INTERNATIONAL SOCIETY FOR
INTERFERON AND CYTOKINE RESEARCH
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The New ISICR Officers

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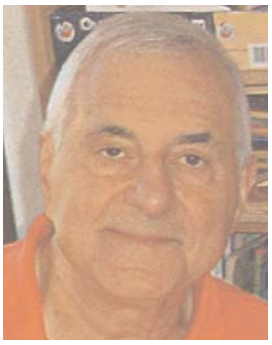

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ISICR Officers

President
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President-Elect
Eleanor Fish
Secretary
Tom Hamilton
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Debbie Weinstein

Future ISICR Meetings

Aug. 27-31, 2006
(Joint ISICR/ICS)
Vienna, Austria
www.cytokineresearch.com/2006

ISICR WWW Site

www.ISICR.org

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A Message from the ISICR President Otto Haller

The Presidency of ISICR is in Europe again, after almost 15 years. Not that this really matters as the ISICR is a truly international society. Our members are from all over the world and it is rewarding to see the increasing strength of the interferon community in Asia and other important areas of the world. The past annual meeting of the Society in Shanghai, China, was a great experience and a testimony to the vigour of interferon research in that part of the world. Nevertheless, the European ties will be strengthened in the coming years. In August 2006 we will join the International Cytokine Society and the European Cytokine Society and convene together in beautiful Vienna for our annual meeting diligently organized by Josef Schwarzmeier. I am convinced that Vienna, located in the center of Europe, with its rich tradition of European culture and science will provide an ideal atmosphere for discussion and interaction among all participants. The year thereafter will mark a very special event. In 2007 we will be celebrating the 50th anniversary of the discovery of interferon by Alick Isaacs and Jean Lindenmann at the Medical Research Council's National Institute for Medical Research in London, U.K. Our annual meeting will have the special attribute of an anniversary meeting and will be held at Oxford University near London. I am grateful to the local organizing committee chaired by Graham R. Foster for their effort in organizing an exceptional meeting. It will be fascinating to look back on 40 years of interferon research and how it evolved. It will be exciting to learn how current research activities connect to the past and where they will now lead. It is my present impression that interferon research is more vigorous than ever. There is an increasing awareness that interferons play a role in many more biological systems than previously anticipated and that there is much more to be discovered. The broadening of interferon research will not be without impact on our Society. The joint ISICR-ICS meetings are a great success, and demonstrate that the interferon and cytokine worlds have much overlapping research which is mutually beneficial. It has therefore been proposed to merge the ISICR and the ICS into a single research society. The new society would be the world's largest non-profit scientific organization, dedicated to promoting the advancement of research on interferons and other cytokines. If approved by the Board of Directors and then the membership at large, the merger will be subtle, taking place within a two to three year period. As to the immediate future, I look forward to a good collaboration with the ISICR Board of Directors, with the officers, members of the Advisory Board and Committees as well as the members at large. In particular I welcome Debbie Weinstein as the new ISICR Executive Director, taking office as of January 1, 2006. As long as our members actively participate in the annual meetings and society matters, I am sure our society has a bright future.

I do want to take this opportunity to thank the former officers, Sid Pestka, Sam Baron and Howard Young for all their efforts over the years on behalf of the society.

Otto Haller

The ISICR would like top hear from you. What do you think of the proposed merger of the ISICR and ICS? Email your thoughts to President Otto Haller or Executive Director Debbie Weinstein.

From Debbie Weinstein, ISICR Executive Director

Small, dynamic societies, like ISICR, that are focused on very specific research interests, have long been essential resources for scientists. In these times of rapidly developing specialized scientific interests and techniques, small societies continue to thrive, emerge and play significant roles in information dissemination for research scientists through conferences and publications. In ISICR and other like societies, the more intimate meetings offer extraordinary opportunities. Senior researchers often comment that they prefer attending meetings that are more focused on their specific interest areas and small meetings lend a better atmosphere for establishing or reinforcing collaborations. At smaller meetings, junior scientists, students and post-docs

*(**From Debbie Weinstein**, cont. from page 2)*

often have unique award and presentation opportunities and have much better access to interacting with senior scientists. At the last meeting of the ISICR, $40,000 was awarded to junior scientists and trainees through the generosity of the Milstein Family. Years ago, when I was a post-doc, I won a significant cash award at a small meeting and I still proudly list this on my CV. I think this use of society funds for assisting members to attend the annual meeting demonstrates the commitment of the ISICR to providing a culture for young scientists to participate in the society and interact with all members, both senior and junior.

However, the administrative management of these societies is time consuming and sometimes complicated - often "squeezed" into the very busy teaching, travel, research and family/life schedules of volunteers. Having recognized that through my experiences on both sides of societies, professional and lay-leader, I enthusiastically responded to the comprehensive Request for Proposal put out last year by immediate Past-President, Howard Young. Howard and the council had the foresight to recognize that ISICR could run more effectively and efficiently if the administrative details of the society were managed in an executive office and the council could focus their efforts on the core components of the society: membership and meetings. I look forward to working with the incoming President, Dr. Otto Haller and the entire ISICR Council on several initiatives, to include: facilitating award opportunities, fine-tuning the financial management mechanisms, and improving the financial stability of the society. I also look forward to hearing from you, the members and hope to meet you at the next meeting - feel free to contact me anytime.

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ISICR Awards

The Seymour and Vivian Milstein Award
Individuals who have made exceptional contributions to research related to interferons and cytokines either in a basic or clinical field. The Seymour and Vivian Milstein awards are made possible by the generous gift of the Milstein family. This award represents a pinnacle of scientific achievement in our field and is an important landmark of the society.

Seymour and Vivian Milstein Award Recipients

1988---Tadatsugu Taniguchi (Japan)
1989---Michel Aguet (Switzerland)
1990---Ara G. Hovanessian (France)
Bryan R. G. Williams (Canada)
1992---Jordan Gutterman (U.S.A.)
Hans Strander (Sweden)
1993---Ian Kerr (U.K.)
Robert H. Silverman (U.S.A.)
1994---Charles E. Bugg (U.S.A.)
Yokio Mitsui (Japan)
Tattanahalli L. Nagabhushan (U.S.A.)
1995---Susan E. Krown (U.S.A.)
R. Michael Roberts (U.S.A.)
1996---Paula Pitha-Rowe (U.S.A.)
Robert D. Schreiber (U.S.A.)
1997---James Darnell (U.S.A.)
Ian Kerr (U.K.)
George Stark (U.S.A.)
1998---Otto Haller (Germany)
1999---Michael Katze (U.S.A.)
Adi Kimchi (Israel)
2000---John Kirkwood (U.S.A.)
Moshe Talpaz (U.S.A.)
2001---Sidney Pestka (U.S.A.)
2002---David Levy (U.S.A.)
Ganes Sen (U.S.A.)
2003---John Hiscott (Canada)
Tom Maniatis (U.S.A.)
2004--- Ernest Borden (U.S.A.)
Keiko Ozato (U.S.A.)
2005---Nancy Reich (U.S.A.)
Menachem Rubinstein/Daniela Novick (Joint Award) (Israel)

*(**Awards**, cont. from page 3)*

Honorary Membership

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

Honorary Members

1984 - Jean Lindenmann (Switzerland)
Yasuiti Nagano (Japan)+
1985 - Piet DeSomer (Belgium)+
1986 - Gertrude Henle (U.S.A.)
Werner Henle (U.S.A.)+
1988 - Karl Fantes (U.K.)
1989 - Yoshimi Kawade (Japan)
1990 - Norman B. Finter (U.K.)
1991 - Charles Chany (France)
1993 - David Tyrrell (U.K.)
Julius Youngner (U.S.A.)
1994 - Kari Cantell (Finland)
Ferdinando Dianzani (Italy)
1995 - Jaqueline DeMaeyer-Guignard (France)
Earle F. Wheelock (U.S.A.)
1996 - Lois Epstein (U.S.A.)
1997 - Gerhard Bodo (Austria)
Ion Gresser (France)
1998 - Samuel Baron (U.S.A.)
Ernest Knight (U.S.A)
1999- Derek Burke (U.K.)
Edward DeMaeyer (France)+
2000 - Peter Lengyel (U.S.A.)
2001 - Thomas Merigan (U.S.A.)
2002 - Michel Revel (Israel)
2003 - Robert Friedman (U.S.A)
Jan Vilcek (U.S.A.)
2004 - No award given
2005 - Phillip Marcus (U.S.A.)
Kathryn Zoon (U.S.A.)
+ Deceased Honorary Members

We invite your nominations for eligible candidates for these prestigious symbols of recognition by our society for outstanding achievements. A brief exposition of the reason for your nomination and other supportive documents (such as CV, if available) should be sent to the ISICR President by **February 10**:

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The nominations will be collated, and passed on to the Chair of the Awards Committee in May. This committee will then prepare a short list of candidates and vote for winners of the awards. As specified in the ISICR Constitution, the final vote of the Awards Committee is subject to the approval of the ISICR Board of Directors.

The Seymour and Vivian Milstein Young Investigator Awards

Eligibility: ISICR members and are less than 8 years after receiving a Ph.D or M.D degree. Every year up to five 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. We urge every eligible individual to apply for the awards. We also ask more senior laboratory advisers to encourage their associates to apply. Send your 2005 Meeting abstract and CV by April 1 to:

Dr.Paula Pitha-Rowe,
Chair, ISICR Awards Committee
Johns Hopkins University
Dept. of Oncology
1650 Orleans Street, Rm 221
Baltimore, MD 21206
FAX: 410-955-0840, Email: parowe@jhmi.edu

*(**Awards**, cont. from page 4)*

A brief note describing your accomplishments and a letter of recommendation from your adviser, are strongly encouraged. The deadline is the same as that of the Meeting abstract for the 2006 ISICR Meeting.

The Christina Fleischmann Memorial Award to Women Investigators

The rules for this ISICR award are the same as for the Seymour and Vivian Milstein Young Investigator Award (see above) except for gender and that candidates are less than 10 years after receiving a PhD or M.D. degree. Every year the Christina Fleischmann Memorial Award is presented to a woman ISICR member who has made notable contributions to either basic, translational or clinical research within 10 years after receiving their Ph.D or M.D. This award is made possible through the generosity of the Fleischmann Foundation and is dedicated to the memory of ISICR member and outstanding interferon research scientist Christina Fleischmann.

Seymour and Vivian Milstein Travel Awards

ISICR members who intend to attend the 2006 ISICR/ICS meeting in Vienna, Austria are eligible for Travel Awards. They are provided through a grant from the Milstein Family as the Seymour and Vivian Milstein Travel Awards, based on the scientific merit of the abstract and financial necessity. However, this award does not exempt payment of the registration fee. Please note that there are no age restrictions to this award. However if both senior and junior members from the same laboratory apply for an award, preference will be given to the junior member. Send your meeting abstract and a note explaining the need for a Travel Award to Dr. Paula Pitha-Rowe, Chair, ISICR Awards Committee by April 1.

