgraduate research training at the University of Illinois and Northwestern University, Chicago. He is an Assistant Professor in the Department of Medicine and Molecular and Developmental Biology at the Albert Einstein College of Medicine, New York. He studies the role of cytokine signaling in hematopoiesis and has identified the overactivation of p38 MAPK in human bone marrow failure. His lab is studying the role of TGF-beta signaling in Myelodysplastic syndromes. His lab also studies caricinogenesis, using an integrative epigenomic platform that includes high throughput array based methylation assays. arrayCGH and gene expression profiling.



# ISICR Survey Offers Excellent Insight and Direction

Jennifer Holland

The International Society for Interferon and Cytokine Research launched its first web based survey on August 30, 2007. 234 members completed the survey which covered many areas of interest including the annual meeting, committees, and the newsletter.

### On Membership:

An overwhelming and welcomed 96% of respondents indicated that they will be continuing their membership with the society in 2008. Some open responses indicated an interest in a joint membership option with ICS.

### On Symposia:

In our desire to continually improve the quality of our symposia to meet the interests and needs of our attendees, the survey queried respondents on conference factors. 40% of 2007 non-attendees noted that they would not be joining the conference in Oxford based on financial considerations while 76% of all respondents indicated that they will be joining the society for the 2008 meeting. Of the 24% that will not be attending the 2008 meeting, many cited a shift in research interest while others cited the cost as being potentially prohibitive. In regards to how attendees decide on conference attendance, program topics lead the decision with 77% commenting this area to be the most important factor. Geographical location and transportation and housing costs seemed to be the second most important factors accounting for 62% of these ratings.

### **On Committees:**

There was a fairly even split between colleagues regarding interest in ISICR committees. The Meetings, Publications and Awards Committees seemed to spark the most interest. ISICR welcomes the input and participation of our members and ISICR society representatives will be contacting individuals who responded with interest about these and other committee options.

### On the Newsletter and ISICR website:

Most respondents (99%) indicated that they do read the newsletter content with some regularity. There was a general consensus, however, that there is a wealth of societal e-newsletters which makes it difficult to take full advantage of any one publication. 83% of respondents also indicated that they utilize the society website on occasion making it a reasonably valuable tool for members.

### On the Slide Repository:

49% of member respondents were not aware of the existence of the ISICR slide repository. This feedback was extremely helpful in telling ISICR that this valuable resource needs to be better advertised. Of those that were aware of this service, 48% have downloaded slides with only 7% donating samples. This was also important feedback and ISICR hopes to increase the stock of available materials to make the repository a more substantial member benefit.

Many individuals offered open ended comments which are greatly appreciated. ISICR representatives will be carefully reviewing all of the input from this survey and using the knowledge to increase the professional benefits to our members. If you have any further comment regarding the survey, or any other input you'd like to offer ISICR, please feel free to email isicr@faseb.org.

Response to individual comments received from the ISICR survey (Note: not all can be specifically addressed but here are responses to some of the more common comments):

Howard Young with input from the Board of Directors

### About the meeting:

<u>Comment:</u> The speakers are always the same <u>Response:</u> An ongoing concern among meeting organizers is making the meeting attractive with high

### (Survey, cont. from page 10)

caliber international speakers and topics. yet giving new investigators the chance to present their work. At the 2007 and 2008 meetings, a number of new investigators were given and will be given the opportunity for oral presentations. Interestingly however, almost 80% of survey respondents indicated that the program was the most important factor in their decision to attend, so it would appear that having outstanding and well known scientists speaking at the meeting is necessary to attract strong attendance.

# <u>Comment:</u> Can there be a wider diversity of subjects and/or joint meetings with other immunology organizations?

Response: Next year the meeting is formatted to include sessions on cytokine/receptor structure as well as Cytokines & bioinformatics/epigenetics/ genetics, among other topics. In past years other organizations have joined the meeting and it is possible that the Society for Leukocyte biology will be involved in the 2009 meeting, tentatively planned for Lisbon. However the overall sense is not to let the meeting become so large that there are more than 2 concurrent sessions, as attendees already have difficulty attending all the sessions that they are interested in.

### **Comment:** More meetings in the US

Response: Given that we are an international organization, we seek to have meetings in locations that will be economical for different members in different years. Please note that two of the next three meetings are planned for North America (2008 Montreal, 2010 Chicago).

### About the newsletter:

Comment: **Don't just interview the "old guys"**Response: For the last few years, we have included minibios of new members, the Milstein Young Investigators & the Christine Fleischmann awardees. Also, many of the Milstein Award winners could hardly be classified as "old guys".

# $\underline{Comment:} \ \textbf{Include a section on teaching immunology in universities}$

Response: Given that none of the editors teach at universities, we would love to include contributions from ISICR members on this topic. Please send them in.

# Comment: The look is plain and needs to be updated and/or the format is outdated

Response: The newsletter is formatted by a contractor after receiving content as a WordDoc. If you think it is plain now, you should have seen it when I was formatting it. Volunteers to help with the design are welcome so don't hesitate to contact me.

# **Comment:** Include an "editors choice" section on hot new papers that are recent.

Response: With such websites as the Faculty of 1000, this type of information already exists. In my opinion, it would be difficult for one person to decide fairly which papers are hot without a lot of comments regarding why specific papers were not chosen. For many years, we have alerted readers to the different areas of interferon/cytokine research by including the Reviews of Interest, especially from journals that members may not always peruse.

### About the slide repository:

### **Comment: What slide repository?**

Response: Amazingly almost ½ of respondents did not know it existed. We will continue to advertise it on the website and in the newsletter. I would like to point out that many available slides could be useful in teaching immunology.

### **Comment:** Some slides are outdated

Response: Given that it is impossible to keep track of all the deposited slides, it is inevitable that when pathway slides are deposited, they may soon become outdated. The only solution is that when members recognize that a slide is either outdated or in fact, wrong, they let me know so the slide can be removed. Furthermore if they are aware of more current slides, either depositing them or notifying me of their source would be most helpful.

# **Comment:** The slides could be better organized into related topics or folders

<u>Response:</u> Currently the slides go in alphabetical order based on the first letter of the description.

### (Survey, cont. from page 11)

However, there is a search bar on the website (upper right corner). The search function covers all words in the slide description so if you type in "STAT4" you will bring up all the slides that include something about STAT4.

### Comment: Can we be notified when new slides are added?

Response: There is no specific time when new slides are added so it would be difficult to notify members of additions. While we could have a flashing bar" new slides", it would almost be on indefinitely. We get charged by FASEB \$25/15 minutes for website changes so I tend to group changes (including posting of slide "snapshots") in order to get updates made most economically.

### **About the Website:**

### Comment: The website is outdated/needs to be more professional

Response: We changed the website format a few years ago to give it a less cluttered look. If there are any website gurus out there that would like to suggest changes to the site, please contact me.

### Comment: Free access to the JICR should be possible through the website

Response: A few years ago, PBL Biomedical paid for members to get free journal access through the website. In reality, use was so low that it was not deemed to be worthwhile. It is believed that many members get access through their institutional libraries.

### **General comments:**

### **Comment:** The ISICR and ICS should merge

Response: This was a comment from many respondents. The ISICR has taken a number of steps for such a merger but the ICS is less enthusiastic, preferring to see how joint meetings in 2008, 2009 and 2010 proceed. It is not anticipated that a merger would occur anytime soon.

### **Comment:** Age limit for lifetime membership is high. Consider 5 or 10 year memberships.

Response: Based on this comment, a 5 year membership was initiated and is now available (\$200 USD).

### **Comment:** Banquet costs are too high, they need to be part of the registration

Response: This cost depends upon the success of the meeting organizers in raising funds. Some years it is possible, but in other years the banquet costs were made optional to keep the registration fee lower. This issue is ongoing and will likely continue to vary from year to year.

Thank You

The ISICR wishes to express its sincered gratitude to Dr. Paula Pitha-Rowe for her many years of leadership of the Awards Committee. The success of the awards program has been due to her leadership and the efforts of the members of the Awards committee. We thank Paula and all the committee members for their outstanding work on behalf of the society. We look forward to continuing the successful ISICR Awards programs under the new leadership of Dr. Robert Silverman. The ISICR also wishes to acknowledge recognize and express the gratitude of the ISICR membership for the efforts of Drs. Norman Finter and Robert Friedman in preserving the history of Interferon research in the interferon archives. The ISICR wishes to express its sincere gratitude to Dr. Paula Pitha-Rowe for her many years of leadership of the Awards Committee. The success of the awards program has been due to her leadership and the efforts of the members of the Awards committee. We thank Paula and all the committee members for their outstanding work on behalf of the society. We look forward to continuing the successful ISICR Awards programs under the new leadership of Dr. Robert Silverman. The ISICR also wishes to acknowledge, recognize and express the gratitude of the ISICR membership for the efforts of Drs. Norman Finter and Robert Friedman in preserving the history of Interferon

# WWW

# **BBID-Biological Biochemical Image Database**

http://bbid.grc.nia.nih.gov/

The Biological Biochemical Image Database is a searchable database of images of putative biological pathways, macromolecular structures, gene families, and cellular relationships. It is of use to those who are working with large sets of genes or proteins using cDNA arrays, functional genomics, or proteomics.

### **Database of Interacting Proteins**

http://dip.doe-mbi.ucla.edu/

The DIPTM database catalogs experimentally determined interactions between proteins. It combines information from a variety of sources to create a single, consistent set of protein-protein interactions. The data stored within the DIP database were curated, both, manually by expert curators and also automatically using computational approaches that utilize the knowledge about the protein-protein interaction networks extracted from the most reliable, core subset of the DIP data. Please, check the reference page to find articles describing the DIP database in greater detail.

This page serves also as an access point to a number of projects related to DIP, such as LiveDIP, The Database of Ligand-Receptor Partners (DLRP) and JDIP

### **Enzyme Finder**

http://www.neb.com/nebecomm/EnzymeFinder.asp http://www.neb.com/nebecomm/enzymefindersearchbysequence.asp

Enzyme Finder By Sequence. Use this tool to select restriction enzymes by name, sequence, overhang, or type. Sequences should be entered using single letter code nomenclature

# The German Genetrap Consortium (GGTC)

http://tikus.gsf.de/

The GGTC generates a reference library of gene trap sequence tags (GTST) from insertional mutations generated in mouse embryonic stem (ES) cells. The gene trap database represents a repository of sequences produced in a large scale gene trap screen in mouse ES cells using various gene trapping vectors which are delivered either by electroporation or retroviral infections

### The Human Metabolome Project

http://www.metabolomics.ca/

Metabolomics is a newborn cousin to genomics and proteomics. Specifically, metabolomics involves the rapid, high throughput characterization of the small molecule metabolites found in an organism. Since the metabolome is closely tied to the genotype of an organism, its physiology and its environment (what the organism eats or breathes), metabolomics offers a unique opportunity to look at genotype-phenotype as well as genotype-envirotype relationships. Metabolomics is increasingly being used in a variety of health applications including pharmacology, preclinical drug trials, toxicology, transplant monitoring, newborn screening and clinical chemistry. However, a key limitation to metabolomics is the fact that the human metabolome is not at all well characterized.

Unlike the situation in genomics, where the human genome is now fully sequenced and freely accessible, metabolomics is not nearly as developed. It is estimated that only a quarter to half of endogenous human metabolites in blood or urine have been positively identified. Of those that have been identified, very few have any information on their normal concentration ranges. Further, there is no publicly available, electronic database for human metabolites (i.e. no "Metabo-Bank") and there are no "metabolite libraries" which allow researchers to obtain quantities of rare metabolites from which to standardize their

# WWW (continued)

instruments. The Human Metabolome Project is a \$7.5 million Genome Canada funded project launched in January 2005. The purpose of the project is to facilitate metabolomics research through several objectives to improve disease identification, prognosis and monitoring; provide insight into drug metabolism and toxicology; provide a linkage between the human metabolome and the human genome; and to develop software tools for metabolomics.