(Note the ISICR hopes to have a web based submission format in place for the 2006 award applications so please check www.isicr.org before submitting an application).

The ISICR wishes to express its most sincere appreciation for the support to the society by the Milstein Family. We are very grateful and honored that the Milstein Family has continued to support our society through the Seymour and Vivian Milstein Awards.

New Corporate Sponsors

The ISICR welcomes Bio-Rad as a new Corporate Silver Sponsor and Linco as an Associate Sponsor for 2006. The support of these companies is much appreciated and is critical for the long term success of the ISICR.
THANK YOU Bio-Rad and Linco!!!!!

www.bio-rad.com
www.lincoresearch.com

NEW ISICR INITIATIVES

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. 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 should not be changed with out permission from the member who donated it and all copyright permissions must be obtained. If you have trouble uploading or downloading slides, please contact Howard Young at youngh@ncifcrf.gov.

The ISICR Chinese Research Partnership

Based on discussions held during the annual meeting in Shanghai, the ISICR is launching an experimental new program for the society, the ISICR Chinese Research Partnership. The goal of this partnership will be to promote interactions between Chinese labs and ISICR members and assist Chinese labs in preparing manuscripts and presentations in proper English. ISICR members who are willing to participate would agree to review the science and edit for English 4-6 manuscripts/year (no more than 1 every 2 months) for their Chinese partner laboratories. The ISICR partner would also agree to evaluate PowerPoint Presentations for correct English content. Partnership would be based on common research interests and we believe that such partnerships will lead to future research interactions and collaborations. Chinese partners will be identified with the assistance of Zhigang Tian, MD, PhD, Professor and Director Institute of Immunology, and Weihua Xiao, Ph.D., School of Life Science, University of Science & Technology of China (USTC) through a listing of ISICR participants in Cellular & Molecular Immunology, (PubMed: Cell Mol Immunol), the official journal of the Chinese Society of Immunology.

Note that research interests are not limited to Immunology. This initiative is open to any ISICR members who would like to participate and is completely voluntary. We would like to have at least 12 members volunteer (more are very welcome) in order to form a reasonable basis for this program. Anyone who would like to participate should email Howard Young at youngh@ncifcrf.gov and provide their email and fax contact information as well as their research interests in order to be paired up with a Chinese lab with common research interests.

Peripheral Blood Mononuclear Cells Freeze/Thaw Procedure

Yvonne B. Sullivan, Ph.D.
Pierce Biotechnology, Rockford, IL

It is often a misconception that Dimethysulfoxide (DMSO) is toxic to peripheral blood mononuclear cells (PBMC). However, this is not the case. Actually, DMSO effects the osmotic environment of the cells. Use this procedure to help increase recovery and viability of frozen PBMC.

Reagents Needed:

Complete Medium: RPMI 1640 plus 10% fetal bovine serum (FBS)
Freezing Medium: 10% DMSO in 90% FBS
Isopropanol Freezing Container
Cryogenic Vials
Conical Tubes
Pipettes
Optional: Recombinant nuclease Benzonase (EM Industries, Hawthorne, N.Y.)

Freezing Procedure:

1. Warm Freezing Medium to room temperature or 37°C.
2. Pellet PBMC by centrifugation and remove excess solution.
3. Gently break up cell pellet.
4. Add desired amount of warm Freezing Medium slowly ("drip wise") to cell pellet. Gently swirl cells during Freezing Medium addition. Do not vortex.

*(**Peripheral Blood**, cont. from page 6)*

5. Mix cells gently by inversion or with large mouth pipette.
6. Aliquot cells into appropriate Cryogenic Vials and store at -80°C overnight in an Isopropanol Freezing Container.
7. Transfer cells to liquid nitrogen for long term storage.

Thawing Procedure:

1. Warm Complete Medium to room temperature or 37°C.
2. Rapidly thaw PBMC in a 37°C waterbath.
3. Gently transfer PBMC to a separate conical tube. A large 50 ml conical is not necessary. Typically a 15 ml conical will suffice.
4. Slowly ("drip wise") add warm Complete Medium to thawed cell mixture. If desired, add >50 U/ml of a recombinant nuclease (Benzonase, EM Industries, Hawthorne, N.Y.) to the Complete Medium to help eliminate clumping in future cultures. This is especially helpful for ELISPOT assays.
   Smith, J. *et al*., Clinical and Diagnostic Laboratory Immunology, Sept. 2001, p. 871-879
5. Pellet PBMC by centrifugation and remove excess solution.
6. Gently break up cell pellet and resuspend PBMC in Complete Medium.
7. Pellet PBMC by centrifugation and remove excess solution.
8. Resuspend PBMC at desired concentration in Complete Medium and proceed with testing.

Organizational vocabulary

1. Assmosis: The process by which some people seem to absorb success and advancement by kissing up to the boss. You will all be measured on this at some point in your career.

2. Blamestorming: Sitting around in a group discussing why a deadline was missed or a project failed and who was responsible. This one will be particularly valuable to those of you who have ongoing projects whose future is in doubt.

3. Salmon Day: The experience of spending an entire day (month, year?) swimming upstream only to die in the end. We've had these projects before (and will again).

4. Chainsaw Consultants: Outside reviewers (site visit team?) brought in to reduce the lab head-count, leaving the brass with clean hands.

5. CLM: Short lingo for 'career limiting move'. Used among lab rats to describe ill-advised activity. Trashing your boss while he/she is within earshot is a serious CLM. (Related to CLB, career limiting behavior)

6. Adminisphere: The rarefied organizational layers beginning just above the rank and file. Decisions that fall from the adminisphere are often profoundly inappropriate or irrelevant to the problems they were designed to solve. Especially prevalent in government research programs.

7. Dilberted: To be exploited and oppressed by your boss. Derived from the experiences of Dilbert, the geek-in-hell comic strip character. "I've been Dilberted again. The old man revised the experiment for the fourth time this week."

8. Flight Risk: Used to describe employees who are suspected of planning to leave the lab or department soon.

9. 404: Someone who's clueless. From the World Wide Web error message "404 Not found", meaning that the requested document could not be located. "Don't bother asking him...he's 404, man."

10. Ohnosecond: That miniscule fraction of time it takes to realize that you've just made a BIG mistake. (See number 5.)

11. Percussive Maintenance: The fine art of whacking an electronic device (or any lab equipment) to get it working again.

Cytokine Storms

Venky Ramakrishna
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While we think of external microbes as our worst enemy during an outbreak of influenza or bronchitis, our own immune systems may be doing more harm than good. Our body detects foreign microorganisms during an infection and shores up a variety of immune defenses. A paradigm that is beginning to unfold comprises massive homing of cellular and antibody infiltrates at the site of infection. The underlying mechanisms of T cell and antibody trafficking is not entirely clear but appears to be a secondary response to "danger signals" that are effectively supported by cytokine and chemokine signals released by professional antigen presenting cells such as macrophages, Langerhans cells and dendritic cells. The heightened concentration of a cytokine/chemokine cocktail is evident both at the local as well as systemic sites and is collectively referred to as the "Cytokine Storm" [1]. In a sense, the body generates the storm in response to a viral infection such as influenza, with the goal of protecting the lungs but cannot contain the ill-effects that can be life threatening such as, airway blockage. There is considerable emphasis on identifying the targets that are ingredients of the "Storm" by developing effective treatments that are specifically directed to weaken an overactive immune response. Some of these targets are clearly the toll-like receptors (TLRs) of the innate immune system and additional targets include many soluble factors (cytokines, cytokine receptors, chemokines etc.). Among the TLRs it is noteworthy that polymorphisms in TLR2 and TLR4 have been shown to predispose individuals to persistent infection (e.g. chronic periodontitis) [2] while individual variations of TLR assembly can influence which cytokines are made in any clinical situation [3].].

It is believed that cytokine storms were responsible for many of the deaths during the 1918 influenza pandemic, which killed a disproportionate number of young adults. In this case, a healthy immune system may have been a liability rather than an asset. However, a recent report in the *Journal of Experimental Medicine* by Humphreys et al. (2003) demonstrates the possibility of preventing a cytokine storm [3]. A few days after T-cells are activated, they produce a molecule called OX40. OX40 binds to receptors on T-cells, preventing them from dying and increasing cytokine production. A recombinant protein, OX40-immunoglobin (OX40-Ig), prevents OX40 from reaching the T-cell receptors, thus reducing the T-cell response. Experiments in mice have demonstrated that OX40-Ig can reduce the symptoms associated with an immune overreaction while allowing the immune system to fight off the virus successfully. These studies have helped Xenova Research plc to seek collaboration with Genentech and Celltech for the clinical development of OX40 ligand technology with the hope of disengaging OX40-OX40L interactions for a variety of indications including cancer, addiction, infectious diseases, transplantation, immunotherapy and autoimmunity.

Cytokine Storms, better known as "syndromes", are generally seen as a systemic expression of multiple inflammatory mediators (cytokines and cytokine signals that normally function in an autocrine, paracrine, or juxtacrine fashion together with oxygen free radicals, coagulation factors). Not only pro-inflammatory cytokines but also anti-inflammatory cytokines are elevated in the blood stream in such conditions [5-10].

Sepsis (septic shock syndrome or SSS) is a systemic inflammatory response syndrome caused by an infection. It is a severe and frequently lethal hemodynamic break-down observed after Gram-negative septicemia and mainly caused by bacterial endotoxins. The so-called toxic shock syndrome (TSS) observed mainly in younger women is caused by tampons contaminated with *Staphylococcus aureus*. An exotoxin is produced by these bacteria, TSST-1 (toxic shock syndrome toxin-1) and induces the synthesis of IL-1 and TNF . An essential role of CD28 costimulatory signals in TSST-1 induced toxic shock syndrome has

(***Cytokine Storms***, cont. from page 8)

been established by studies of transgenic mice deficient in expression of CD28.

Multiple organ dysfunction syndrome (MODS) may represent the end stage of severe systemic inflammatory response syndrome or sepsis. The symptoms are characterized by hypotension, insufficient tissue perfusion, uncontrollable bleeding, and multisystem organ failure caused mainly by hypoxia, tissue acidosis, and severe local alterations of metabolism. The massive deterioration of homeostasis involves blood vessels, platelets, blood coagulation and fibrinolytic processes, the presence or absence of inhibitors, the kallikrein-kininogen system and complement. Management of the shock-specific symptoms is still one of the most challenging problems faced by clinicians. At the cellular level, the shock syndrome is elicited by endogenous mediators. Although the list of shock mediators currently comprises more than 150 candidates, a careful analysis reveals that only a few are causally associated with shock symptoms, including histamine, complement factor C5a, β-endorphin, thromboxane B2 , platelet activating factor, and oxygen free radicals. Plasma levels of α-2-macroglobulin, an inhibitor of different proteinases, have been described to be reduced in patients with sepsis and to be associated with fatal outcome in some studies. The major pro-inflammatory cytokines involved in septic shock are IL-1 , IL-6 and TNF-α, which are released by macrophages following cell activation by bacterial endotoxins . Hemofiltration or hemoadsorption only partially remove these mediators from the circulation and the clinical significance of these procedures is still uncertain.