The project mandate is to identify, quantify, catalogue and store all metabolites that can potentially be found in human tissues and biofluids at concentrations greater than one micromolar. This data will be freely accessible in an electronic format to all researchers through the Human Metabolome Database (www.hmdb.ca). In addition, all compounds will be publicly available through our Human Metabolome Library (www.metabolibrary.ca).

Already more than 800 compounds have been identified and by end of 2006, it is expected that more than 1400 metabolites will have been identified, quantified and archived into web-accessible databases (www.hmdb.ca) and stored in -80°C freezers. However, the Human Metabolome Project is only mandated to provide chemical data and chemical compounds to the scientific community. It does not have the funding or the resources to use these "raw materials" for disease identification and characterization. Indeed the intent of the Human Metabolome Project is to be an enabler of future metabolomic research, just as the Human Genome Project has been an enabler of current genomic research.

We intend to be among the first research groups in Canada to be enabled by the Human Metabolome Project. Specifically we wish to combine the analytical technologies we have already helped develop with the databases (and chemical libraries) being developed to take metabolic profiling to a new level. We believe that by combining NMR-based metabolic profiling with new data from the Human Metabolome Project, we will be able to more fully characterize and understand a wide range of impor-

tant to emphasize that these investigations are not a simple reassessment of well-known and well-understood metabolic disorders. Given the state-of-the-art in metabolic profiling where only a small number of metabolites are routinely identified or identifiable, we are very much at the stage where human genetics was before the advent of microarrays.

### Interferon Archives

Search for GC/267 in the reference field of the Wellcome archives and manuscripts search page (http://en.wellcome.ac.uk), or Interferon in the any text field.

Alternatively, the catalog of the interferon archive developed by the Archives committee and deposited with the Welcome Trust can be found at: http://archives.wellcome.ac.uk/DServe/dserve.exe?& dsqIni=Dserve.ini&dsqApp=Archive&dsqCmd=sho w.tcl&dsqDb=Catalog&dsqPos=0&dsqSearch=((text)='interferon')

The collection itself is not online and it is not clear if it will ever become web accessible.

# **KEGG: Kyoto Encyclopedia of Genes and Genomes**

http://www.genome.jp/kegg/

A grand challenge in the post-genomic era is a complete computer representation of the cell, the organism, and the biosphere, which will enable computational prediction of higher-level complexity of cellular processes and organism behaviors from genomic and molecular information. Towards this end we have been developing a bioinformatics resource named KEGG as part of the research projects of the Kanehisa Laboratories in the Bioinformatics Center of Kyoto University and the Human Genome Center of the University of Tokyo.

KEGG is a database of biological systems, consisting of genetic building blocks of genes and proteins (KEGG GENES), chemical building blocks of both

# WWW (continued)

endogenous and exogenous substances (KEGG LIGAND), molecular wiring diagrams of interaction and reaction networks (KEGG PATHWAY), and hierarchies and relationships of various biological objects (KEGG BRITE). KEGG provides a reference knowledge base for linking genomes to biological systems and also to environments by the processes of PATHWAY mapping and BRITE mapping.

Database	Content	Source	
PATHWAY	Molecular interaction and reaction networks for metabolism, various cellular processes, and human diseases	Manually entered from published materials	
BRITE	Functional hierarchies representing our knowledge on various aspects of biological systems	Manually entered from published materials	
GENES	KEGG ORTHOLOGY (KO): Ortholog groups based on PATHWAY and BRITE	Manually defined by KEGG	
	GENES: Gene catalogs of complete genomes with manual annotation	Generated from RefSeq and other public resources with reannotation by KEGG	
	DGENES: Gene catalogs of draft genomes with automatic annotation		
	EGENES: Gene catalogs (consensus contigs) of EST data with automatic annotation		
	GENOME: Genome maps and organism information		
	SSDB: Sequence similarities with best-hit information for identifying ortholog/paralog clusters and conserved gene clusters	Computationally derived from GENES by pairwise genome comparisons of all protein-coding genes	
LIGAND	COMPOUND: Chemical compounds	Manually entered from published materials	
	DRUG: Drugs approved in the U.S. and Japan		
	GLYCAN: Glycans		
	REACTION: Chemical reactions		
	RPAIR: Chemical structure transformation patterns		
	ENZYME: Enzyme nomenclature	Generated from ExplorEnz enzyme database with annotation by KEGG	

# WWW (continued)

### LabLit.com

http://www.lablit.com/

LabLit.com is dedicated to real laboratory culture and to the portrayal and perceptions of that culture - science, scientists and labs - in fiction, the media and across popular culture. The site is intended for non-scientists as well as scientists, and the goal is to inform, entertain and surprise (see the launch Editorial for more information).

LabLit.com is edited by scientist and science writer Dr. Jennifer Rohn, who has fifteen years of research experience in the fields of virology, cell biology, cancer and gene therapy and an incurable addiction to scientist-related literature (or "lab lit", a term she coined in 2001 which is now used widely).

LabLit.com heartily welcomes quality material from any interested reader who has something to say or show and would like to contribute to any regular (or irregular) section. The format is flexible and all items related to LabLit.com's brief will be seriously considered. If your work is selected, you will keep the copyright but will be asked to grant LabLit.com a non-exclusive license; we also reserve the right to copyedit if necessary. This magazine is currently a labor of love, so we will be unable to pay for contributions at this time, but we do offer scope for self-promotion and linking out to the external sites of your choice. We would also be delighted if you would link LabLit.com to your own website.

Please feel free to make a proposal or to contact us with questions or comments!

### **PANTHER**

http://www.pantherdb.org/

The PANTHER (Protein ANalysis THrough Evolutionary Relationships) Classification System is a unique resource that classifies genes by their functions, using published scientific experimental evidence and evolutionary relationships to predict function even in the absence of direct experimental evidence. Proteins are classified by expert biologists into families and subfamilies of shared function, which are then categorized by molecular function and biological process ontology terms. For an increasing number of proteins, detailed biochemical interactions in canonical pathways are captured and can be viewed interactively.

To get started, try either a text search, browsing by function, or take a look at interactive pie charts that summarize the functions of whole genomes for Human, Mouse, Rat and Drosophila melanogaster.

PANTHER is maintained by the Evolutionary Systems Biology Group at SRI.

Recommended by Kevin Ahern in *Genetic Engineering News* 

### New tools for scientific literature searching:

http://www.gopubmed.com: Provides an interface to search PubMed and associate search results with GO ontology and Mesh ontology terms. Adds additional links to explanations of certain keywords. Highlights search terms and keywords in text. http://demos.vivisimo.com/clustermed: Similar in design to above example, but instead of using an ontology, they cluster groups of terms together. The cluster groups are then used to filter the search results analogous to ontology terms.

### http://www.ihop-net.org/UniPub/iHOP/:

Information Hyperlinked over Proteins - Gene-based searching of the literature and display of key sentences relevant to the search term, with links to abstracts. Synonym enhanced searching of PubMed. <a href="http://mekentosj.com/papers/">http://mekentosj.com/papers/</a>: In case you are a Macintosh user at home, this new product is a very nice application of MacOs features in the context of scientific papers. Papers was awarded the Apple Design Award in 2007. It features a built-in, intelligent search interface to PubMed, enables the attachment of PDF articles, uses spotlight searching and uses a similar interface as iPhoto. It is only available for the Mac and they have no intentions of migrating-migrating to Windows. It's cheap (\$39.00).

# SO YOU THINK YOU KNOW EVERYTHING?

"Stewardesses" is the longest word typed with only the left hand ...



And "lollipop" is the longest word typed with your right hand. (Bet you tried this out mentally, didn't you?)

No word in the English language rhymes with month, orange, silver, or purple.

"Dreamt" is the only English word that ends in the letters "mt". ? (Are you doubting this?)



Our eyes are always the same size from birth, but our nose and ears never stop growing.

The sentence: "The quick brown fox jumps over the lazy dog" uses every letter of the alphabet. (Now, you KNOW you're going to try this out for accuracy, right?)

The words 'racecar,' 'kayak' and 'level' are the same whether they are read left to right or right to left (palindromes). (Yep, I knew you were going to "do" this one.)

There are only four words in the English language which end in "dous": tremendous, horrendous, stupendous, and hazardous. (You're not doubting this, are you?)

There are two words in the English language that have all five vowels in order: "abstemious" and "facetious." (Yes, admit it, you are going to say, a e i o u)

TYPEWRITER is the longest word that can be made using the letters only on one row of the keyboard. (All you typists are going to test this out)



A cat has 32 muscles in each ear.



A goldfish has a memory span of three seconds. (Some days that's about what my memory span is.)

A "jiffy" is an actual unit of time for 1/100th of a second

A shark is the only fish that can blink with both eyes.

A snail can sleep for three years. (I know some people that could do this too.!)



Almonds are a member of the peach family.

An ostrich's eye is bigger than its brain.

Babies are born without kneecaps. They don't appear until the child reaches 2 to 6 years of age.

February 1865 is the only month in recorded history not to have a full moon.

If the population of China walked past you, 8 abreast, the line would never end because of the rate of reproduction.



Leonardo DaVinci invented the scissors.

Peanuts are one of the ingredients of dynamite!

Rubberbands last longer when refrigerated.

The average person's left hand does 56% of the typing.

The cruise liner, QE 2, moves only six inches for each gallon of diesel that it burns.

The microwave was invented after a researcher walked by a radar tube and a chocolate bar melted in his pocket. (Good thing he did that.)

The winter of 1932 was so cold that Niagara Falls froze completely solid.

There are more chickens than people in the world.



Winston Churchill was born in a ladies' room during a dance.

Women blink nearly twice as much as men.

Now you know more than you did before!

# **Biotech News**

Clips from the Daily Drug News Hannah Nguyen

# [November 09, 2007] CombinatoRx initiates phase IIa clinical trial of CRx-191 for psoriasis

CombinatoRx has initiated dosing of patients in a 12-day, single-center, randomized, double-blind, placebo-controlled phase IIa clinical trial evaluating the efficacy and safety of CRx-191 (mometasone furoate/nortriptyline hydrochloride), a topical synergistic combination drug candidate in development for psoriasis and other steroid-responsive dermatoses, in reducing psoriatic infiltrate band thickness in subjects with plaque psoriasis. Approximately 20 subjects with chronic, stable plaque psoriasis in an area sufficient for six treatment fields within an occlusive dressing will be enrolled. All subjects will receive all treatments in the selected treatment arms: CRx-191 low dose (0.1% mometasone furoate + 0.05% nortriptyline), CRx-191 high dose (0.1% mometasone furoate + 0.1% nortriptyline), 0.1% mometasone alone, 0.05% nortriptyline alone, 0.1% nortriptyline alone and placebo. Endpoints include reduction from baseline in psoriatic infiltrate as measured by ultrasound at day 12 and will compare both doses of CRx-191 and its individual components. CRx-191 has a novel multitarget mechanism that inhibits TNF-alpha and interferon gamma, key cell mediators of dermal inflammation. It contains a mid-potency glucocorticosteroid, mometasone, and a very low dose of the tricyclic antidepressant, nortriptyline. Another study to evaluate the potential of CRx-191 compared with high potency steroid comparator, to induce skin atrophy, has been completed and data analysis is ongoing (CombinatoRx News Release).

[October 29, 2007] Osiris begins phase II study of **Prochymal for type 1 diabetes.** Osiris Therapeutics has initiated a phase II clinical trial evaluating Prochymal(TM), a preparation of mesenchymal stem cells specially formulated for intravenous infusion, as a treatment for type 1 diabetes. The phase II trial will evaluate the safety and efficacy of Prochymal(TM) in conjunction with standard of care in preserving insulin production in patients recently diagnosed with type 1 diabetes mellitus. The design will be a double-blind, placebo-controlled trial with a target enrollment of 60 patients. The primary endpoint of the trial will be the measurement of C-peptide produced during a mixed meal tolerance test in patients treated with Prochymal(TM), compared to those receiving placebo. Research indicates that the drug is able to downregulate the production of proinflammatory cytokines, including tumor necrosis factor-alpha and interferon-gamma. The drug has been granted fast track status by FDA for both graft-versus-host disease (GVHD) and Crohn's disease. It has also obtained orphan drug status from the FDA and EMEA for steroid refractory GVHD (Osiris Therapeutics News Release).

### [November 15, 2007] E.U. approves Pegintron/Rebetol therapy for HCV patients failing interferon. The E.U. has approved Schering-Plough's 48-week Pegintron(TM) (peginterferon alfa-2b, 1.5 mcg/kg once weekly) and Rebetol(R) (ribavirin, 800-1400 mg daily) combination therapy for

retreating adult patients with chronic hepatitis C (HCV) whose prior treatment with interferon alfa (pegylated or nonpegylated) and ribavirin combination therapy or interferon alfa monotherapy did not result in a sustained response. The European Commission approval of this expanded indication has led to a marketing authorization with unified labeling that is valid in the current 27-member E.U. states as well as in Iceland and Norway. The approval is based on results from an ongoing noncomparative clinical study (EPIC3) in which 1,336 patients with moderate to severe fibrosis or cirrhosis

(Biotech News, cont. from page 18)

who failed previous treatment with combination interferon alfa/ribavirin therapy were retreated with Pegintron(TM) combination therapy (Schering-Plough News Release).

# [November 27, 2007] Selective LMP7 proteasome inhibitor shows antirheumatic activity in vivo.

The immunoproteasome is the term used to describe the proteasome complex found in hematopoietically derived cells or cells exposed to inflammatory cytokines. PR-957 is a selective inhibitor of the LMP7 catalytic subunit of the immunoproteasome that has been developed at Proteolix. It blocked lipopolysaccharide-induced production of tumor necrosis factor (TNF)-alpha, interleukin (IL)-6 and IL-12p40, and anti-CD3/CD28-induced interferon gamma release in vitro. Following in vivo administration, PR-957 selectively blocked LMP7 activity in blood and tissues and suppressed clinical and histological disease progression in collagen antibodyinduced arthritis models with a minimum effective dose at least 8-fold lower than the maximal tolerated dose (Muchamuel, T. et al. Arthritis Rheum [71st Annu Sci Meet Am Coll Rheumatol (Nov 6-11, Boston) 2007] 2007, 56(9, Suppl.): Abst 939).

[October 19, 2007] IMP-321, an immunopotentiator, activates human effector cytotoxic cells. IMP-321 (ImmuFact[R]) is a novel, potent, immunopotentiator currently under phase I/II development at Immutep for the treatment of various cancers. IMP-321 is a soluble, recombinant form of the human lymphocyte activation gene-3 (LAG-3) protein. LAG-3 is involved in amplification of T-cell immune responses, specifically type 1 T-helper cells (TH1)/type 1 cytotoxic CD8 T-cells (Tc1) responses which influence resistance to disease and ultimately survival. Experiments using ex vivo human polymorphonuclear monocytes (PBMCs) from healthy subjects and metastatic cancer (breast and renal carcinomas) patients were performed to determine the efficacy of the agent in inducing Th1/Tc1-mediated cytotoxic responses. IMP-321 bound to all circulating dendritic cells but to less than 10% of MHC class II cells including myeloid dendritic cells and some monocytes. Treatment of PBMCs with IMP-321 induced production of cytokines and chemokines

including interferon (IFN) gamma, tumor necrosis factor (TNF)-alpha, interleukin IL-1beta, IL-6, CCL4, CCL2 and CCL5; however, the immunosuppressant IL-10 was not induced with IMP-321 treatment. Activation of a significant number CD8+ Tcells and NK cells was observed after 18 hours of IMP-321 exposure which resulted in production of Tc1 cytokines such as IFN-gamma and TNF-alpha, which are crucial for effective antitumor responses. The Tc1 IFN-gamma response was not seen following treatment with TLR1-9 agonists which induced IL-10. Similar results were obtained from PBMCs from cancer patients with the exception that lower values were obtained for the NK subset. IMP-321 represents a novel class of immunopotentiator that may be effective in cancer patients in that it recruits a large range of effector cells in both innate and acquired immune responses to tumor cells, ultimately resulting in cytotoxic responses (Brignone, C. et al. J Immunol 2007, 179(6): 4202).

[October 29, 2007] Three-year results show benefit of alemtuzumab treatment for multiple sclerosis. In the CAMMS223 study, patients with relapsing-remitting multiple sclerosis received alemtuzumab (Campath[R]; Genzyme, Bayer Schering Pharma) or interferon beta-1a, though the administration of alemtuzumab was stopped due to the occurrence of immune thrombocytopenic purpura (ITP) in some patients. Data obtained after 36 months of follow-up show the maintenance of benefit seen in analyses at earlier time points and no new cases of ITP in the past year in the study. Alemtuzumab therapy consisted of doses of 12 or 24 mg i.v. given for 5 days at the first treatment, then 3 days of retreatment after 12 months with an option for further retreatment at 24 months. Interferon beta-1a was administered in a 44 mcg s.c. dose given three times per week. At 3 years, alemtuzumab-treated patients had a reduction in the risk of relapse of at least 73% compared to patients given interferon beta-1a. Alemtuzumabtreated patients also had a reduction in the risk of progression of clinically significant disability of at least 70% compared to patients treated with interferon beta-1a. Overall, ITP was diagnosed in 6 patients treated with alemtuzumab in CAMS223. Two phase III studies evaluating alemtuzumab in multiple sclerosis patients have begun (CARE-MS I and II) (Compston, D.A.S. 23rd Congr Eur Comm

### (Biotech News, cont. from page 19)

Treatment Res Multiple Scler (ECTRIMS) & 12th Annu Conf Rehab MS (RIMS) (Oct 11-14, Prague) 2007, Abst 128; Bayer Schering Pharma News Release; Genzyme News Release).

[November 09, 2007] GSK initiates ENABLE 1 and ENABLE 2 phase III trials of eltrombopag. GlaxoSmithKline has initiated two parallel, multicenter, two-part phase III studies to assess the clinical benefits of its investigational compound Promacta(R)/Revolade(TM) (eltrombopag), an oral, nonpeptide thrombopoietin receptor agonist, in hepatitis C-associated thrombocytopenia. The studies, ENABLE 1 and ENABLE 2 (Eltrombopag to iNitiate and maintain interferon Antiviral treatment to Benefit subjects with hepatitis C-related Liver Disease), will measure the ability of eltrombopag to raise platelet counts sufficiently enough to enable the initiation of antiviral therapy and to allow sustained antiviral therapy in thrombocytopenic hepatitis C (HCV) patients. The clinical benefit of eltrombopag will be measured by the proportion of subjects who are able to achieve sustained virological response (SVR). ENABLE 1 and ENABLE 2 each consists of an open-label pre-antiviral treatment phase (part 1) and a randomized, double-blind, placebo controlled antiviral treatment phase (part 2). Both studies will enroll approximately 750 patients with chronic HCV with baseline platelet counts of less than 75,000/mcl. In part 1 of the study, all subjects will receive openlabel eltrombopag in increasing doses for up to nine weeks before being randomized to double-blind eltrombopag or matched placebo in combination with antiviral therapy for up to 48 weeks (part 2). ENABLE 1 will administer peginterferon alfa-2a plus ribavirin, while ENABLE 2 will investigate the use of peginterferon alfa-2b plus ribavirin. SVR rates will be assessed along with safety and quality-of-life outcomes. Eltrombopag was discovered as a result of a research collaboration between GSK and Ligand and is being developed by GSK (GlaxoSmithKline

# [October 25, 2007] Preliminary PROTECT-1 results show efficacy of CCX-282-B in Crohn's

disease. A high rate of clinical response has been seen in an ongoing trial of the chemokine receptor CCR9 inhibitor CCX-282-B (Traficet-ENITM): GlaxoSmithKline, ChemoCentryx) in patients with Crohn's disease. The multinational PROTECT-1 study includes patients with moderate to severe disease who are randomized to placebo or CCX-282-B 250 mg/day, 500 mg/day or 250 mg b.i.d. for 12 weeks. This is followed by a 4-week active treatment period with CCX-282-B 250 mg b.i.d., after which Crohn's Disease Activity Index (CDAI) 70 responders are rerandomized in the maintenance period to placebo or CCX-282-B 250 mg b.i.d. for 36 weeks. Of 39 patients completing the active treatment period, 29 achieved a CDAI 70 response, 27 achieved a CDAI 100 response and 16 were in remission (CDAI less than 150). There were no serious unexpected adverse events related to CCX-282-B (Keshav, S. et al. Am J Gastroenterol [Annu Sci Meet Am Coll Gastroenterol (Oct 12-17, Philadelphia) 2007] 2007, 102(Suppl. 2): Abst 972).

# [November 12, 2007] FDA approves IND application for Metastatix's CXCR4 inhibitor MSX-122.

The FDA has accepted the IND submitted by Metastatix for MSX-122, the company's potent CXCR4 inhibitor being developed for the treatment of a number of critical indications, including various cancers and inflammatory diseases. The IND acceptance will permit Metastatix to commence phase I clinical studies in the U.S. to determine the safety and tolerability of MSX-122 for the treatment of solid tumors. The product is a potent inhibitor of the chemokine receptor CXCR4, which is activated by stromal derived factor-1 (SDF-1). The interaction between SDF-1 and CXCR4 has been shown to promote chemotaxis and angiogenesis in multiple cancer cell types. In preclinical studies, MSX-122 has displayed a favorable pharmacodynamic and safety profile while inhibiting the function of CXCR4, thus affecting downstream cellular events (Metastatix News Release).

News Release).

[November 26, 2007] NovImmune develops novel mAbs with potential use in septic shock / News in **Context.** Activation of Toll-like receptor 4 (TLR4) by bacterial endotoxin or lipopolysaccharide (LPS) initiates an inflammatory signaling cascade, which is critical for sepsis development. Researchers at NovImmune have developed a murine monoclonal antibody (mAb), namely 5E3, against the complex formed by TLR4 and myeloid differentiation protein-2 (MD-2), which facilitates intracellular transport and stabilization of TLR4. In vitro, 5E3 dosedependently inhibited cell activation after LPS challenge and blocked LPS-induced production of tumor necrosis factor (TNF) alpha. In vivo, pretreatment with 5E3 before sublethal LPS administration dosedependently suppressed the production of interleukin (IL)-6 at doses ranging from 1 to 10 mg/kg. Also, monocyte chemoattractant protein (MCP-1) and IL-10 serum levels were also significantly diminished by 5E3. In the colon ascendens stent peritonitis model, an experimentally induced polymicrobial peritonitis sepsis, 5E3 (2 mg/kg) increased survival by more than 80%. These results hold promise for TLR4/MD-2 complex blockade for the treatment of sepsis (Daubeuf, B. et al. J Immunol 2007, 179(9): 6107).

15C1 is another anti-TLR4 monoclonal antibody developed at NovImmune, which was shown to potently inhibit LPS-dependent TLR4 induction of a panel of human cells and TLR4-dependent activation of human whole blood. The mechanism of action of 15C1's inhibition of TLR4 activation was found to be at least partially mediated via binding of the activating Fc receptor CD32A, hence inhibiting proinflammatory stimulation (Dunn-Siegrist, I. et al. J Biol Chem 2007, Advance publication).