IL-1 causes tachycardia and hypotension. It synergises with TNFα and TNFα activity is also potentiated by IFNγ. TNFα mainly acts on endothelial cells and increases their procoagulatory activity. Activated endothelial cells also express a number of adhesion molecules that facilitate the adhesion of leukocytes to the endothelium. The accumulation of inflammatory cells further contributes to the tissue destruction. Rabbits challenged with a lethal dose of endotoxins produce several milligrams of TNFα per kg of body weight which quickly reaches all tissues by the blood circulation. The symptoms observed after administration of pure TNFα are almost identical with those observed after an endotoxin shock. The severe effects of an endotoxinemia can be abolished almost completely by administration of antibodies directed against TNFα. The importance of TNFα in septic shock is illustrated by studies of mice in which one of the TNF receptors has been deleted by homologous recombination. TNFα receptor-deficient mice are resistant to endotoxic shock although they still succumb to infections with some other pathogens. .

In humans, TNFα serum concentrations in excess of 1 ng/mL are frequently an indication of the lethal outcome of bacterial sepsis. However, absolute serum concentrations of cytokines involved in the pathophysiology of septic shock are normally not reliable indicators of the severity of the shock state and also do not allow prediction of the clinical outcome.

Monoclonal antibodies directed against bacterial endotoxins inactivate the bacterial toxin and therefore act the beginning of the causal chain of events. Such antibodies are of prophylactic value only and cannot be used to treat acute cases. Animal experiments with genetically engineered IL-1 receptor antagonists have shown that this substance positively influences blood pressure, initial leukopenia, and later leukocytosis in septic shock. Unfortunately the IL-1 receptor antagonist has a very short plasma half-life and therefore optimal effects are obtained only at relatively high doses, on the order of approximately 100 mg/kg body weight. Work is currently in progress to genetically engineer this factor to obtain variants with higher specific activity and improved biological half-lives.

Conclusions

The Cytokine Storm is undoubtedly a robust response to a variety of clinical conditions that can affect both healthy individuals as well as patients with disease burden. Given the variability between individuals at the genetic and epigenetic levels, containing and reversing an overt immune activation state presents a formidable challenge to many clinicians. Several strategies need to be put in place for rapidly identifying targets upstream and downstream

*(**Cytokine Storms**, cont. from page 9)*

In this regard, many post-genomics companies that are eager to establish a niche in the healthcare sector must realize this opportunity to develop high throughput platforms for rapid and comprehensive diagnostic tools for identifying polymorphisms by enabling access to databases on global gene expression, transcriptome and proteome profiling. This would further enable the generation of chip-based cytokine arrays and facilitate the design of bio-engineered products such as decoy receptors traps to soak up soluble mediators (Regeneron) or RNAi and alternate anti-sense strategies (Xenova). As industry-academia interactions continue to co-develop reasonably good strategies to combat this detrimental host response, "cytokine storms" may become a thing of the past.

References:

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Novel Interferon Signaling Pathways Explored in Special Issue of *Journal of Interferon & Cytokine Research*

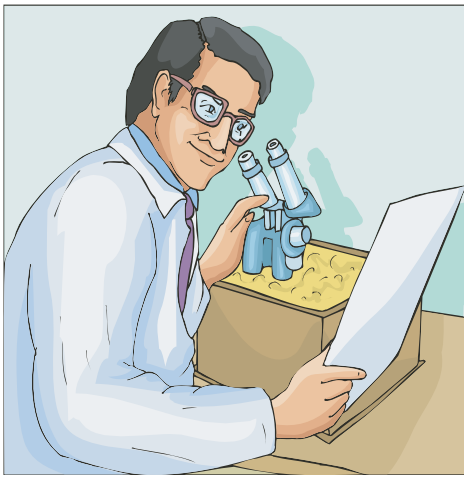
New Rochelle, NY, December 28, 2005-The multiple signaling pathways used by the group of cytokines commonly known as interferons to alter the body's immune system and exert their antiviral and growth inhibitory effects include many newly discovered signaling elements and mechanisms that are redefining the view of how interferons function and are described in a cutting-edge Special Issue (December, Volume 25, Number 12) of Journal of Interferon & Cytokine Research, a peer-reviewed journal published by Mary Ann Liebert, Inc. Several key papers are available free online at www.liebertonline.com/jir Dedicated to Neo-Classical Pathways of Interferon Signaling, the December Special Issue of the Journal takes an in-depth look at recent research efforts to identify and characterize the interactive, cooperative signaling networks that are helping shed light on the complex mechanisms by which interferons regulate gene expression and affect the function of immune cells. Guest Editor Leonidas C. Platanias, Ph.D., has gathered an impressive collection of papers prepared by experts in the field that spans the many aspects of interferon signaling. "The emerging evidence from all these discoveries suggests that the cooperation among multiple signaling elements and pathways is essential for the induction of IFN-responses, and is in a way transforming again the field of IFN-signaling," writes Dr. Platanias.

The Journal includes an article by Inna Nusinzon and Curt M. Horvath entitled, "Unexpected Roles for

*(**Novel Interferon**, cont. from page 10)*

Deacetylation in Interferon- and Cytokine-Induced Transcription," in which the authors present evidence to support the theory that positive regulation of gene expression by interferons and other cytokines requires both acetylation and deacetylation. Efstratios Katsoulidis and colleagues describe recent findings on the role of the p38 MAP kinase pathway in mediating IFN-dependent biological effects and discuss the impact of upstream and downstream pathway components on the control of cellular responses triggered by interferons in an article entitled, "The p38 Mitogen-Activated Protein Kinase Pathway in Interferon Signal Transduction." Focusing on one particular signaling pathway used by interferon to regulate gene transcription, Dhananjaya V. Kalvakolanu and Sanjit K. Roy describe the use of a phosphorylation/dephosphorylation mechanism to activate interferon-stimulated genes in the article entitled, "CCAAT/Enhancer Binding Proteins and Interferon Signaling Pathways."

"The authors of the articles in this issue have made significant recent discoveries that will help us understand better how interferons work," says Ganes C. Sen, Ph.D., Professor, Department of Molecular Genetics, Cleveland Clinic Foundation and Co-Editor in Chief of Journal of Interferon & Cytokine Research. "The new information will be valuable for designing optimum protocols for clinical use of interferons in treating various diseases."



NEW ISICR MEMBERS

The ISICR welcomes all these new members. We look forward to your active participation on ISICR committees and in our annual meeting. For more information in how to participate in the ISICR, please contact the ISICR President, Otto Haller.

Charles J. Azelu
Ibadan, Nigeria

Di Fen
Newark, NJ

Elizabeth A. Fitzpatrick
Memphis, TN

Frode Fridell
Bergen, Norway

Carole L. Galligan
Toronto, Canada

Jing Gao
Cleveland, HO

Vladimir Hurgin
Rehovot, Israel

Tara P. Hurst
Dublin, Iceland

Lehmann Jutta
Munchen, Germany

Karen L. Kantor
Evanston, IL

Gilla Kaplan
Newark, NJ

Janet Kirkley
Galesburg, IL

Thomas A. Kraus
Evanston, IL

*(**New Members**, cont. from page 11)*

James Li
Hong Kong

Xudong Liao
Cleveland, OH

Tetsuya Maegawa
Osaka, Japan

Inna Nusinzon
Evanston, IL

Haidar S. Saddam
Tikrit, Iraq

Rishikesh M. Sawant
Boston, MA

Tariq A. Tajuddin
Dublin, Iceland

Alexei Tumanov
Chicago, IL

Lai Wei
Memphis, TN

Tzu G. Wu
Minneapolis, MN

Weifeng Xu
New York, NY

New Member Minibios

Thomas Tan

Janet Kirkley, Ph.D.
Associate Professor and Chair,
Program in Biochemistry
Knox College
Galesburg, IL 61401

Janet Kirkley received her Ph.D. in Biochemistry from The George Washington University, Washington, D.C. For her dissertation research, she studied the effect of adjuvants and immunogen format on the size and character of the immune response as part of an AIDS vaccine development project. She joined the Knox College faculty in 1992 to help start a new major in biochemistry. Research in Dr. Kirkley's lab currently focuses on mechanisms through which temperature regulates macrophage activation by LPS, in particular signal transduction events and activation of transcription factors for LPS-inducible cytokines and other gene products.

Reasons for joining ISICR: "I decided to join ISICR because my current research project investigates regulation of cytokine production by macrophages. Joining ISICR will provide opportunities to interact with other investigators in the field of cytokine and IFN research."

If ISICR members would like to be profiled in the newsletter via a new member minibio, please contact Thomas Tan at TAN_SENG-LAI@Lilly.com

ISICR Members in the News

Bryan Williams has taken a new position in Australia as Director of the Monash Institute!! His new contact info is:

Director
Monash Institute of Medical Research
27-31 Wright Street
Clayton 3168 Vic
Australia
Tel: 61 3 9594 7165
Fax: 61 3 9594 7167
email bryan.williams@med.monash.edu.au

The ISICR wishes him well in this new and exciting challenge!!!

A cartoon by Ken Frauwith, reprinted with permission
http://www.wam.umd.edu/~kfrauwir/SDSPage/Page1.html

Clinical Trials

Hannah Nguyen

More information on this list can be obtained at http://clinicaltrials.gov, http://www.centerwatch.com/search.asp, or http://clinicalstudies.info.nih.gov.