### **News in Context: Sepsis and TLR4**

Sepsis is a serious syndrome caused by an intense immune response to a severe infection or trauma. It can progress to severe sepsis when the infection is associated with acute organ dysfunction and terminate in septic shock, a condition that presents with hypotension and multiple organ system failure. Immunocompromised, critically ill, elderly or premature neonate patients are especially prone to suffer

infections that may develop into sepsis. Gram-negative and also Gram-positive bacteria and fungi can initiate an inflammatory cascade that starts with the release of products synthesized by the microorganisms (LPS, lipoteichoic acid or exotoxins), which stimulate the release of macrophage-derived inflammatory cytokines, like TNF-alpha and IL-1. This exacerbated cytokine production, which can include pro- and antiinflammatory cytokines, contributes to the development of septic shock. Sepsis treatment starts with broad-spectrum antibiotics and supportive care measures, like hypotension management in case of severe sepsis. Eradicating the source of infection, such as an infected catheter, is key to sepsis control. However, in spite of treating the infection, sepsis patients may progress and develop septic shock and multiorgan failure. Therefore, new treatment strategies are being developed. Neutralization of individual cytokines may be adequate but poorly effective in protecting the patient against an inflammatory response involving different cytokines and other mediators. In contrast, targeting Toll-like receptor (TLR) signaling may be more effective, since it will affect a broader range of downstream proinflammatory molecules, such as interleukins or TNF-alpha. Upon infection, pathogens are recognized by phagocytic leukocytes or other cells of the innate immune system. Pattern recognition receptors in innate immune cells identify pathogen-associated molecular patterns from microorganisms, like endotoxin or LPS on the cell wall of Gram-negative bacteria. TLRs belong to a family of pattern recognition receptors able to discriminate between different types of pathogens. Binding of microbial products to TLRs triggers the activation of several signal transduction pathways. The best characterized is the activation of the transcription factor NF-kB, which regulates the production of cytokines, chemokines, adhesion molecules and enzymes like iNOS (inducible nitric oxide synthase) that are important in the innate immune response. TLRs also contribute to adaptive immunity through activation of antigen-presenting cells and enhancement of dendritic cell maturation. In particular, TLR4 is known to trigger NF-kB activation after binding of bacterial endotoxin or LPS, its main ligand (Mbow, M.L. and Sarisky, R.T. Drug News Perspect 2005, 18(3): 179). Blocking TLR4 signaling appears to be promising for sepsis management according to the above-mentioned results and to

(Biotech News, cont. from page 21)

those with other TLR4 antagonists such as eritoran (Eisai) and resatorvid (TAK-242; Takeda) currently undergoing phase III clinical trials.

[December 05, 2007] Centocor and Janssen-Cilag seek approval for ustekinumab from FDA and EMEA. Centocor has submitted a BLA with the FDA and Janssen-Cilag has submitted an MAA to the EMEA requesting the approval of ustekinumab (CNTO-1275), a human monoclonal antibody that targets the cytokines interleukin-12 (IL-12) and interleukin-23 (IL-23), for the treatment of adult patients with chronic moderate to severe plaque psoriasis. The submissions are based on a comprehensive development program including data from two large phase III multicenter, randomized, double-blind, placebo-controlled trials involving approximately 2,000 patients that evaluated the safety and efficacy of the product in the treatment of moderate to severe plague psoriasis. The primary endpoint of each pivotal study was the proportion of patients who achieved at least a 75% reduction in psoriasis as measured by the Psoriasis Area and Severity Index. Centocor discovered ustekinumab and has exclusive marketing rights to the product in the U.S. and Janssen-Cilag has exclusive marketing rights in all



other countries (Centocor News Release)

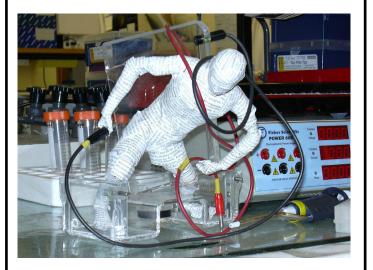
### Only great minds can read this

This is weird, but interesting!

fi yuo cna raed tihs, yuo hvae a sgtrane mnid too Cna yuo raed tihs? Olny 55 plepoe out of 100 can. i cdnuolt blveiee taht I cluod aulaclty uesdnatnrd waht I was rdanieg. The phaonmneal pweor of the hmuan mnid, aoccdrnig to a rscheearch at Cmabrigde Uinervtisy, it dseno't mtaetr in waht oerdr the ltteres in a wrod are, the olny iproamtnt tihng is taht the frsit and lsat ltteer be in the rghit pclae. The rset can be a taotl mses and you can sitll raed it whotuit a pboerlm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe. Azanmig huh? yaeh and I awlyas tghuhot slpeling was ipmorantt!

### Lab Laocoon

A science sculpture dedicated to lonely post-docs everywhere. Kersten Hall 20 May 2007



Picture reproduced through the courtesy of Dr. Jennifer L. Rohn, Editor, LabLit.com:
The culture of science in fiction & fact

### **Reviews of Interest**

Cytokine & Growth Factor Reviews 18(5-6):347-552 (October-December 2007) Honoring the Milstein Family Support of Interferon Research - ISICR Milstein Award Winners (1990-2006). Edited by John Hiscott.

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Robb, L. Cytokine receptors and hematopoietic differentiation *Oncogene* 26 (47): 6715-6723, 2007.



# HOW TO WRITE A CURRICULUM VITAE (CV)

Melanie V. Sinche, NCC Career Counselor & Consultant

What is a Curriculum Vitae/CV?

A curriculum vitae or CV is similar to a resume in that it provides an overview of your professional and educational experience. The difference between the two primarily lies in content and purpose. A CV is typically developed for application for teaching or research positions in a university or research setting. A resume is prepared for employers outside the academic environment.

### Elements of a CV

### **CONTACT INFORMATION**

Include your name, address, complete telephone number, and e-mail address. Some people include both personal and department addresses to emphasize their current academic affiliation. Make sure you put your last name and page numbers on all but the first page. Do not include any explicit reference to your age, marital status, race, gender identity, or ethnicity.

### **EDUCATION**

List all institutions, degrees, and graduation dates in reverse chronological order. If you attended an institution but did not earn a degree, you do not need to list it on your CV unless the training you received was vital to your career-language courses taken abroad, for instance. Some postdoctoral researchers include their postdoctoral training here, others include it under their research section; follow the norm in your field.

### DISSERTATION/DISSERTATION ABSTRACT

This category is recommended only for those who are currently enrolled in a Ph.D. program. For those who have completed the Ph.D., you can simply list the title of your dissertation, as well as the name of your chair/advisor and/or committee members, beneath the information on your doctoral degree in the previous category. Some fields require a longer

description (about a paragraph) of the dissertation on your CV, generally under a separate section entitled "Dissertation Abstract," while other fields expect dissertation research to be listed under "Research Experience." Follow the norm in your field.

### AWARDS, FELLOWSHIPS, HONORS, GRANTS

List all relevant academic distinctions, teaching awards, fellowships, honors, or grants you have received since you entered graduate school in reverse chronological order. This information may be combined if there are only a few citations, or broken out into separate categories (e.g. "Grants") if there are several. Include the name of the department and institution bestowing the honor. Include undergraduate honors and fellowships if they are relevant to your field or indicate exceptional academic achievement (e.g., summa cum laude, Phi Beta Kappa, etc.).

### RESEARCH EXPERIENCE

Most often used in some of the sciences and social sciences, this category can include postdoctoral, dissertation/graduate work, and possibly undergraduate and internship research. Typically, you describe your project(s) (including any techniques you mastered) and list the affiliated lab and/or professor, although some fields prefer not to see any descriptive information after your position titles. Follow the norm in your field.

### **PUBLICATIONS**

Include bibliographic citations of articles, research reports and book reviews that you have published. If applicable, poems, musical recitals or art exhibits may be included in this section. Depending upon your field, as you gain experience, you will further separate these items into different categories, such as "book reviews," "articles in refereed journals," "books," etc. Use the form of citation appropriate to your field. In order to list something as "forthcoming" in this section, you should have a reasonably firm sense of when the publication will appear in print.

### PRESENTATIONS, ABSTRACTS

List all papers/talks you have given, or will deliver, along with the names, dates, and locations of the conferences or meetings where you presented that work. If you are a postdoctoral researcher with

### (Curriculum Vitae, cont. from page 24)

numerous publications, you may choose to list only invited talks or selected abstracts. If you presented your work at a university colloquium or workshop, you may also list the talk here if it was a substantial piece of work or something directly relevant to your dissertation work or research agenda.

### WORK SUBMITTED, WORK IN PROGRESS

In some fields, it is fairly standard practice for scholars to add sections entitled "Work Submitted" and "Work in Progress" to their CVs. Often these can be listed under a subheading in the publications section. If you have an article or book under review at a refereed journal or academic press, you should list it under the category "Work Submitted for Publication." In this way, you can inform employers that you have enough confidence in your work to submit it for publication. If you are an experienced candidate, or want to change jobs, you will want to indicate the potential of publication on new projects by reporting your progress in a section entitled "Work in Progress."

### TEACHING EXPERIENCE

Include all full-time, part-time, and adjunct teaching experience. For each position, list your title, the dates of employment (or quarter and year), and the name (not just the number) of each course you taught. Include a brief description of your responsibilities. Since job titles vary from university to university, you need to tell the employer something about your level of involvement in the course design, preparation of materials, weekly instruction, and grading.

# RESEARCH INTERESTS, TEACHING COMPETENCIES

In some fields, you list your current research interests and teaching competencies. These would be listed as separate categories. When listing your teaching competencies, be sure to list general categories, as well as specialized ones, so that employers know you are capable and willing to teach the undergraduate and general education requirements offered in their departments.

# PROFESSIONAL TRAINING, RELATED WORK EXPERIENCE

List any special professional training you received in your department or through a professional organization in this section. Such training may include special courses on pedagogy or teaching techniques, professional seminars offered by a professional organization, or technical or computer training completed in addition to your regular coursework. If you have work experience that is relevant to your application, list and describe such experience in a separate category entitled "Related Work Experience."

### LANGUAGES

Where relevant, list the languages you have studied, as well as some indication of your level of expertise (e.g., "Reading knowledge of French and German" or "Fluent in Spanish; working knowledge of Italian").

# PROFESSIONAL AFFILIATIONS and SER-VICE

List the major professional organizations to which you belong. If you have served actively in one or more of these organizations, you may wish to indicate the level of your involvement here as well.

# ACADEMIC SERVICE, COMMUNITY OUTREACH

If you have served on any committees (such as graduate advisory or search committees in your department or any appointed or elected position in the university), list the experience here. You may also note in this category any talks you gave or meetings you arranged in your department about professional issues in your field. Demonstrating service will tell employers that you are a good citizen in your current department and institution. If you have volunteered your time in other ways related to your discipline within the community at large (e.g., judging a science fair, school and museum outreach, etc.), you can list such activities here as well.

### (Curriculum Vitae, cont. from page 25)

### REFERENCES

At the end of your CV, list the names, titles, and academic affiliations of your references. List your references in order of importance (for instance, your dissertation director/advisor first, followed by other members of your committee or other advisors who know your work well). In some fields, it is customary to list the mailing and/or e-mail addresses and telephone numbers of your references; follow the standard in your field.

### **Final Tips**

- Length:
  - 2 to 4 pages for a new professional 4 to 7 pages for a person with more experience 10 pages maximum
- List dates on the right-hand side, more important information on the left.
- Omit reference to age, marital status, race, gender identity, or ethnicity.
- Do not include headings such as "Curriculum Vitae," "Personal Information," or "Name."
- Use action verbs to begin every job description.
- Add a header with name and page number to each page after the first.
- Be sure to have a career counselor, and/or several faculty members, critique your CV when you have completed your draft.