Safety and Tolerability of **Interferon-Beta-1a** and Estroprogestins in MS Patients. ClinicalTrials.gov identifier NCT00151801. Location: Department of Neurology - University of Rome La Sapienza, Rome, 00100, Italy. Contacts: Carlo Pozzilli, MD, +39-06-49914716, carlo.pozzilli@uniroma1.it; Fabiana Marinelli, MD, Principal Investigator, +39-338-2955443, fabiana.marinelli@uniroma1.it.; Valentina Tomassini, MD, Study Chair. Study ID Numbers: NEU - PIL - 03

Interferon ß-1b Treatment by Cyclical Administration. ClinicalTrials.gov identifier NCT00270816. Location: Azienda Ospedaliera S. Andrea, II Facoltà di Medicina e Chirurgia, Università di Roma "La Sapienza", Rome, 00139, Italy. Contacts: Marco Salvetti, MD, Study Director, +390680345994, marco.salvetti@uniroma1.it; Silvia Romano, MD, Sub-Investigator, +390680345994, silvia.romano@uniroma1.it. Study ID Numbers: NEU - CYC - 06

A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Study of the Safety and Efficacy of **Interferon Gamma-1b** in Patients With Idiopathic Pulmonary Fibrosis (The INSPIRE Trial). ClinicalTrials.gov Identifier: NCT00075998

A phase 3, randomized, double-blind, placebo-controlled trial to determine the efficacy and safety of 200 µg of recombinant **Interferon gamma-1b** administered by subcutaneous (SC) injection, compared with placebo, in patients with IPF. Contact: InterMune Inc. 888-486-6411 medinfo@intermune.com, www.inspiretrial.com Study ID Numbers: GIPF-007

Safety and Efficacy of SCH 503034 Plus **Peg-Intron**, With and Without Added Ribavirin, in Patients With Chronic Hepatitis C, Genotype 1, Who Did Not Respond to Previous Treatment With **Peginterferon Alfa** Plus Ribavirin (Study P03659). ClinicalTrials.gov identifier NCT00160251. Locations and Contacts in 14 US States, France,

(***Clinical Trials*** continued from page 13)

Germany, and Italy. Study ID Number: P03659

Intralesional Treatment With **Interleukin-2 (Proleukin)** in Soft Tissue Melanoma Metastases. ClinicalTrials.gov identifier NCT00204581. Location: Skin Cancer Program, Department of Dermatology, Liebermeisterstrasse 8, Tübingen, Germany BW, 72076. Contact and Principal Investigator: Claus Garbe, MD ++49 7071 29 87110, claus.garbe@med.uni-tuebingen.de. Study ID Number: IL-2-LOK-MM

Toxicity Substudy of ESPRIT: **TOXIL-2** Substudy. ClinicalTrials.gov identifier NCT00147355. Locations and Contacts in Argentina, Australia, and Isreal. Principal Investigator: Sarah L Pett, M.D, National Centre in HIV Epidemiology and Clinical Research, Faculty of Medicine, University of New South Wales, Sydney, Australia. Study ID Numbers: ESPRIT TOXIL-2 UNSW PSO 6361

A Study of CNTO 328 (chimeric antibody against **Interleukin-6**) in Subjects With Metastatic Renal Cell Carcinoma. ClinicalTrials.gov identifier NCT00265135. Information: info@veritasmedicine.com. Locations and Contacts in the Czech Republic (recruiting), France (no longer recruiting), the Netherlands (recruiting) and the United Kingdom (no longer recruiting). Study Director: Centocor Research & Development, Inc. Study ID Number: CR005278

Interleukin-7 to Treat HIV-Infected People Receiving Antiretroviral Treatment. ClinicalTrials.gov identifier NCT00105417. Location and Contact: National Institute of Allergy and Infectious Diseases (NIAID), 9000 Rockville Pike, Bethesda, Maryland, 20892; Patient Recruitment and Public Liaison Office, 1-800-411-1222, prpl@mail.cc.nih.gov, TTY 1-866-411-1010. Study ID Numbers: 050112; 05-I-0112

The Relationship of Single Nucleotide Polymorphisms in the **Interleukin-7 Receptor-α** Gene to CD4+ Immune Recovery in HIV Infected Patients Who Begin Antiretroviral Treatment With HAART. ClinicalTrials.gov identifier NCT00168207. Location: The Alfred Hospital, Commercial Road, Melbourne, Victoria, 3004, Australia. Contacts:Jennifer Hoy, A/Prof, Study Director, The Alfred Hospital, 0061 3 9276 6900, Jennifer.Hoy@med.monash.edu.au; Kyra Chua, Dr, Sub-Investigator; Sharon Lewin, Prof, Principal Investigator, Alfred Hospital, Melbourne, Vic 3004. Study ID Number: 112/05

Cytokine Polymorphisms (in the **Interleukin-10** and **inducible nitric oxide synthase** genes) and Acetaminophen Toxicity. ClinicalTrials.gov identifier NCT00166608. Locations and Contacts in 7 US States. Principal Investigator: Laura James, M.D., Arkansas Children's Hospital. Study ID Number: PPRU-10369s

Study of STA-5326 Mesylate (blocks the release of **Interleukin-12** from peripheral blood mononuclear cells; an oral IL-12/23 inhibitor) in Patients With Moderate to Severe Crohn's Disease. ClinicalTrials.gov identifier NCT00138840. Locations and Contacts in 17 US States and 3 Canadian Provinces. Study chair or principal investigator: Bruce Sands, MD, Massachusetts General Hospital. Study ID Number: 5326-07

EPO and **G-CSF** for Low-Risk MDS. ClinicalTrials.gov identifier NCT00234143. Location: St Bartholomew's Hospital, London, EC1A 7BE, United Kingdom. Contact and Principal Investigator: Samir G Agrawal, MD, PhD, +44 - 207 601 8202, s.g.agrawal@qmul.ac.uk, St. Bartholomew's Hospital. Study ID Number: 04/Q1907/94

Can a Modified Fat Diet With Low Glycaemic Load Improve Insulin Sensitivity and Inflammatory Mediators (**Tumor Necrosis Factor alpha**, CRP, **Interleukin 6**) in Overweight People With Chronic Heart Failure? ClinicalTrials.gov identifier NCT00163904. Location: Alfred Hospital, Melbourne, Victoria, 3004, Australia Contacts: Fiona Adams, BSc. Grad.Dip.Diet, Principal Investigator, +613 9276 3063, adams@alfred.org.au; Rachel Stoney, PhD, +613 9276 3063; r.stoney@alfred.org.au. Study ID Numbers: 12/05; Small Project Grant - T10513; Allied Health Grant - A10501

Reviews of Interest

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WWW

2005 Meeting Photos!!

http://www.sibcb.ac.cn/ISICR2005-10.html

If you have additional 2005 meeting photos that you would like to share with ISICR members, please send them to Howard Young at youngh@ncifcrf.gov.

ABX Guide: Diagnosis & Treatment of Infectious Diseases

http://www.hopkins-abxguide.org/

The new book ABX Guide: Diagnosis & Treatment of Infectious Diseases is a comprehensive infectious disease resource specifically designed to assist healthcare providers in rapidly finding accurate information for common office and hospital infections. Johns Hopkins faculty including the renowned ID expert, Dr. John Bartlett, wrote and edited this guide making this one of the most authoritative drug resources available.

Allgenes

www.allgenes.org/

DoTS (**D**atabase **O**f **T**ranscribed **S**equences) is a human and mouse transcript index created from all publicly available transcript sequences. The input sequences are clustered and assembled to form the *DoTS Consensus Transcripts* that comprise the index. These transcripts are assigned stable identifiers of the form DT.123456 (and are often referred to as "dots"). The transcripts are in turn clustered to form *putative DoTS Genes*. These are assigned stable identifiers of the form DG.1234356.

- Releases 9 Human and 10 Mouse contain 35,151 Human and 30,507 mouse DoTS Genes have been assigned a DoTS Gene Model generated by an analysis of BLAT alignments of DoTS Transcripts. They are available as links from the DoTS Genes pages.
- Mouse BLAT alignments were obtained using the UCSC mouse version mm5 (NCBI mouse build 33).
- Release 10 Mouse includes six sources of gene traps: Mammalian Functional Genome Centre (MFGC), Sanger Institute Gene Trap Resource (SIGTR), Lexicon Genetics Incorporated, H.E. Ruley Lab at Vanderbilt Univ., P. Soriano Lab - Fred Hutchinson, Center for Modeling Human Disease. Previous releases included gene traps from BayGenomics and the German Gene Trap Consortium.

This site highlighted by Kevin Ahern (www.davinci-press.com) in *Genetic Engineering News.*

BACPAC Resources Center

http://bacpac.chori.org/home.htm

The BACPAC Resources Center has created a wide variety of libraries, which can be ordered under a number of different formats: individual clones, filters, vectors, and library plates. We also host, maintain and distribute a number of libraries which have been constructed externally and picked in our laboratory using our colony pickers.

Our laboratory operates using a cost recovery mechanism, as a result, the costs of maintenance of our resources is exactly covered by the prices we have established. Funding for creation of additional libraries is provided by grants from various institutes and laboratories interested in constructing specific BAC libraries. Requests for construction of libraries, as well as requests for hosting of externally created libraries should be emailed directly to the principal investigator, Pieter de Jong (pdejong@chori.org).

Bioimages

http://www.cas.vanderbilt.edu/bioimages/frame.htm

To provide educational information to the public on biologically related topics, as well as a source of biological images for personal and non-commercial use. Recommended by Kevin Ahern (ahernk@orst.edu) in *Biotechniques*

WWW (continued)

BioTechniques® Molecular Biology Techniques Forums

http://molecularbiology.forums.biotechniques.com/forums/

BioTechniques® Molecular Biology Forums is a science-based bulletin board for techniques, tips, and questions concerning molecular biology, cell biology, microscopy, and bioinformatics.

Cancerquest

www.cancerquest.org

This site was created to teach the biology of cancer. No assumptions are made about previous knowledge of cancer or biology. The target audience for our site includes cancer patients, their families and friends, medical workers and others interested in the subject. We hope to inform the curious and empower current cancer patients and survivors of cancer with a better understanding of the disease process and the approaches currently taken in cancer treatment.

CellC: Software for quantification of labeled bacteria by automated image analysis

http://www.cs.tut.fi/sgn/csb/cellc/

CellC enables automated enumeration of microbial cells, comparison of total count and specific count images (e.g DAPI and FISH images), and provides quantitative estimates of cell morphology. The software includes a graphical user interface and allows sequential analysis of multiple images without user intervention.

The Expressed Gene Anatomy Database

http://www.tigr.org/tdb/egad/egad.shtml

EGAD was constructed by extraction and curation of sequences from GenBank to create a non-redundant set of human transcript (HT) sequences and non-human transcript (ET) sequences. In some cases, HTs/ETs were created by splicing together distinct GenBank accessions for each exon in those transcripts, or by splicing exons from a genomic sequence. Each HT sequence is linked to a human gene (HG). An HG may have more than one HT due to alternative splicing. Alternative splice forms of a gene are linked in HG and HT reports. HG and HT/ET names have been curated for consistent nomenclature. Cellular roles have been assigned to each HT/ET. Tissue distribution information is available for most HTs/ETs. Extensive expression information, including positions of overlapping Expressed Sequence Tags (ESTs), is available in HT/ET reports, for most HTs/ETs, with links to TIGR's Gene Indices. Clones for HTs/ETs may also be available through the TIGR/ATCC Special Collection.

The curated HT/ET data set is available as a multiple FastA format file, please go to TIGR's data licensing page for more information.

EGAD is accessed through the following queries:
A name search in which the user supplies a gene product name will return a list of matching HTs/ETs and their identifications. Sequence reports can be generated for Human Transcripts (HTs)or non-human transcripts (ET) or Human Genes (HGs).
EGAD has been implemented using the Sybase relational database management system.

For EGAD Comments/Questions send mail to egad@tigr.org.

WWW (continued)

Genome-wide mapping of histone H3 acetylation in human T cells

http://dir.nhlbi.nih.gov/labs/lmi/zhao/epigenome/G&D2005.htm

The genome-wide distribution of K9/K14 di-acetylated histone H3 in resting and activated human T lymphocytes was mapped by a combination of chromatin immunoprecipitation and SAGE technique (GMAT). The level of the histone acetylation at a genetic locus is positively correlated with the detection frequency of a 21-bp sequence tag identified by the GMAT analysis. The detection frequency (y-axis) is plotted against the chromosome coordinated (x-axis). The top panel (blue) and the middle panel (red) are the H3 acetylation data in resting and activated T cells, respectively. The lower panel represents a gene map generated by the UCSC genome Browser.

References: (1) *Genes & Dev.* online published on Feb. 10, 2005 (2) Nat. Biotechnol. 2004 (22),1013-6

Manatee

http://manatee.sourceforge.net/

Manatee is a web-based gene evaluation and genome annotation tool that can view, modify, and store annotation for prokaryotic and eukaryotic genomes. The Manatee interface allows biologists to quickly identify genes and make high quality functional assignments using a multitude of genome analyses tools. These tools consist of, but are not limited to GO classifications, BER and blast search data, paralogous families, and annotation suggestions generated from automated analysis. .

The Manatee project was created by the bioinformatics department at The Institute for Genomic Research (TIGR) in Rockville, MD. This on-going, open source initiative was developed with two missions. One, to allow biologists the ability to functionally annotate their genomes using a powerful, stand-alone web application with a robustly designed relational annotation database. And secondly, to invite outside developers the opportunity to contribute their own ideas and requirements to enhance Manatee's ability to accomplish biological goals.

Phospho.ELM

phospho.elm.eu.org

The Phospho.ELM database contains a collection of experimentally verified Serine, Threonine and Tyrosine sites in eukaryotic proteins. The entries, manually annotated and based on scientific literature, provide information about the phosphorylated proteins and the exact position of known phosphorylated instances.

Phospho.ELM version 4.0 (Nov 2005) contains 1805 substrate proteins from different species covering 1372 tyrosine, 3175 serine and 767 threonine instances.

Protein Kinase Resources

http://www.kinasenet.org/pkr/Welcome.do

The Protein Kinase Resource has been redesigned and expanded with new content and cross-links with other online resources. This site is the first public release of the new PKR initiative, which aims to link together various sources of information (sequence, structure, annotation) and provide ways to access, display and analyze it from within the convenient web environment. In addition, several new technologies to integrate information search, retrieval and visualization with respect to protein kinases have been introduced.

Scansite

scansite.mit.edu

Scansite identifies short protein sequence motifs that are recognized by modular signaling domains, phosphorylated by protein Ser/Thr- or Tyr-kinases or mediate specific interactions with protein or phospholipid ligands. Each sequence motif is represented as a position-specific scoring matrix (PSSM) based

on results from oriented peptide library and phage display experiments. Predicted domain-motif interactions from Scansite can be sequentially combined, allowing segments of biological pathways to be constructed in silico. The current release of Scansite, version 2.0, includes 62 motifs characterizing the binding and/or substrate specificities of many families of Ser/Thr- or Tyr-kinases, SH2, SH3, PDZ, 14-3-3 and PTB domains, together with signature motifs for PtdIns(3,4,5)P(3)-specific PH domains. Scansite 2.0 contains significant improvements to its original interface, including a number of new generalized user features and significantly enhanced performance. Searches of all SWISS-PROT, TrEMBL, Genpept and Ensembl protein database entries are now possible with run times reduced by approximately 60% when compared with Scansite version 1.0. Scansite 2.0 allows restricted searching of species-specific proteins, as well as isoelectric point and molecular weight sorting to facilitate comparison of predictions with results from two-dimensional gel electrophoresis experiments. Support for user-defined motifs has been increased, allowing easier input of user-defined matrices and permitting user-defined motifs to be combined with pre-compiled Scansite motifs for dual motif searching. In addition, a new series of Sequence Match programs for non-quantitative user-defined motifs has been implemented.

Sending Large files

www.yousendit.com

When a recipient's server can't accept large files, try this website. It holds up to 1GB of data for free. You simply put in the recipient's email and your email and load the files. Then it will let the recipient know when the files are there and provide a link for retrieving them.

Vector Backbones

http://www.addgene.org/vectors

Can't find information about a plasmid's backbone? Addgene has compiled a list of relevant vector backbones from literature and several companies. Unless otherwise noted, Addgene does not sell these backbones. This information is provided for your convenience. It is intended for use only as a guide. If a backbone is available from another vendor, please visit the vendor's website for complete information on the vector.

Viral Bioinformatics Resource Center

http://athena.bioc.uvic.ca/

This resource provides access to viral genomes and a variety of tools for comparative genomic analyses. At the heart of the system is VOCs (Virus Orthologous Clusters), a database with built-in tools that allows users to retrieve and analyze the genes, gene families, and genomes of different virus families. The database is the source of information for other programs of the workbench for whole genome alignments, genome display, or gene/protein sequence analysis. Many of these tools can also be used with user-provided sequence data. The workbench tools are Java-based and user-friendly to allow all users, regardless of computer skill-level, to access and analyze the data. Recommended by Kevin Ahern (ahernk@orst.edu) in Biotechniques

Watcut

http://watcut.uwaterloo.ca/watcut/watcut/template.php

An on-line tool for restriction analysis, silent mutation scanning, and SNP-RFLP analysis.

CYTOKINES 2006

Cytokines, Interferons, Chemokines and Growth Factors in Cancer and Immunity

6th Joint Meeting of

International Cytokine Society

International Society for Interferon and Cytokine Research

European Cytokine Society

August 27-31, Hilton-Stadtpark, Vienna, Austria

The organizers are cordially inviting you to take part in the International Conference "Cytokines 2006", which will be held from August 27 to 31, 2006 in Vienna, Austria. This will be the 6th Joint Meeting of the International Cytokine Society (ICS) and the International Society for Interferon and Cytokine Research (ISICR) as well as the 2nd Joint Meeting of these societies with the European Cytokine Society (ECS). Our Conference will bundle the energies of these three major societies and provide a comprehensive update of the most recent insights into the basic and clinical aspects of Cytokines, Interferons, Chemokines and Growth Factors.

We hope that the ambitious scientific program will bring together the leading investigators of cytokine biology. Themes to be covered will include cytokine/interferon structure and function, gene regulation, signal transduction, receptors, cell cycle control, regulation of cell survival, microenvironment, new cytokines, as well as the role of interferons, chemokines and 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, post-doctoral fellows, graduate students and representatives of the pharmaceutical industry all stand to profit from taking part. We believe that this Joint Meeting - set in the venerable city of Vienna - will reflect the best of current science of cytokines and give vital impulses for its further development.

Located at the crossroads of East, West, North and South of Europe, the city of Vienna - with its rich tradition in culture and science - will provide an ideal atmosphere for lively discussions among the participants. The conference venue, the Hilton-Stadtpark, Austria's largest Congress Hotel, is centrally located, only a short walk into the old town with its magnificent churches, palaces and gardens, many famous museums, coffeehouses and restaurants. The venue enjoys a direct fast-train connection to the airport (16 minutes). On the occasion of Mozart's 250th anniversary, many musical events will be taking place in Vienna in 2006, when Austria will also head the European Commission. We are confident that your stay in the elegant city of Vienna will be most memorable.

The Local Organizing Committee
Josef Schwarzmeier, Martin Aringer, Meinrad Busslinger, Thomas Decker, Jan deVries, Raymond Kaempfer, Sylvia Knapp, Josef Penninger, Antal Rot, Anneliese Schimpl, Medhat Shehata, Josef Smolen, Peter Valent, Christoph Zielinski

(***Cytokines 2006*** continued from page 20)

The Program Committee of the Cytokine Conference 2006 invites the submission of original contributions to be published as Abstracts in "European Cytokine Network".

All abstracts will be reviewed by the Scientific Program Committee.

Deadline for submission of abstracts	April 24, 2006
Notification of acceptance of abstracts	May 30, 2006

Topics

Allergy	Angiogenesis	Apoptosis	Cancer
Cell Cycle Control	Cell trafficking	Chemokines	Cytokine/Interferon Mode of Action
Cytokine Receptors	Cytokines	Gene Regulation	Growth Factors
Hematopoiesis	Host Defense	Immunity	Infection
Inflammation	Interferons	Microenvironment	Signal Transduction

Guidelines for Preparing Abstracts

Submission Guidelines:
Abstracts must be submitted online using the online submission form accessible from the Conference homepage. No alternative abstract submissions via mail, fax or email will be possible. **The deadline for abstract submission is April 24, 2006.** Abstracts received after this date will not be considered. Abstracts will be evaluated by the Scientific Program Committee; based on novelty and scientific merit, the best of them will be selected for oral presentations at Workshops and Symposia. Abstracts accepted for the Conference will be published in *European Cytokine Network*. Notification of acceptance of the abstract will be made by May 30, 2006. Together with the confirmation of abstract acceptance, authors will be asked to confirm their attendance by registering online. All presenting authors must register as participants by July 31, 2006, to ensure the inclusion of their abstracts in the program.

Registration Fees

Registration fees are in EURO (€).

REGISTRATION FEES	REDUCED paid before June 30, 2006	REGULAR paid after June 30, 2006	PAYMENT RECEIVED ON SITE
Member	€ 400.-	€ 500.-	€ 550.-
Non Member	€ 500.-	€ 600.-	€ 650.-
Students*	€ 250.-	€ 350.-	€ 400.-
Accompanying Person	€ 120.-	€ 150.-	€ 150.-

* Student card or a certificate signed by the Head of Department has to be mailed or faxed to the Conference Secretariat.

(***Cytokines 2006*** continued from page 21)

Regular online registration will be closed on August 17, 2006. All registrations received after this date have to be charged the same rate as those received on site.

The registration fee for participants includes:

- Admission to the scientific sessions
- Admission to the commercial exhibition
- Conference documents and the Abstracts
- Opening Ceremony and Welcome Reception, Sunday, August 27, 2006
- Gala Dinner at the City Hall, Tuesday, August 29, 2006 (since this is an invitation of the City of Vienna, only the first 800 registrants can be accepted)

The registration fee for accompanying persons includes the following:

- Opening Ceremony and Welcome Reception, Sunday, August 27, 2006
- Admission to the commercial exhibition
- Tour "Mozart", Monday, August 28, 2006
- Gala Dinner at the City Hall, Tuesday, August 29, 2006 (since this is an invitation of the City of Vienna, only the first 800 registrants can be accepted)

Terms of Payment

All payments shall be paid in advance by:
- Bank transfer - free of charges for the recipient - to Austropa Interconvention Account No. 00602 364 259 held with Bank Austria, Creditanstalt AG, Bank Code 12000, Operngasse 8, 1010 Vienna, Austria, BIC Code **BKAUATWW**, IBAN Code **AT16 1200 0006 0236 4259**. Please remember to include the participant's name and the reference "Cytokine Conference".