### **Sample Category Headings**

Education
Educational Background
Professional Studies
Academic Background
Academic Training
Degrees
Dissertation
Comprehensive Areas
Master's Project

Professional Competencies Course Highlights Educational Highlights Proficiencies Areas of Knowledge Areas of Expertise Areas of Concentration in Graduate Study Graduate Fieldwork Graduate Practica Specialized Training Internships Teaching Assistantships Research Assistantships

Teaching Interests Academic Interests Research Interests **Educational Interests** Postdoctoral Experience **Professional Interests** Professional Experience Professional Overview Professional Background **Academic Appointments** Teaching Experience Teaching Overview **Experience Summary Professional Summary Experience Highlights** Related Professional Experience Research Appointments Research Experience

Academic Accomplishments **Professional Achievements** Career Achievements Career Highlights Research Overview Administrative Experience Consulting Experience Related Experiences Academic Service Advising Professional Service Professional Development University Involvement Service Outreach Leadership **Major Committees** Committee Leadership Departmental Leadership **Professional Association Advisory Boards** University Assignments **Advisory Committees** National Boards Conferences Attended Conference Participation **Conference Presentations** Conference Leadership Workshop Presentations

Convention Addresses

Lectures and Colloquia

**Scholarly Presentations** 

Programs and Workshops

Invited Addresses

Invited Lectures

**Professional Activities** Presentations and Publications **Abstracts Publications Scholarly Publications** Scholarly Works Bibliography **Books** Chapters **Editorial Boards Professional Papers Technical Papers** Refereed Journal Articles **Editorial Appointments** Articles/Monographs Reviews **Book Reviews** Multimedia Materials Selected Presentations Research Awards Research Grants **Funded Projects Grants and Contracts** Patents Exhibits/Exhibitions

Arrangements/Scores
Performances
Recitals
Scholarships

Scholarships Fellowships Academic Awards Honors Distinctions

Activities and Distinctions Honors and Awards Professional Recognition

Prizes

College Activities

Awards Affiliations Memberships

Professional Memberships Memberships in Scholarly

Societies

Professional Organizations Honorary Societies Professional Societies Professional Certification

Certification Licensure Endorsements Special Training

Foreign Study Study Abroad Travel Abroad International Projects

Languages

Language Competencies

Thesis

# **Clinical Trials**

Hannah Nguyen

More information on this list can be obtained at http://clinicaltrials.gov [CT], http://www.center-watch.com/search.asp [CW], or http://clinicalstudies.info.nih.gov [CCNIH].

# First Study of the Safety of CNTO 888 (a Human Monoconal Antibody Against CC-Chemokine Ligand 2) in Patients With Solid Tumors.

Locations: San Antonio, Texas, United States, 78229 and Sutton, United Kingdom, SM2 5PT. Study Director: Centocor, Inc. Clinical Trial Centocor, Inc.. Study ID Numbers: CR013699. ClinicalTrials.gov

Identifier: NCT00537368

Correlation Between Cytokines and Hepatic Histology in Patients Infected by HIV-1 and the Hepatitis-C Virus. Location: SAE e Hospital Dia de Aids, Botucatu, Sao Paulo, Brazil, 18618970. Contact and Principal Investigator: Alexandre N Barbosa, MD, MSc UPECLIN HC FM Botucatu Unesp +55 014 3811-6537 alexnaime@fmb.unesp.br. Study ID Numbers: Unesp-FMB-SAE/HD-07-01. ClinicalTrials.gov Identifier: NCT00499434

### MAGIC Cell-5-Combicytokine Trial (MAGIC

Cell-5). Location: Seoul National University Hospital, Seoul, Republic of Korea. Principal Investigator: Hyo-Soo Kim, MD PhD Seoul National University Hospital. Study ID Numbers: MAGIC Cell-5. ClinicalTrials.gov Identifier: NCT00501917

Low Dose Decitabine + Interferon-Alfa-2b in Advanced Renal Cell Carcinoma. Location: U.T.M.D. Anderson Cancer Center, Houston, Texas, United States, 77030. Principal Investigator: Ana M. Aparicio, MD, U.T.M.D. Anderson Cancer Center. Study ID Numbers: 2006-0962. ClinicalTrials.gov Identifier: NCT00561912NCT00561912

Followed By Cisplatin, Vinblastine, and Temozolomide in Treating Patients With Advanced Melanoma or Other Cancer. Location: Case Comprehensive Cancer Center and Cleveland Clinic Taussig Cancer Center, Cleveland, Ohio, United States. Contacts: Clinical Trials Office - Case Comprehensive Cancer Center 800-641-2422; Clinical Trials Office - Cleveland Clinic Taussig Cancer Center 866-223-8100. Study ID Numbers: CDR0000557420, CASE-3Y06. ClinicalTrials.gov Identifier: NCT00498979

# A Pilot Study of Aerosol Interferon-Gamma for Treatment of Idiopathic Pulmonary Fibrosis.

Location: Division of Pulmonary & Critical Care Medicine, NYU School of Medicine, New York, New York, United States, 10016. Principal Investigator: Rany Condos, MD; NYU School of Medicine. Study ID Numbers: 9583, IFB 9583. ClinicalTrials.gov Identifier: NCT00563212

### DT388IL3 Fusion Protein in Treating Patients With Acute Myeloid Leukemia or Accelerated Phase or Blastic Phase Chronic Myeloid

Leukemia. Locations: North Carolina and Texas, United States and British Columbia, Canada. Contacts: Clinical Trials Office - Duke Comprehensive Cancer Center 888-275-3853; Contact: Arthur E. Frankel, MD 254-724-0094; Donna E. Hogge, MD 604-875-4863. Study Chair: Arthur E. Frankel, MD, Scott and White Hospital & Clinic. Study ID Numbers: CDR0000511032, S-WHITE-22304, S-WHITE-050047. ClinicalTrials.gov Identifier: NCT00397579

# Interferon-Alfa and Interleukin-6 in Treating Patients With Recurrent Multiple Myeloma.

Location: Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, Maryland, United States, 21231-2410. Contact: Clinical Trials Office - Sidney Kimmel Comprehensive Cancer Center 410-955-8804 jhcccro@jhmi.edu. Study Chair: Carol A. Huff, MD, Sidney Kimmel Comprehensive Cancer Center. Study ID Numbers: CDR0000543428, JHOC-J0620, JHOC-NA\_00002178. ClinicalTrials.gov identifier: NCT00470093

Interleukin-7 in Treating Patients With Metastatic Melanoma or Locally Advanced or Metastatic Kidney Cancer. Location: Warren Grant Magnuson Clinical Center 888-NCI-1937. Study Chair: Steven A. Rosenberg, MD, PhD NCI - Surgery Branch. Study ID Numbers: CDR0000551550, NCI-07-C-0114, CYTHERIS-CLI-107-04. ClinicalTrials.gov Identifier NCT00492440

Safety and Effectiveness of PENNVAX-B Vaccine Alone, With IL-12, or IL-15 DNA in Healthy Adults. Locations and Contacts in Alabama, California and New York, United States. Study Chair: Marnie Elizaga, HVTN, FHCRC. Study ID Numbers: HVTN 070. ClinicalTrials.gov Identifier: NCT00528489

A Phase I, Dose-Escalation Study to Assess the Safety and Biological Activity of Recombinant Human Interleukin-18. Location: GSK Clinical Trials Call Center Indianapolis, Indiana, United States, 46202. Contact: Michael Robertson 877-379-3718. Study Chair: GSK Clinical Trials, MD GlaxoSmithKline. Study ID Numbers: ILI105618. ClinicalTrials.gov Identifier: NCT00500058

# AMD3100 With G-CSF in Poor Mobilizing Adult Patients Who Previously Failed HSC

Collection/Attempts. Locations in several US States. Contact: Gary Calandra, MD 604-530-1057 clinicaltrials@anormed.com. Principal Investigator: John McCarty, MD Virginia Commonwealth University. Study ID Numbers: AMD3100-2112.

ClinicalTrials.gov Identifier: NCT00396331



# THE ISICR SLIDE REPOSITORY

Ever see a slide in a talk that you wish you could use for your own presentation? Well now this may be possible through the ISICR Slide Repository. Members can now go in and post slides that they have developed or download slides that others have provided to the membership. OVER 350 SLIDES ARE NOW AVAILABLE!!!!!! For this member only feature, you need to have your member number so if you are not sure what that is, please contact the membership office. We urge members to upload general slides that other members can use for lectures, classes, seminars, etc. Slides are not to be changed without permission from the donor and all copyright permissions must be obtained. The repository now has a useful search capability that allows you to find slides on a particular topic. If you have trouble uploading or downloading slides, please contact Howard Young at younghow@mail.nih.gov.

PLEASE CONSIDER CONTRIBUTING YOUR SLIDES. The success of this initiative depends upon you, the membership!!!!

I wish to express a special thanks to Elsevier and Andrew Miller, Senior Publishing Editor, Elsevier, Health Sciences, for permitting us to deposit many of the figures from the Milstein Award edition of Cytokines & Growth Factors Reviews. http://www.sciencedirect.com/science/journal/13596101

### A correction and a comment about the last issue (14.2)

Bob Friedman

First, the picture of the batsman is wrong, I'm left-handed. This must be corrected by making a mirror image of the picture. Otherwise, I plan to lodge a complaint with the League for the Left-Hand. Also, you left out two Brit expressions that are important for Americans to know: knock up = knock on someone's door; and, an out-house = any unattached building. Confusing use of these terms can be embarrassing. For instance, to say I'll knock you up in the out-house is to a Brit a neutral statement, whereas to one of us, it has sinister implications.

### THEY DON'T MAKE MEETINGS LIKE THEY USED TO

Bob Friedman

The only hesitation I had in accepting Charles Chany's invitation to attend an interferon meeting to be held in Lyon in January, 1969 was that I might miss the telecast of Super Bowl III between the New York Jets and the (then) Baltimore Colts, to be held on Sunday, January 12 that year. I decided to risk missing the game and made reservations on Pan Am (which still was in operation) for getting to Lyon from Washington, planning to return on the 12th, and hoping I'd not miss the Super Bowl, the timing of which was not to be set until quite close to when the game was to be played.

Greg O'Conor, a fellow member of the Laboratory of Pathology in the NCI, had spent a number of years working with the United Nations in Lyon on cancer epidemiology. When I asked him about good places to eat in the city, he told me that the best restaurant was undoubtedly Tante Elise, but to be sure also to go to Booth 16 in the food market where fresh shell fish was served. In any visit to Lyon, it was not to be missed.

My plan was to fly to London, stay overnight, and take a connecting flight to Lyon. Meeting my flight when it landed in London was Joseph Sonnabend, with whom I had worked closely in Alec Isaacs' lab in 1963-64. I spent the night at his house in St. John's Wood

After arriving in Lyon the next day, I met almost all of the British interferon workers, including Ian Kerr and Norman Finter, that evening for dinner. I suggested we try the restaurant so enthusiastically endorsed by Greg O'Conor, Tante Elise. However after arriving at the restaurant and studying the menu, everyone agreed that the prices there were beyond our travel allowances. Just as we about to get up and excuse ourselves to our waiter, Charles Chany arrived with a man he introduced as M. Charles Merieux, the gentleman whose company had funded the meeting we were to attend. He congratulated us on our choosing the best restaurant in Lyon to eat at, and told us we were sure to enjoy our meal, and the hospitality for which Lyon was famous. I

suggested that we stay where we were, as M. Merieux seemed so delighted with our choosing his favorite restaurant, he just might pick up the check for our dinners. All agreed that this seemed likely enough to chance going over our travel budgets. Anyway, the menu looked appetizing. Except for Joseph and me, everyone at our table ordered the specialty of the house, steak tartare, raw chopped beef with a raw egg. The meal was acknowledged by all of us to be delicious, and indeed M. Merieux graciously picked up the check and paid the tip.

The next morning the breakfast room at our hotel was almost empty - only Joseph and I were there. When we arrived at the meeting site, none of the British scientists had appeared at the opening, or indeed any later session of the three day meeting. I soon got word that the missing scientists had been struck by severe gastroenteritis, almost certainly as a consequence of what they'd had for dinner the first night. Well I thought, at least my good friend Joseph had been spared.

Even without the contribution of the British contingent, the meeting went along quite well. A lunch for the participants was provided, but I suggested to Joseph that we go to the market to see what Booth 16 had to offer. He agreed. Greg O'Conor was right. The meals served consisted of huge portions of shell fish. Joseph ordered mussels, and I, oysters. It took some time to get through the amount of shell fish provided. Joseph couldn't begin to finish his portion, so he offered me some, but I was full, and had to refuse, which was just as well, because about five weeks later Joseph came down with hepatitis, probably hepatitis A, as a result of eating his portion of mussels at the renowned Booth 16.

Thus, I had single-handedly disabled almost the total British interferon research establishment.