Please note that all banking fees have to be settled by the remitter. For reducing the banking fees please use the IBAN and BIC codes.

- Credit cards: VISA, Diners, Eurocard/Mastercard, American Express, JCB

  Please indicate the card number and expiry date on the application form.

Please note that the Reduced and Regular fee rates apply for the transfers received before/on June 30, 2006 and August 17, 2006, respectively.

Confirmation

Confirmations of registration and payments received until August 17, 2006 will be sent to the registrants. Participants are kindly asked to bring this confirmation letter to the registration desk at the Conference venue.

Changes/Cancellations

All requests for cancellations have to be made in writing to the Conference Secretariat, Austropa Interconvention. The participants who cancel before July 25, 2006, will receive a full refund after the end of the Conference, minus an administrative fee of €50. No refunds will be made on cancellations received after July 25, 2006.
The requests for substitution made by a registered participant will be granted until August 17, 2006 at the administrative cost of €18.
Certificate of Attendance will be included with the Conference documents..

Hotel Information

Our Conference Secretariat
Austropa Interconvention
Manuela Jung
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has pre-booked rooms at discount rates at the Conference Hotel Hilton - Stadtpark and in other selected hotels very close to the Conference Venue. All participants are kindly requested to complete the hotel booking section during the online registration.

Deadline for hotel reservation is June 30, 2006

We recommend that you make your hotel reservation as soon as possible as rooms will be allocated on a first come first served basis. A deposit payment amounting to the charge for one night stay is required to secure your booking. If the hotel requested is fully booked, Austropa Interconvention will book for you

(***Cytokines 2006*** continued from page 22)

an equivalent accommodation. After June 30, 2006 the availability of rooms and rates cannot be guaranteed.

INDIVIDUAL BOOKINGS

Hotel Deposit, Confirmation and Receipt
Hotel rooms will be reserved and confirmed upon the receipt of your deposit. Austropa Interconvention will send you a written confirmation of reservation. Please keep this confirmation letter (voucher) and present it when checking in. As a matter of principle the hotel's final invoice will be based on the number of nights you booked in advance. On your departure the hotel will issue an invoice for the hotel amount due minus the pre-paid deposit.

HOTEL CHANGES AND CANCELLATIONS

Please request changes or cancellations in writing exclusively to Austropa Interconvention and notdirectly to the hotel. If you cancel your hotel reservation before August 1, 2006, you will receive the refund of the deposit after the end of the Conference. However, a handling fee of €40,- per room will be retained. Unfortunately, no refund of the hotel deposit can be made on cancellations received after that August 1, 2006. The availability of your room cannot be guaranteed if you do not check in on the arrival date booked.

COMPANY/GROUP BOOKINGS
For company/group bookings (10 or more rooms) different terms of payment and cancellation will apply, please contact Austropa Interconvention for details. The rates indicated are in EURO (€) per room, per night with bath or shower/WC, and include breakfast, service charge and local taxes.

	Category	Single	Double	Breakfast
1	Hilton Stadtpark - conference hotel	€ 175,-	€ 190,-	Included
2	Astoria - 4 star	€ 137,-	€ 179,-	Included
3	Europa - 4 star	€ 137,-	€ 179,-	Included
4	City Central - 4 star	€ 134,-	€ 176,-	Included
5	Stefanie - 4 star	€ 129,-	€ 169,-	Included
6	Post - 3 star	€ 79,-	€ 120,-	Included
7	Drei Kronen - 3 sta	€ 75,-	€ 105,-	Included
8	Wandl - 3 star	€ 95,-	€ 150,-	Included
9	Ibis Mariahilf - 3 star	€ 80,-	€ 104,-	Included
10	Academia - 2 star	€ 50,-	€ 66,-	Included
11	Jugendgaestehaus Pfeilgasse - 2 star (without private conveniences)	€ 25,-	€ 42,-	Included

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(Technical questions concerning the online submission process)
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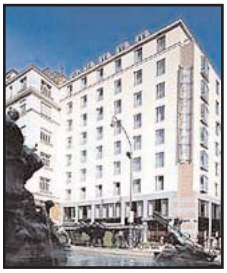

Like chocolate and peanut butter this odd pairing tastes good

By Chris McNamara
Special to the Chicago Tribune

CHICAGO -- The crowd squeezed into the upstairs room at Hopleaf Bar was buzzing. Buzzing with excitement -- sure -- but also with a double-punch of potent ales and rich truffles. It was a beer-and-chocolate-pairing seminar at this neighborhood bar last spring. Alcohol flirted with caffeine. And a few dozen hedonists flirted with nirvana.

The beer expert was Jim Javenkoski, a culinary attache with Unibroue brewery of Quebec who has a doctorate in food science from the University of Illinois.

The chocolatier was Liz Dierolf from Vosges Haut-Chocolat, who instructed the audience to pop the truffles into their mouths upside down, enabling the cracked peppercorns or curry that dusts the tops of the delicacies to buzz the taste buds before the chocolate coats the palate. (Dierolf has since left Vosges for another chocolatier.)

(***Chocolate*** continued from page 24)

The syllabus was sweet: four premium Unibroue ales paired with eight Vosges truffles. Trois Pistoles, a strong, dark ale with 9 percent alcohol, was served first with the Mirabelle orange truffle. "Blended with orange flower water and dark chocolate and kissed with orange nasturtium blossoms," read the menu.

Dierolf detailed the ingredients, Javenkoski described how the beer was brewed, and the audience chewed, sipped and moaned in delight. Then it was on to the next truffle: Tlan Nacu, crafted from Belgian dark chocolate and cream infused with plump vanilla beans from a small plantation on the Gulf Coast of Mexico. It was as delicious as it sounds, and the flavor intensified when awash in sips of the Trois Pistoles.

Two great tastes

"Chocolate can be very dense," Javenkoski explained. "Beer with a fairly strong alcohol content serves as a solvent for those flavors. With ingredients that are soluble in alcohol, like cocoa butter, your taste buds and nose have more of a chance to savor."

Vosges owner Katrina Markoff was more succinct on the topic of beer/chocolate combos. She simply let out a "Yummm!" Her love of beer and chocolate inspired the Zion Collection, launching in October, which will include truffles infused with Red Stripe beer. "[Good pairings] depend on the type of beer," she said. "Anything grainy or oaty is best with chocolate. Chocolate is very strong and needs a hearty counterpart. You definitely don't want to use a Bud Light."

There are as many opinions on the booze/chocolate pairing as there are permutations.

One such pairing came next in the seminar: Edition 2005, an extra-strong ruby ale, with Rose Vert, dark chocolate flavored with bittersweet herbs and rose water. Then the Edition 2005 was paired with Alexis, a ball of dark chocolate and curry powder that -- upon tasting -- managed to legitimize this description: "a sublime experience, haunting and unexpected."

(***Chocolate*** continued from page 25)

Mike Roper, owner of Hopleaf, recommended malty beers. "I think that the malty sweetness of beer complements the chocolate, especially milk chocolate. Hoppy beers would work with bitter chocolates -- stouts, porters, Belgians, brown and dark ales."

Robert Davis, owner of Unique So Chique Tea & Chocolate Room, said he prefers to match truffles to wine, reserving beer for other chocolate desserts. "Beer goes better with cakes and pastries, which have a lighter consistency," he said. "A fruit-flavored beer is good to accompany those."

Armchair experts

Of course, the experts are not the only ones with observations; after all, Hopleaf is a destination for educated drinkers, and the seminar was filled with them.

"Instead of drinking 12 Coors Lights, I'm more interested in coming here on the weekends and trying three or four different styles of good beers," said Bud Sleet.

"I love these beers and I know these chocolates," added his friend, April Clements. "Combining beer and chocolate is not odd. We'd open a great bottle of red wine to have with dessert, and that translates to these beers."

They had paid $30 to attend, and they had strong opinions. Some thought certain beers overwhelmed the chocolates. Others believed the beer was served too cold.

"I think this chocolate would be too much without this beer," one attendee said.

"Chocolate is never too much," responded another.

The boisterousness of the crowd grew as the number of beers imbibed did. "Hey, chocolate lady!" someone hollered. "Which one is which?"

In the course of about an hour, everyone had gobbled six chocolates and downed numerous glasses of potent ale. But there was no rest for the weary. The final beer selection was Quelque Chose, a cherry ale served warm, steaming the sides of the glass when poured.

It was first paired with Chef Pascal, a cherry/chocolate/cream concoction named for a famed pastry chef at Le Cordon Bleu in Paris. Then it was coupled with Red Fire, a truffle forged of ancho chili powder, cassia cinnamon and dark Belgian chocolate.

It was a bizarre mix, for sure, but then nothing seemed unusual in this setting, where beers and chocolates made for a perfect Sunday supper.

"Is there anyone left who doubts that beer and chocolate work together?" Javenkoski asked.

The crowd communicated its response with clinking glasses and roaring cheers fueled by sugar highs and head buzzes.

Minutes of the ISICR committee meetings

Minutes: ISICR Board of Directors Meeting
October 23, 2005
Shanghai, China
Present: Howard Young, Otto Haller, Fernando Dianzani, Ara Hovanessian, Bryan Williams, Menachem Rubinstein, Tom Hamilton (Secretary-elect), Eleanor Fish (President-elect), Thomas Tan (Finance committee member)

1. The Board accepted the budget that had been submitted but there was concern that there would not be any profit from the Shanghai meeting and that the $30,000 from corporations was not certain. Board members agreed that more effort to make contact with specific individuals within companies was needed.
2. Future meetings were a big issue. While the choice of Oxford for 2007 was approved, it was done with a few caveats, one of which was the elimination of the dinner obligation at the individual colleges. Given that other sites have not been brought forth (Chicago was raised as a possibility in 2008), the Board supported the idea of the new Executive Director being more heavily involved in the planning of future meetings and identification of meeting sites.
3. The Board approved the concept of a web based application process for future ISICR awards, if the costs to establish such a system were within reason.
4. There was discussion regarding merger with the ICS but some members cautioned that we need to think about the overall benefits to the ISICR of such a merger. The idea of continuing joint meetings was endorsed.
5. The Board agreed that the arrangement with George Galasso should end this year, especially since George recommended that the relationship was no longer needed. Howard Young will send a letter thanking him for his efforts on behalf of the society
6. The Board supported the recommendation of the Publication committee that the contract with Mary Ann Liebert be renegotiated as the committee felt that there should be at least some modest financial return to the society. One idea viewed favorably was that a specific sum per year be requested and in return for that, one of the plenary sessions at the annual meeting be designated as sponsored by Mary Ann Liebert or one of the plenary lectures could be designated as the Mary Ann Liebert lecture.
7. Howard Young raised concern that we have not yet converted the Interferon pamphlet (credit for creation goes to Debbie Vestal) into "patient language" primarily due to the fact that he had not found a source of the $1500-$2000 needed to do so. Eleanor Fish indicated that she could possible get it done much cheaper in Canada and Howard indicated that he would send it to her.
8. Howard Young announced the launch of the ISICR slide repository on the website and asked members to contribute slides to the site.
9. Based on informal discussions at the meeting, Howard Young proposed a new initiative for the ISICR. Designated as the "ISICR-Chinese Research Partnership", the idea is to recruit volunteers from the ISICR membership who would be willing to partner with Chinese labs with similar research interests. The ISICR partner would agree to edit the English and evaluate the science (where appropriate) of up to 6 papers/year from their Chinese partner prior to submission to journals. In addition the ISICR member would, if requested, edit PowerPoint presentations for the Chinese laboratory. This idea was based on the thought that when individuals get papers to review and the English grammar is poor, there is a bias to think the science may also be poor. By editing the paper prior to submission, these problems can be avoided. In addition it is hoped that such partnerships would lead to scientific exchanges and collaborations. Based on at least informal discussions with other ISICR members and Board members, the concept was met with enthusiasm.
10. The lack of attendance at the General Membership meeting demonstrated that attempting to schedule it early in the morning prior to a plenary session does not work. While no consensus was reached regarding the best time to schedule the meeting, Otto Haller was urged to consider other times for the General membership meeting during the 2006 meeting.