(TO BE CONTINUED)

# **ISICR Reports**



Photo courtesy of David Sehy

### **ISICR Board of Directors Report**

Sunday, 16 September, 2007 Oxford, UK

In attendance: Drs. Haller, Fish, Freidman, Young, Hamilton, Dianzani, Williams, Hovanessian, Baron, Hiscott, and Pestka. Committee chairs in attendance included Drs. Czarniecki, and Fleischmann.

The President extended the board's gratitude to the Milstein family (and Dr. Pestka) for their continued financial support of the Milstein Award and the Travel Awards in 2007. Dr. Pestka pointed out that he is now interacting with three members of the Milstein family and thus negotiations take longer. Dr. Fish suggested that perhaps she could participate in future interactions in order to lessen the burden on Dr. Pestka and Dr. Pestka indicated that he would welcome her involvement in the process.

Dr. Hamilton described the process and outcome for the 2007 election process. The ballot results were extremely close for both the position of President-elect and for the three Board of Director positions. In addition, the geographical distribution of BOD membership and nominees was discussed. The BOD then voted unanimously to waive the rule regarding geographic location of the BOD members. Subsequently, the results of the election for President-elect (Dr. Leonidas Platanias) and for three new members of the Board of Directors (Drs. Nancy Reich, Keiko Ozato, and George Stark) were announced by Dr. Haller.

Dr. Haller also extended the Board's congratulations to this year's awards winners including Dr. Shizuo Akira (Milstein Award), Drs. Ian Kerr and George Stark (Honorary Members), and Dr. Nancy Jewel (Christina Fleischmann Memorial Award).

The change in the Executive Director and its impact was discussed briefly. Debbie Weinstein (former Director) has resigned to take on another position and has been replaced by John Lord. The function of the Executive Director will be assessed over the coming year.

Dr. Friedman presented the Treasurer's report (see this newsletter) and indicated that the Society's financial condition remains solid.

Dr. Christine Czarnieki presented the Meetings committee report. The 2006 joint meeting with the ICS was successful and there was a profit made on the meeting though the exact amount was not known and the Society has not yet received the funds. (Post meeting note: a check for >\$4,000 has subsequently been received by the ISICR).

It has been agreed by the Meetings Committee that future meetings (2008, 2009, 2010) will be held jointly with the International Cytokine Society.

The 2007 meeting, despite initial concerns regarding budget, appears to be very close to breaking even. Hence, it is anticipated that there will be little or no expense to the Society even when the \$20,000 given to the organizers to lower registration costs is factored into the calculations.

Dr. John Hiscott reported on plans for the 2008 joint meeting with the ICS to be held in Montreal. The program is under development, the venue has been identified, and budget planning indicates that there should be no significant concerns. However all Board members were asked to identify possible funding sources and help with the fundraising efforts.

The 2009 meeting, to be managed jointly with ICS, is tentatively planned to be held in Lisbon, Portugal. Dr. Haller has appointed Drs. Michael Tovey, Thomas Decker, and David Levy to the Program Committee for the 2009 meeting.

### (ISICR Reports, cont. from page 30)

The Meetings Committee has recommended that the 2010 meeting be held in Chicago.

The Publications Committee report was presented by Dr. Fleischmann. The status of the Journal of Interferon and Cytokine Research was discussed. The Journal is functioning well and the impact factor for 2007 has improved modestly.

Dr. Haller discussed the current status of the proposed merger between the ISICR and the ICS. Based upon a membership vote conducted prior to the meeting in 2006, Dr. Haller and a group of 4 additional ISICR members (Drs. Young, Fish, Zoon, and Billiau) prepared a draft of Constitution/Bylaws for the new merged Society. This was sent to the President of the ICS (Dr. Carl Ware) for consideration. The initial response of the ICS council was not positive though Dr. Ware has indicated that he is willing for this to be discussed further at the ICS annual meeting to be held in San Francisco in October. It was recommended that Dr. Fish, as the incoming ISICR president, should attend the ICS meeting and the Council meeting to present the issues on behalf of the ISICR.

Dr. Haller reported on changes in leadership, composition or continuance for several standing committees. Dr, Paula Pitha-Rowe has requested to step down as the Chair of the Awards Committee and Dr. Haller has asked Dr. Robert Silverman to accept this important position. The BOD noted a special appreciation and its' gratitude to Dr. Pitha-Rowe for her many years of service to the ISICR as Chair of the Awards Committee. In addition, Dr. Norman Finter requested to resign as the Chair of the Archives Committee. The BOD also expressed its' gratitude to Dr. Finter and Dr. Friedman for their efforts in preserving the history of Interferon research. Following a brief discussion, it was decided that the Archives committee had accomplished its task and that it would be discontinued as a standing committee.

Dr. Young briefly reported on the outcome of the ISICR member survey. It was noted that financial considerations caused a number of respondents to forgo the Oxford meeting but almost 80% of

respondents indicated that they would attend in 2008. Interestingly the meeting program was chosen as the most compelling factor that influences attendance. Other findings included the following: almost all members read or at least skim the newsletter; a large number of respondents indicated that they would be willing to serve on ISICR committee; less than 50% of members were aware of the ISICR slide repository and only a very few members have actually donated slides to the repository; members were aware of the website but use was in general, only occasional. Dr. Young also noted that a previous ISICR initiative- the Chinese-ISICR partnership- has received little interest from the Chinese side and thus is no longer being actively promoted.

There being no further business, the meeting was adjourned.

Respectfully submitted Thomas Hamilton, Ph.D. Secretary, ISICR

### **ISICR Archives Committee Report**

Sunday, 16 September 2007 Oxford, UK

The Archives committee met, and decided that its mission had been accomplished, and that it should be abolished as a standing committee. The archive is housed at The Wellcome Trust (Wellcome Foundation for the History and Understanding of Medicine) in London. The records in the archive will be available on the internet at a location which will be posted in a future issue of the newsletter.

Respectfully submitted, Bob Friedman

### **ISICR Meetings Committee Report**

Sunday, 16 September 2007 Oxford, UK

The meeting was called to order on Sunday, September 16, 2007. Present for all or part of the meeting were the following members and Ad hoc members: Graham Foster, Takashi Fujita for Yoichiro Iwakura, John Hiscott, Santo Landolfo, Nancy Reich,

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Michael Tovey, and Leon Platanias. Also attending were guests from the ISICR Board of Directors (Otto Haller, Eleanor Fish, Robert Friedman, and Howard Young), from Oxford Conference Management (Priscilla Frost) and from the Montreal Meeting Organizing Committee (Gabriella Di Pancrazio). The meeting was chaired by Christine Czarniecki.

### 2006 - Vienna, Austria

Josef Schwarzmeier, the Chair of the 2006 Meeting was not able to attend. He sent the committee a final status report and Christine Czarniecki reviewed the summary with the committee. The Meetings Committee expresses thanks to Josef and his colleagues for an extremely successful meeting.

This meeting was the 6th joint meeting of the two societies (and third joint meeting of the ISICR, ICS and European Cytokine Society). The meeting took place August 27-31, 2006 at the Hilton-Stadtpark in Vienna, Austria. There were a total of 750 participants coming from 38 countries - with the largest number of participants coming from the US, followed by Austria.

The final report indicated a total income of 395,545.50 Euros with a breakdown in Euros as follows: 239,057.50 from registration fees; 24,488 from exhibitors; 132,000 from sponsors/Pharmaceutical companies. Final expenses totaled 388,476.72 Euros yielding an excess of 7068.78 Euros which was to be split among the societies. The registration breakdown was as follows: of a total of 583 paid registrations, 499 were "early", 74 were "late" and 10 were "on site".

Post meeting note: On January 29, 2007 The ISICR received \$4348.33 from the 2006 Meeting in Vienna.

# **2007 - Oxford, United Kingdom - The Anniversary Meeting**

Graham Foster the Chair of the Organizing Committee of the current ISICR Meeting provided a status update. This meeting marks the 50th anniversary of the discovery of interferon by Alick Isaacs and Jean Lindenmann and it was preceded by a pre-Meeting Symposium entitled "History of the Interferons" on September 15, 2007. The current report indicates 77 registrants for the pre-meeting and 308 (including cancellations) registrants for the main meeting.

The income is reported as £155,732 with the following breakdown: £104,775 from registrations; £2,500 from the MRC; £18,457 from pharmaceutical sponsors; £10,000 from exhibitors; and £20,000 from the ISICR. Current expenditures including VAT are reported as £141,190. After final payments are made, any balance remaining will be returned to the ISICR. Consistent with the data from the Vienna meeting, the majority of registrations (and funds) come in by the "early registration" cut-off date which in this case was June, 2007.

Planning for this conference suffered from the departure of Debbie Weinstein from FASEB. There were delays in establishment of the meeting website and there were problems in the linkages after it was up and running. Communications between FASEB and the local organizing group were problematic. The meeting website was established and managed by FASEB in the US and the registrations funds collected online were taken in and held in the US. There were a number of participants who could not pay via the website (due to companies or institutes not having credit card facilities). In those cases, bank transfers were sent to Oxford Conference Management and funds held in the UK. The organizers and FASEB made the decision to track the fluctuations in exchange rate and adjust the registration rates accordingly. The drop in value of the dollar against the pound had disastrous effects on the conference budget and the Organizers and ISICR feared that the necessary increases in registration rates would deter potential participants. Therefore in June 2007, the ISICR agreed to advance the Organizers \$20,000 with the understanding that any remaining balance of funds would be returned to the ISICR.

Based on problems encountered, the ISICR Meetings Committee strongly recommends that: (i) FASEB provide ISICR Membership listings to future meetings organizers in a user-friendly format; and (ii) the money raised for a conference should be held in the country in which the meeting is to be held and where the conference expenses (bills) are to be paid. In

### (ISICR Reports, cont. from page 32)

addition, the ISICR Meetings Committee voted to require that for future meetings, the annual meetings organizers will submit a budget status report to the Meetings Committee and ISICR Board in January of the year of the meeting. The Guidelines for ISICR Meetings will be modified to reflect that change.

### 2008 - Montreal

John Hiscott presented an update on the 2008 Joint ISICR/ICS meeting in Montreal. He introduced Gabriella Di Pancrazio who will be providing local organizational support for the conference. The conference will be the 7th Joint conference of the ISICR and ICS and the focus will be "Cytokines in Cancer and Infectious Diseases". The conference will take place October 12-16, 2008 at the Fairmont Queen Elizabeth Hotel (www.fairmont.com/queenelizabeth/). Details can be found on the conference website: www.cytokines2008.org. The organizers chose to use the same website that ICS has used previously.

There was discussion about using the same website for all future meetings. Advantages include cost savings from not having to "reinvent the wheel" each time, as well as identification, recognition and familiarity with a particular meeting website.

The scientific program will include plenary lectures, symposia, workshops and poster sessions on the following topics: pattern recognition receptors in innate and adaptive immunity; inflammation and cancer; emerging infectious diseases; vaccine development and cytokines; viral evasion of the immune response; microRNA in cytokine regulation; signal transduction; post-translational control of cytokine gene expression; novel cytokines; therapeutics; T-cell regulatory mechanisms; structure-function relationships; functions of interferon stimulated genes; regulation of the TNF superfamily.

The program is well underway with plenary symposia and sessions established and chairs identified. The opening keynote speaker will be Dr. Nahum Sonenberg and the closing session keynote speaker will be Dr. Tada Taniguchi.

Fund raising activities have been initiated. There

was discussion of periodic review of budget status updates and John agreed to provide such updates to the Meetings Committee and ISICR Board.

### 2009 - New Proposal for Lisbon

In the past few months, representatives from ISICR, ICS and SLB have been discussing the potential organization of a joint conference in Lisbon, Portugal in 2009. Michael Tovey presented a summary of the discussions to allow the ISICR Meetings Committee to vote on a recommendation to the ISICR Board. The proposed dates are October 17-21, 2009. The scientific focus of the conference will be Mechanisms of Infections/Cancer Immunopathogenesis. The proposed scientific program is as follows: common keynote and plenary sessions with input from the three societies and common poster sessions. Concurrent symposia will follow two tracks: Track I - infectious disease, pathogenesis and Track II - basic science.

The venue for the conference will be the Lisbon Conference Center which is located in a historical area on the Tagus River near the center of the city. The state of the art conference centre has 8 auditoria with seating capacity of 400 to 1,500 or 150 to 650. There are 25 meetings rooms and Banquet capacity of 700 to 3,500. The conference centre is in the center of the city (true?) and the city has a large number (263) of hotels in the 2-5 star range.

The proposed scientific organizing committee is comprised of members from each of the represented societies with Luis Montaner as Chair. ISICR Representatives: Thomas Decker, David Levy, Michael Tovey: SLB Representatives: Giorgio Trinchieri, Michael Parkhouse, Ruis Victorino; ICS Representatives: Scott Durum, plus 2 others to named. In addition, an executive committee will be established. The role of this committee will be to confer more frequently to address general issues and urgent issues. The executive committee will be comprised of Luis Montaner and one committee member each from ISICR, ICS and SLB. The roles of the Organizing committee are: preparation of the scientific program; organization of the meeting venue; fund raising (non government members); participation in frequent conference calls to resolve issues pertaining to program, venue, fund raising etc; and

### (ISICR Reports, cont. from page 33)

reporting to constituent societies. Clifford Brownstein (FASEB) will serve as the Business Manger and he will identify/ recommend a local conference manager. For the establishment of the Meeting Website, the organizing Committee will compare bids from Mike Homme (who did the ICS meeting website) versus FASEB. A detailed budget is being prepared.

The Meetings Committee expressed strong support for this meeting proposal and voted unanimously in favor of recommending Lisbon, Portugal as the meeting site for the 2009 joint ISICR/ICS/SLB Congress with the condition that a budget be submitted to the Meetings Committee for review.

Post meeting note: The ISICR Board subsequently approved Lisbon Portugal as the site for a meeting in 2009.

### 2010 - New Proposal for Chicago

Leon Platanias presented the proposal for a joint ISICR/ICS meeting to be held in Chicago in 2010. The proposed dates for the conference are September 12-15, 2010 and the proposed venue is the Robert H. Lure Comprehensive Cancer Center of Northwestern University in Chicago, Illinois. The proposed theme of the conference is "Cytokines and Cancer" with a strong clinical focus.

Leon presented a proposed budget that was developed with local staff at the Center who have experience with meetings planning. The proposed budget is based on 500 registrants and estimates expenses (excluding banquet) of approximately \$400,000 US. Initial feedback to Leon from ICS has indicated support for this proposal.

The Meetings Committee expressed enthusiastic support for this proposal and voted unanimously in favor of recommending Chicago, Illinois as the meeting site for the 2010 joint ISICR/ICS Congress. However, concern was raised about the high estimated costs and the fund-raising difficulties experienced by organizers of the last few meetings.

Post meeting note: The ISICR Board subsequently approved Chicago, Illinois as the site for a meeting in 2010.

### **Other Business**

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

Respectfully submitted, Christine Czarniecki Chair, ISICR Meetings Committee

### **ISICR Membership Committee Report**

Sunday, 16th September 2007 Oxford, UK

### Attendees:

Heinz-Kurt Hochkeppel (chair), Howard Young, Eleanor Fish, Cassandra James Apologies: Ana Gamero. Other committee members: Benz-Zion Levi, Lawrence Pfeffer

As the first and most important agenda item the ISICR Membership statistics 2006 vs 2007 were discussed. On the next page is a table comparing the situation in August 2006 with the situation in September 2007.



### Membership Statistics 8 Aug - 2006 vs 10 Sept - 2007

<b>Current members</b>	as of 8 Aug - 06	as of 10 Sept -07
Paid	541	547
a) renewed	440	398
b) new	101	149
Status:		
a) Regular	423	435
b) Student	48	32
c) Corporate Sponsors	6	4
d) Emeritus	7	9
e) Post Doc	56	58
f) Life Member	1	10
Honorary members	24	26
Life ((Waived)	1	1
Regular Corporate Sponsored	6	8
Student (Waived)	75	99
Total	647	682
Active Members for follow -up	as of 8 Aug - 06	as of 10 Sept -07
a) 2006 Non-renewals	-	129
b) 2005 Non-renewals	123	1
c) 2004 Non-renewals	99	-
<b>Total Members listed in the Database</b>	869	892
Members Paid in Advance:		
2007	170	-
2008	34	73
2009	3	98
<b>Active Members with Bad Addresses</b>	14	10

At a first glance the numbers of active paid Membership 2006/2007 look very similar (total active paid Membership of 647 in 2006 vs 682 in 2007.) . There was though a loss of 42 renewing active Members from 2006 to 2007 which was compensated by 149 new Members in 2007 vs 101 in 2006.

### 2. Active Members Not Renewing 2005/2006

However, a real issue is the number of active Members who didn't renew their memberships in 2005 and 2006. This is a total of 210 active Members.

Immediate Actions / Results / Recommendations:

- A reminder was sent to all not paying active Members.
- There was only a modest response to the reminder letters, The responding Members were either just renewing, or officially declined renewal (reason: not any more active in the IFN/Cytokine field)
- There were many bad addresses (e-mail or regular mail addresses, phone numbers)

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### (ISICR Reports, cont. from page 35)

### Recommendations:

- In future FASEB is asked to send with the renewal letter a reminder to all active Members with the request to inform FASEB about intended job/e-mail address changes (specifically, students & post docs) ahead of time.
- FASEB is asked to put also sponsors of post docs and students into the data base in order to be able to better trace address changes.
- All active Members will be once again informed that they have free access to the ISICR slide repository but that the Membership Committee will ask FASEB to cancel this access after a certain period of time (to be defined) for active Members not paying their annual Membership dues.

# 3. Recent ISICR Survey / A few Key Survey Results

The overall results of the survey will be communicated and discussed in the next ISICR newsletter (an additional reason to read the next newsletter!)

Here are a few key results:

- There was a surprisingly high percentage of responders who would like to be active member in one of the ISICR Committees, preferentially in the Meeting and in the Publication Committee. H. Young is going to send e-mails to those who filled in e-mail addresses at the end of the survey.
- Equally surprising was that about 50% of the responders didn't know about the ISICR slide repository which all active members can make use of (also students).
- The ISICR WEB site is only visited occasionally. One reason may be that it from time to time needs partial updating, although H.Young is keeping the site current besides all his other duties in the Society (many thanks Howard !!). A volunteer is needed who devotes additional and regular time to the web site (please contact Howard Young if interested).

# 4. Recommendations to improve ISICR Membership

- Anyone who joins the Society now (late this year) should also automatically get the 2008 membership.
- Institute a 5 years membership for US\$200. This is a US\$50 savings over renewing each year.
- The ISICR web site may become more attractive for companies if corporate sponsors would be allowed to have a link in it for communication and if such companies would obtain an ISICR Corporate Sponsor Certificate which will also be communicated in the ISICR NewsLetter.
- FASEB needs to take a more active and leading role in regularly approaching companies in the IFN/Cytokine field. This specifically concerns exhibitors at ISICR meetings.
- Many scientists in the cancer / immunology / inflammation / autoimmune etc.diseases fields don't know about the ISICR. A new updated flyer / brochure may help here. H. Young and E. Fish will take action in organizing the updating and distribution of a new ISICR flyer. FASEB is asked to support the distribution of the flyers.

The board of directors of ISICR is asked to approve the first two items of the recommendations immediately.

Respectfully submitted by Heinz-Kurt Hochkeppel Chair, ISICR Membership Committee

# **ISICR Publications Committee Report** Sunday, 16 September 2007

Oxford, UK

Members Present: Bob Fleischmann, Chair, Tom Hamilton, Editor-in-Chief JICR, Jerry Tilles, Deborah Vestal, Ganes Sen, Editor-in-Chief JICR, Phil Marcus, ex officio

The meeting of Publications Committee was called to order at 1:30 pm.

### (ISICR Reports, cont. from page 36)

Tom Hamilton and Ganes Sen provided their report of the Status of the Journal of Interferon and Cytokine Research (JICR) to the Publications Committee. The highlights of their report were as follows.

- 1. With 1/3 of year 2007 to go, the JICR is on track with last year in terms of both the number of articles published and the number of pages published. These numbers are still down from the levels in 2002 but they seem to have stabilized.
- 2. The impact factor of the JICR was 2.472 in 2006, the latest year reported, up from 2.094 in 2005.
- 3. The time from submission to decision on acceptance or rejection is seen as a bit variable, but acceptable overall. The editors are working to encourage slow reviewers and Associate Editors to speed up their times.
- 4. The Quick Review is now a 3-week review time at a cost of \$250. So, there are fewer Quick Review requests.
- 5. The time from acceptance to publication is still seen as long. To shorten this time, the accepted manuscripts will be posted on-line within a few days of acceptance.
- 6. The JICR published 9 reviews presenting historical perspectives on the early days of interferon research. They have received positive comments and were seen as valuable contributions to the history of the field.
- 7. It was noted that, in keeping to our contract, it is once again time for replacement or renomination of Associate Editors and Editorial Board members.
- 8. There was some discussion that the Associate Editors might use the Editorial Board members more for their reviews.

A motion was made and passed 4-0 to accept the report of the Editors-in-Chief and to commend them for their outstanding service on behalf of the JICR and of the International Society for Interferon and Cytokine Research.

Having no other business, the meeting was adjourned at 2:15 pm.

Respectfully submitted, Bob Fleischmann, Chair

### **ISICR Standards Committee Report**

Sunday, 16 September 2007 Oxford, UK

Committee members attending: Tony Meager, Vijay Jethwa, Aida Prync, Michael Tovey, Sidney Grossberg (Chairman), and Ron Bordens (by phone). Kazuko Uno and David Sehy attended as observers. Other Committee members included Masayoshi Kohase, Guido Antonelli, and Huub Schellekens.

Dr. Grossberg called the meeting to order at 15:00 hours. He explained that Norman Finter has asked to be retired from the Committee. A teleconference had been arranged to include Ron Bordens in the U.S.A., but no contact could be established with Huub Schellekens in the Netherlands. Dr. Uno represented Dr. Kohase.

### I. Interferon-β Manufacturers' Collaborative Neutralizing Antibody Study

A collaborative study had been organized in 2003 in which the three major manufacturers of human interferon-β (Biogen-Idec, BerlexSchering AG, and Ares-Serono) were to evaluate the MxA interferon (IFN) bioassay (Pungor, et al., J. IFN & Cytokine Res. 18:1025-1030, 1998) as a possibly acceptable method to measure IFN neutralizing antibodies (NAbs). The study was commissioned by the Biotech Working Party / Committee on Healthcare and Medicinal Products of the European Medicines Evaluation Agency (EMEA), of the European Union (EU) under the aegis of the National Institute for Biological Standards and Control (NIBSC), U.K. Tony Meager presented a summary of the study results to the Committee based on tabulated information provided to him by Huub Schellekens, who had prepared this information for formal presentation elsewhere. Serum samples with titers previously determined to be negative, high, medium, and low that had been obtained by the manufacturers from IFN-β-treated multiple sclerosis patients in clinical trials were sub-divided at NIBSC and distributed in a blinded fashion to the three laboratories. The assays were performed with the A549 human lung carcinoma cells, utilizing a secondary MxA protein ELISA with an anti-MxA monoclonal antibody provided by

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Novartis; the assay was designed so that the results could be reported as the reduction of 10 Laboratory Units (LU)/ml to 1 LU/ml, as originally recommended by WHO, following the procedure of Kawade et al. There was essentially 100% concordance of titers obtained among the three laboratories with a range of 3-10% coefficient of variation; titers tested against IFN-β1b as antigen were often lower than those obtained against the two IFN-β1a products. Although the MxA methodology designed for use in this study was considered to be acceptable, the lack of availability of the monoclonal antibody allowed under the Novartis patent severely restricts its general use. The Standards Committee was informed of the availability of the MxA mRNA method adaptation by Bertolotto et al. (Journal of Immunological Methods. 32:19-31, 2007), which obviates the need for the MxA monoclonal antibody.