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11. There was some concern that, in the Shanghai meeting, there was no time set aside for posters so meeting attendees really didn't get the opportunity to speak to the poster presenters. It was agreed that having the posters up during the entire meeting was a good idea but the Vienna organizers should be urged to set aside a time for posters, preferably accompanied with wine and cheese or some other light refreshments.
12. The Board wishes to express its sincerest appreciation and gratitude to Sid Pestka and Sam Barron for their long term service to the ISICR. Their efforts on behalf of the society are much appreciated.

Respectfully submitted,
Howard Young
President, ISICR

Minutes: ISICR International Council Meeting
October 22, 2005
Shanghai, China
Present: Howard Young (President ISICR), Otto Haller (President-Elect, ISICR), Patrick Matthys (Belgium), Zhonghtan Qi (China), Rune Hartmann (Denmark), Michael Tovey (France), Ben-Zion Levi (Israel), Takashi Fujita (Japan), Masayoshi Kahare (Japan), Katja Pokrovskaja (Sweden), Chris Czarniecki (USA), Bob Fleischmann (USA), David Levy (USA), Robert Silverman (USA), George Stark (USA),

1. Howard Young emphasized the need for IC members to become more involved in many aspects of the society, from membership recruitment to providing information to include in future newsletters.
2. Howard Young discussed the transition to having an Executive Director and described what her duties would encompass.
3. Future meetings were a big issue. While the choice of Oxford for 2007 was discussed, it was pointed out that beyond 2007 we have no proposals. The IC supported the idea of the new Executive Director being more heavily involved in the planning of future meetings and identification of meeting sites.
4. There was a brief discussion regarding merger with the ICS and Howard Young described the steps that will be taken in the process of considering this idea.
5. Howard Young informed the IC that we have not yet converted the Interferon pamphlet (credit for creation goes to Debbie Vestal) into "patient language" primarily due to the fact that he had not found a source of the funds needed to do so.
6. Howard Young announced the launch of the ISICR slide repository on the website and asked IC members to contribute slides to the site (and urge others to do so), including slides that were in languages other than English.
7. There was some concern that there was no time set aside for posters so meeting attendees really didn't get the opportunity to speak to the poster presenters. The IC members requested that the organizers of the Vienna meeting be asked to set aside time for poster viewing.
8. The IC wishes to express its sincerest appreciation and gratitude to Sid Pestka and Sam Barron for their long term service to the ISICR. The society has benefited substantially from their untiring efforts and dedication to the membership.

Respectfully submitted,
Howard Young
President, ISICR

Minutes: ISICR Meetings Committee
October 20, 2005
Shanghai, China
Present: Nancy Reich, Michael Tovey, Yoichiro Iwakura, and Josef Schwarzmeier and guests from the ISICR Board of Directors (Howard Young, Otto Haller and Eleanor Fish).

The meeting was chaired by Christine Czarniecki.

2004 - San Juan, Puerto Rico
The ISICR Meetings Committee thanked Nancy Reich and the Organizers for their efforts towards a meeting that was excellent in terms of scientific program and successful from the financial perspective. Nancy Reich provided a detailed meeting report. There were 540 attendees plus guests. Registration funding breakdown included: 177 members (ISICR and ICS); 100 non-members; 82 from Industry; and 97 students. Income from registration, exhibitors and contributions yielded $328,191. Contributions

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included: funds from industry ranging from $1000 to $20,000; and $3000 from an NIH grant. Total expenses were $280,304 and the difference between income and expenses ($47,887) was split equally between the ICS and the ISICR. No seed funds were provided by ISICR.

Written comments from attendees were collated by Sherwood Reichert and provided important suggestions for future meetings such as: Poster sessions were praised; participation at poster sessions was successfully encouraged by having wine and cheese at the sessions; paper and pen should be provided in meeting packs; computers should be available for attendees to check email; session chairs should keep speakers on schedule to allow attendees to move between concurrent sessions; infectious disease topics continue to receive insufficient attention

2005 - Shanghai, China

Xin-yuan Liu, the Chair of the 2005 Meeting was not able to attend and the status presentation was made by Ms. Hua Xu.

Speaker totals were reported as: 1 keynote speaker; 40 plenary speakers; 42 symposium speakers and 72 workshop speakers. The Mayor of Shanghai will give the opening speech at the Opening Ceremony.

The Satellite Meeting will be held on October 25 to 26 at the Medicinal College of Zhe Jiang University in Hangzhou. The theme of the meeting is "Immunity" and the organizers are Drs. Xuetao Cao and Xiaojing Ma.

Current registration totals: 175 ISICR members; 119 non-members; 53 students and 29 accompanying persons. Thirty two countries and regions were represented. The total income was reported as 1820 thousand RMB with a breakdown as follows: 980 thousand RMB from registrations; 520 thousand RMB from the Chinese government; 320 thousand RMB from pharmaceutical sponsors. Total estimated expenses were reported as 1812 thousand RMB which included 1000 thousand RMB for invited speakers; 100 thousand RMB for the Satellite meeting; and 20 thousand RMB for the abstract book.

2006 - Vienna, Austria

Josef Schwarzmeier, the Chair of the Organizing Committee of the 2006 Joint ISICR/ICS/ECS Meeting provided an update.

This meeting which will be the 6th joint meeting of the two societies (and third joint meeting of the ISICR, ICS and European Cytokine Society) will take place August 27 - 31, 2006 in Vienna, Austria. The meeting will take place in the Hilton-Stadpark, Austria's largest Congress Hotel. The completely renovated Hilton, Vienna is centrally located adjacent to the popular "Stadpark" and St. Stephen's Cathedral. There is direct access to the airport by the City-Airport train (CAT). The reasons for the earlier than normal dates were numerous: significant financial contributions from the city and state government for a meeting held before Sept. 1 and availability of student housing before Sept. 1 for 80 euros or less.

In addition, since this conference will be held during Vienna's 250th anniversary of Mozart's birth, many musical events will take place at this time and an impressive social and sightseeing program is being planned.

All talks will take place in the Hilton and the organizers are making efforts to attract clinical researchers. The themes to be covered include new cytokines, cytokine functions and structures, gene regulation, signal transduction, cell cycle control, role of cytokines in immunology, inflammation, angiogenesis and host defense. A significant part of the conference will be devoted to therapeutic effects of cytokines in the management of malignant and non-malignant disorders.

The budget is estimated at 420,000 Euros using an estimate of 600 registrants. The organizers estimate a need for 70,000 Euros to be raised from pharmaceutical sponsors and are seeking assistance from members of the ISICR Meetings Committee and general membership.

The Congress Secretariat is AustropaInterconvention. Deadline for abstract submission is April 24, 2006. The website for this meeting can be accessed at www.cytokineresearch.com/2006.

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There was some discussion regarding registration fees. The Meetings committee is concerned with the planned registration fee being too high and strongly recommends that the organizers lower the fee as well as establish a reduced fee for students. The committee also suggested that the organizers reserve some spaces on the program for late breaking noteworthy papers and for presentations by young investigator awardees.

2007 - Oxford, United Kingdom
Earlier in the year, the ISICR Meetings Committee received a proposal from Graham Foster who proposed Oxford for the ISICR Meeting in 2007. Considering the fact that 2007 will mark the 50th anniversary of the discovery of interferon by Alick Isaacs and Jean Lindenmann at the Medical Research Council's National Institute for Medical Research in London, UK., the committee is in agreement that the UK is the most appropriate place to hold this meeting.

Dr. Foster was not able to attend the Shanghai meeting, however, the committee discussed the proposal that had been previously reviewed.

Information from Graham's proposal:
The local organizing committee is comprised of Graham R Foster (chair); Derek Burke; Michael Clemens; Norman Finter; Linda Hibbert; Ian Kerr; Giovanna Lombardi; Tony Meager

The theme of the meeting will be "Learning from our history - how the lessons from the past help solve today's problems" and the meeting will focus on how past difficulties have been resolved and how current research is resolving many of the on-going puzzles. Each plenary session will be co-chaired by a distinguished interferon research scientist and an active, junior scientist. The sessions will focus on current, state of the art interferon research but each will be introduced by a brief synopsis of previous work in the area with particular emphasis on the way past problems were resolved. The goal is to ensure that as we move into the future the lessons from the past are not forgotten.

Oxford University (http://www.conference-oxford.com/Con%20Fac.html) is proposed as the venue. Oxford University provides a first rate, cost effective service for international conferences. For the 2007 ISICR meeting the main lectures and poster sessions will be held in the university examination hall. Delegates may chose from discounted accommodation in the university colleges or lodgings in the many high quality hotels throughout the city.

Oxford is centrally located with regular train and coach services to most parts of the UK and easy access to three major airports (London Heathrow, London Gatwick and Birmingham International). All three airports have regular coach services to Oxford and the Paddington express from Heathrow airport provides rapid access (15 minutes) to Paddington railway station that provides a regular train service to Oxford.

During the summer vacation affordable accommodation is available within the Oxford colleges. Each of Oxford's colleges has its own unique character and provides cost effective accommodation for those attending conferences in the city. Accommodation costs range from around £60 per night to £120 per night.

The conference will run from Sunday September 16 through to Wednesday 19 September 2007. Posters and commercial exhibits will be on display in one of the university examination halls and the lecture sessions will take place in adjacent rooms in the same building.

A draft budget was developed based on an estimate of 300 registrants and indicated estimated expenses of £114,260 and estimated incoming funds of £125,625 (including support from the Wellcome Trust).