# II. European Union Initiative on IFN Neutralizing Antibodies in Multiple Sclerosis

In November 2005 the European Union (EU) funded a 3.5-million-euro grant program to (1) standardize IFN-β neutralizing antibody (NAb) assays, (2) optimize IFN-? bioactivity markers, and (3) determine when and how to manage antibody-mediated decreased bioactivity in order to avoid or reverse possible clinical sequelae. Of particular interest to the Standards Committee is the standardization and validation of IFN NAb bioassays and the development of new ones as well as the provision of reference standards. Greater details concerning these aspects as well as information on the consortium of partners, participants, organization, and specific projects are provided at the web site, www.nabinms.eu.

# III. Standardization of Design of Neutralizing Antibody Assays and Reporting of Results

In 2000 a proposal was considered by the ISICR to recommend to the WHO a refinement of the methodology based originally on the work by Yoshimi Kawade to standardize the reporting of results of bioassays measuring NAbs to IFNs. This proposal was based on the data and analyses in two manu-

scripts derived from a WHO international collaborative study on human antibodies to IFN-α and IFN-β involving 14 laboratories that demonstrated the applicability of the methodology to different bioassay types used by different investigators. Following the publication of these works (Grossberg et al., J. IFN & Cytokine Res. 21:729-742 and 743-755, 2001), the ISICR Standards Committee endorsed unanimously in 2001 that the proposal be forwarded to the WHO for consideration at the next meeting of its Cytokine Consultation group. It was recommended that a white paper be developed by the Committee for this purpose, which was accordingly undertaken by Norman Finter and Sidney Grossberg and approved by the Committee. At an informal WHO Consultation on Cytokines and Growth Factors (held at NIBSC in 2003), this proposal was presented and discussed; that group decided to delay recommendation to the Expert Committee on Biological Standardization (ECBS) until the results would become available of the then planned IFN-β Manufacturers' Collaborative Study (see Section I, above) comparing different bioassays. The elements of this proposal were published as a part of a book chapter review of antibodies to interferons by Grossberg and Kawade (in The Interferons: Characterization and Application, A. Meager, Ed., Wiley-VCH, pp. 375-399, 2006). There is increased interest in the pharmaceutical industry in the standardization of high throughput neutralizing antibody assays for cytokines and growth factors.

# IV. Lymphoblastoid IFN Standardization in Japan

Kazuko Uno reported that Masayoshi Kohase had written to the director of Sumitomo, the largest manufacturer of lymphoblastoid interferon in Japan, to inquire about their current wishes (and those of the other three manufacturers) concerning the resolution of the problem of disparity between the unitage of the Second WHO Lymphoblastoid Standard (95/568) and the Japanese National Standard for lymphoblastoid IFN (J-501), which Japanese law requires manufacturers to use, the unitage of which was based on the First WHO International Standard for Lymphoblastoid IFN (Ga23-902-530). Dr. Uno reported that the response

### (ISICR Reports, cont. from page 38)

from Sumitomo is that they have no new opinion on the matter. Presumably the manufacturers in Japan will continue to do as they have done, namely, to continue to designate unitage in terms of the Japanese National Standard. There appears to be no immediate plans for exporting lymphoblastoid IFN products to other countries, which might require a re-designation of International Units on the product labels based on the new WHO Standard, possibly affecting the dosage administered to patients and confusion of physicians.

### V. New Standards and Reference Reagents

The following information from NIBSC was provided by Tony Meager.

IL-17 and IL-18. Based on international collaborative studies and summary reports presented to the WHO Expert Committee on Biological Standardization (ECBS), IL-17 and IL-18 were established as International Reference Reagents (IRR), but not as International Standards (IS) inasmuch as less than five participating laboratories, required by ECBS, were involved in the collaborative assay studies.

TRAIL (tumor necrosis factor-related, apoptosisinducing ligand). A summary report will be presented to WHO ECBS recommending that an IRR be established for TRAIL.

Reference materials of Neurotrophin-3 (NT-3), IL-23, IFN-?1 (IL-29), IL-24, IL-27, and BLyS (B-lymphocyte stimulator) are in various stages of preparation at NIBSC. BLyS development remains a problem because of lack of a suitable bioassay.

# VI. Standardization of Novel or Modified Interferons

Ron Bordens proposed, and the Committee concurred following discussion, that serious consideration be given to the establishment of pegylated IFN products. These interferon products are replacing the

non-pegylated forms in common usage because of their apparent reduced immunogenicity and the reduced frequency of their administration, making them more acceptable to patients; they are thus the products of choice for therapy of viral and malignant diseases. It was noted that the site of pegylation as well as the size and structure (linear or branched) of the attached polyethylene glycol chains vary. Dr. Bordens informed the Committee of some curious attributes of pegylated IFN reactivity in bioassay. perhaps due to possible interference by certain medium constituents. It was agreed that the resolution of such problems would need to be achieved before pegylated interferons might be considered for preparation as International Standards. Such efforts will require the involvement and support of the commercial producers.

### VII. Standardization of Generic Interferons

Dr. David Wood, Director of Biologics at WHO, had responded to Dr. Grossberg's query as to how our Committee might be helpful to WHO, by describing the problem of so-called biosimilars or follow-on protein products; these products are generic replacements of biologicals on which the original patents have expired. They will likely be replaced by proteins produced by others manufacturers that must meet requirements yet to be established allowing for the production of materials comparable to the original ones. The problems of replacements of biological products produced under patents have been reviewed in detail by Huub Schellekens (Nephrol. Dial. Transplant, Suppl. 4:31-36, 2005). Although it seems that the original manufacturers are in the best position to provide protocols for the production, quality control, and safety testing of such products, it does not appear to be in their interest to do so. It might be assumed that the responsibility for the development of such guidelines would devolve upon national regulatory authorities, but it was considered likely that production might occur in countries without effective regulatory agencies, a matter of increasing concern to WHO. It seems clear that the ISICR Standards Committee does not have the competencies necessary to help WHO develop such protocols. It was suggested that the Committee respond to Dr. Wood to indicate this, and further to suggest that pharma-

### (ISICR Reports, cont. from page 39)

copeias might serve as a source of such information, but if not, that WHO may consider convoking expert groups to develop such protocols.

### VIII. Availability of Interferon and Cytokine Reference Reagents, Antisera, and Standards

ISICR members as well as commercial laboratories and pharmaceutical manufacturers of interferons and other cytokine products are encouraged to avail themselves of the reference reagents, standard preparations, and antisera available from NIBSC, www.nibsc.ac.uk, and BEI Resources, www.beiresources.com.

It was noted that the September 2007 ISICR Newsletter contained some erroneous information about obtaining reference standard materials, including antisera, from the U.S. National Institutes of Health. It was suggested that Dr. Grossberg write an article for an ISICR Newsletter explaining the avail

ability of reference materials and the process involved in applying to BEI Resources for such materials.

Dr. Grossberg has received reports of difficulties encountered by investigators in U.S. institutions as well as those located elsewhere in meeting the BEI Resources application requirements, most particularly the required Material Transfer Agreement. He has been in touch with Susan Peacock, NIH Project Officer, about approaches to help applicants with possible amendments to the language regarding indemnification in the Material Transfer Agreement. Dr. Grossberg is also exploring the possibility of having the NIH transfer to NIBSC a portion of some of the WHO Reference Reagents and Standard Preparations in order to facilitate their acquisition by scientists located outside the U.S.A.

There being no further business, the meeting was adjourned at 17:30 hours.

Respectfully submitted, Sidney E. Grossberg

### **International Society for Interferon Research Balance Sheet** As of June 30, 2007

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	Jun 30, 07	Dec 31, 06
ASSETS		
<b>Current Assets</b>		
Checking/Savings		
11100 · Bank of America	\$ 22,459.51	\$ 18,845.42
11111 · Business Interest Maximizer	\$ 149,206.88	\$ 102,501.42
11112 · Bank of America CD	\$ 100,562.33	\$ 100,187.09
Total Checking/Savings	\$ 272,228.72	\$ 221,533.93
Other Current Assets \$ -		
1299 · CC Due from FASEB	\$ 800.00	\$ 5,250.00
2101 · AM07	\$ (28,494.40)	\$ 5,757.60
<b>Total Other Current Assets</b>	\$ (27,694.40)	\$ 11,007.60
<b>Total Current Assets</b>	\$ 244,534.32	\$ 232,541.53
TOTAL ASSETS	\$ 244,534.32	\$ 232,541.53

# International Society for Interferon Research Profit & Loss Comparison YTD through June 2007 and 2006

	YTD 06/30/07	12/31/06
Income		
4020 · Advertising Income	\$ 4,348.33	\$ 2,400.00
4030 · Contributions Income	\$ 1,500.00	\$ 65,000.00
4150 · Miscellaneous Income	\$ 20.00	
4190 · Reimbursed Expenses		\$ 1,605.08
4300 · Membership Dues	\$ 34,721.00	\$ 52,420.00
4310 · Weblink	\$ 700.00	
4320 · Journal Income		\$ 7,044.00
7010 · Interest Income	\$ 2,088.12	\$ 5,807.01
Total Income	\$ 43,377.45	\$ 134,276.09
Expenses		
46175 · FASEB Administrative	\$ 21,575.06	\$ 38,686.86
53910 · Website	\$ 634.50	\$ 3,214.64
53920 · Shopping Cart Hosting	\$ 439.20	
54100 · Milstein		\$ 11,250.00
54101 · Milstein Travel		\$ 41,200.00
54102 · Milstein Young Investigator		\$ 5,000.00
54103 · Christina Fleischmann Award		\$ 1,500.00
54104 · Honorary Member		\$ 2,000.00
54000 · Awards - Other		\$ 1,075.74
59800 · Meeting rentals	\$ 2,781.93	
6120 · Bank Service Charges	\$ 2,586.44	\$ 90.00
6250 · Postage and Delivery		\$ 214.00
6260 · Printing and Reproduction	\$ 2,465.68	\$ 8,253.68
6650 · Accounting		\$ 775.00
6655 · Consulting		\$ 450.00
6340 · Telephone		\$ 697.61
6350 · Travel & Ent	\$ -	\$ 125.00
6550 · Office Supplies	\$ 45.45	\$ 76.50
66900 · Reconciliation Discrepancies	\$ (1.60)	
Total Expense	\$ 30,526.66	\$ 114,609.03
Net Income	\$ 12,850.79	\$ 19,667.06

# Cytokines 2008

The organizers cordially invite you to participate in the 7th Joint Meeting of the International Society for Interferon and Cytokine Research and the International Cytokine Society "Cytokines 2008" to be held October 12 to 16, 2008 in Montreal, Quebec, Canada. Our Conference will harness the biomedical expertise and energies of these major societies to provide a comprehensive update of recent insights into basic and clinical aspects of Cytokines in Cancer, Inflammation, and Infectious Diseases. The overall theme of this Conference is Translating Knowledge into Health, and is chosen to emphasize the integration of basic, pre-clinical, pharmaceutical and clinical research in the areas of cancer, immune modulation, inflammation and infectious diseases. Topics to be covered will include cytokine/interferon structure and function, gene regulation, signal transduction, regulation of cell survival, microenvironment, new cytokines, as well as the multiple roles of cytokines in immunology, inflammation, angiogenesis, host defense and tumor biology. A significant part of the conference will be devoted to cytokine-based therapies in malignancy and other disorders as well as emerging therapies targeting cytokines in autoimmune, inflammatory and malignant diseases. Senior scientists, young investigators, physicians, postdoctoral fellows, graduate students and representatives of the pharmaceutical industry all stand to profit from the interactions available at this venue. We believe that this Conference - set in the beautiful cosmopolitan city of Montreal during the stunning fall display of colors - will reflect the best of current cytokine research and will provide a vital impulse for further development.

### **Canadian Organizing Committee**

John Hiscott - McGill University
Marc Servant - Universite de Montreal
Eleanor Fish - University of Toronto
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