Christine Czarniecki summarized information received from Debbie Weinstein (dweinstein@faseb.org) who will assume the position of Executive Director of the ISICR in January 2006 and who recently was involved with the organization of a meeting of the Society for Leukocyte Biology in Oxford. In Debbie's opinion, there will

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be challenges with holding the meeting in Oxford, however, the challenges can be managed and there were many positives to the location. The committee discussed the challenges which included audiovisual assistance, establishing systems to deal with banking issues, and negotiating with the lodging facilities to exclude dinner from the lodging fees. Debbie will be of great assistance in the planning for this meeting.

Based on the earlier review of the proposal by the committee members (by email) and on the discussions at this committee meeting, the ISICR Meetings Committee agreed provide the ISICR Board with therecommendation of Graham Foster's proposal for the 2007 ISICR Meeting to be held in Oxford, UK.

Proposals for beyond 2007
The committee discussed possible locations for future meetings. With the 2007 ISICR Meeting taking place in Oxford, UK, then we should try to identify a location in the United States for the 2008 meeting. In light of the decrease in the number of proposals that are being submitted to the ISICR Meetings Committee, the committee agreed to conduct discussions with Debbie Weinstein to consider possible solutions to future planning.

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

Respectfully submitted,
Christine Czarniecki

Minutes ISICR Membership Committee
Teleconference Meeting, on Nov 16, 2005
Attendees: Heinz-Kurt Hochkeppel (chair), Eleanor Fish, Laurence Pfeffer, Ana Gamero.

1. Current ISICR membership status as of Nov 2005

The present membership situation is modestly encouraging. There seems to be a slight trend towards increasing membership. However, the committee members still feel that further special efforts must be undertaken to secure and - if possible - expand ISICR membership over the next years.

Membership statistics:

	2004	2005
Regular Members	476	541
Students/Fellows	43	131
Student fee waived	0	73

This slight trend towards increasing membership may be partly due to the personal e-mails of Howard Young to members with elapsing membership in which he encourages them to renew their membership. The membership committee thanks Howard for for his great and efficient efforts.

Additional proposals in order to improve membership

a) to track all recent publications that have "IFN" as keyword on a monthly basis and to contact every three months the authors of the articles encouraging them to join the Society - if they are not yet members - and send them the most recent newsletter, as well as other available information on ISICR (action : A. Gamero).

b) to remind principle investigators that their students should join the Society; mention the possibility of travel awards for the annual meeting as incentive.

c) to promote the Society at other scientific meetings (flyers, newsletter etc). For this purpose all available information about the ISICR (e.g. flyer, newsletter, brochure, standard letter from the President of ISICR) should be available on the ISICR website as a pdf file so that every member attending other conferences or visiting institutions has the possibility to download the information.

d) FASEB, with the help of the executive director of ISICR, to communicate the pdf.file information (made available for downloading on the ISICR website) to clinicians in hospitals and to practicing physicians, either by directly contacting ASCO

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Society (US) in order to get a list of clinicians working with IFN or by getting information from Pub Med who is doing clinical trials with IFNs.

e) Executive Director to get access to the latest ICS membership directory - these are all scientists with interest in cytokines - and cross-check which ICS members are not yet ISICR members and send them the pdf information about the ISICR. The ISICR Awards committee is encouraged to select new members for travel awards to the annual meeting in order to highlight a major benefit of membership.

f) to mention on the ISICR website - in addition to the newsletter - the first life membership option and to re-emphasize this possibility for the > 55 years members of ISICR .

g) to update the ISICR brochure and have it available for downloading from the website as a pdf file.

e) to again contact PBL Biomedical Inc. and ask them to include the ISICR flyer with their product shipments as they have previously done. This has been very much appreciated by the ISICR.

Respectfully submitted,
Heinz-Kurt Hochkeppel

Minutes: ISICR Nomenclature Committee Meeting
Oct 22, 2005
Shanghai, China
Present: R. Pines, S. Kotenko, E. Lundgren, I. Marie. C. Krause was associated with the meeting.

The meeting was called to order at noon Friday, October 22, 2005 at annual meeting of International Society for Interferon and Cytokine Research, Shanghai, Chile. SK was chosen to write the minutes. The minutes were distributed to the other members for information and input.

1. The minutes from the previous meeting in Puerto Rico (Oct. 21, 2004) has been distributed and EL reported on contacts with IUPHAR (International Union of Pharmacology), which led to no further actions.

2. The letter from Ruth Lovering, PhD, a Gene Nomenclature Advisor at HGNC was distributed and discussed. In this letter Dr. Lovering informed Dr. Lundgren that HGNC recently received a request from Dr. Pestka to designate one of the human type I IFN genes as an IFNNP1 and the corresponding protein IFN-ν (pseudogene). C. Krause provided more information about the *IFNNP1* gene. He noted that this human gene has substantial homology to unique type I IFN genes in feline and canine genomes. The gene is a pseudogene in both human and canine genomes, whereas it appears to be a functional gene in the feline genome. Reference was made to a poster presented by Dr. Isotova describing activities of human IFN-ν in which a stop codon was substituted with the Gln codon. This reconstituted IFN-ν demonstrated strong antiproliferative effect and antiviral activity. As no published information is available on functional properties or expression of feline IFN-ν, no decision was made.

3. The use of Roman and Arabic number as well as Greek letters was discussed. While it was agreed before and confirmed again that to date there are three type of IFNs which are abbreviated by roman numbers type I, type II and type III, it was pointed that the use of numbering for describing different subtypes of type I IFNs in one organism (chicken or fish), like chicken IFN-3, could be confusing and misinterpreted as chicken type III IFNs. It was then discussed how Greek letters should be assigned to IFNs from different organisms. In the human genome there are seventeen functional type I IFN genes: 13 IFN-α, and one of each IFN-β , IFN-ω , IFN-κ and IFN-ε These type I IFNs demonstrate different degree of sequence homology and also may have distinct pattern of expression, biological activities, structures, posi tion in the genome, etc. There are also IFN-τ , IFN-δ and IFN-ζ in other species. The question rose how new type I IFNs from other species should be designated: i) based on the homology in primary structure (how homologous should they be to be designated with the same

(**Minutes** continued from page 32)

should they be to be designated with the same Greek letter?); ii) based on the pattern of expression (some IFNs demonstrate tissue restricted expression and, perhaps, developmental stage restricted expression); or iii) based on similarities in functional and biological activities? It was agreed that IFN nomenclature should be assigned only after demonstration of antiviral properties of the protein, while designation with Greek letters of IFN-like gene products with unique properties was a matter for further debate. Currently all designation decisions should be made on case to case basis. It was decided to form a working group for further discussions supplementing the ISICR nomenclature committee with Christopher Krause, Peter Steheli and Philip Marcus with the aim to develop a universal protocol.

Respectfully submitted,
Sergei Kotenko
Erik Lundgren

Minutes: ISICR Publications Committee Meeting
Thursday, October 20, 2005
Shanghai, China
Present: Xiaojing Ma; Bob Fleischmann; Jerry Tilles; Deborah Vestal; Tom Hamilton, *ex officio*; Ganes Sen, *ex officio*; and, Howard Young, President of the ISICR, guest.

Ganes Sen and Tom Hamilton, Editors-In-Chief of the Journal of Interferon and Cytokine Research (JICR) submitted a report on the State of the JICR. The report was presented by Ganes Sen. Four specific points were presented and discussed.

1. It was noted that the JICR was on the upswing after a bit of a downturn during the transition to the new Editors-In-Chief. Submissions and published manuscripts for January to October had rebounded to 141 and 69 as compared with 106 and 44 last year. Moreover, the Impact Factor continued its rising trend and rose to an all-time high of 2.59.
2. A Special Issue on Alternative Signaling Pathways (edited by Dr. Leonidas Platanias) is due in December. More Special Issues are planned.
3. Electronic review of submitted manuscripts has been initiated. This will allow the Editors and Section Editors to keep better track of progress of the manuscripts through the review process at any given time. It will also allow a data-base for reviewer expertise to be employed for more efficient assignment of reviews.
4. Mary Ann Liebert has made a very generous commitment to members of the Editorial Board that they will not have to pay page charges for manuscripts that they publish in the journal. This gives something back to the Editorial Board members who provide the bulk of the manuscript reviews. Further, it provides Editorial Board members with added incentive to publish in the journal. It should be noted that manuscripts of Editorial Board members will continue to have to pass through the same thorough review as manuscripts submitted by non-Editorial Board members.

There was discussion about the status of the current contract with Mary Ann Liebert. The contract has worked well and has automatically renewed. It has provided the basis for a stable relationship between Mary Ann Liebert, Inc. and the ISICR. As a possible addition to further cement this relationship, it was suggested that Mary Ann Liebert, Inc. should be approached about the possibility of providing sponsorship of one or two speakers at the ISICR Annual Meeting. This proposed sponsorship would be envisioned to underwrite the "Mary Ann Liebert Plenary Lectures". This proposed sponsorship would appear to offer substantial benefits to both Mary Ann Liebert, Inc. and the ISICR. It would more clearly underline the close link between Mary Ann Liebert, Inc. and the ISICR for attendees at the Annual Meeting of the ISICR. It would have the benefit of providing Mary Ann Liebert, Inc. with added publicity. It would have the benefit of providing the ISICR with the highly appreciated sponsorship of one or two plenary session speakers. [As chair of the Publications Committee, Bob Fleischmann has been charged with responsibility of approaching Mary Ann Liebert, Inc. about this proposed sponsorship.]

Respectfully submitted,
Robert Fleischman

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Minutes: ISICR Standards Committee Meeting
Thursday, 20 October 2005
Shanghai, China
Present: Norman Finter*, Masayoshi Kohase*, Sidney Grossberg (Chairman)* (*in attendance), and Guido Antonelli, Ronald Bordens, Vijay Jethwa, Tony Meager, Aida Prync, and Huub Schellekens

Dr. Grossberg opened the meeting at 15:15 hours, and reviewed the agenda and its attached documents with the Committee.

I. New Biological Standards and Reference Reagents

The Committee briefly reviewed the following information that Dr. Tony Meager of the National Institute of Biological Standards and Control (NIBSC) had kindly provided.

VEGF (vascular endothelial growth factor) and KGF (keratinocyte growth factor): The collaborative studies have been completed and summary reports are to be presented to the WHO Expert Committee on Biological Standardization (ECBS); both are likely to be considered only for establishment as International Reference Reagents, but not as International Standards, inasmuch as less than five participating laboratories were involved in the collaborative assay studies.

IL-18 and TRAIL (tumor necrosis factor-related, apoptosis-inducing ligand): Collaborative assay data are being accumulated on each preparation, for which summary reports should be ready to submit to the WHO ECBS in 2006, most likely for establishment as Reference Reagents.

Reference materials for IL-17, IL-23, IL-29, and BLyS (B-lymphocyte stimulator) are in various stages of preparation.

II. Interferon-β Manufacturers Collaborative Neutralizing Antibody Study

As discussed at a WHO Informal Consultation on cytokines in 2003, the three current manufacturers of human interferon-β (Biogen-Idec, Berlex (Schering AG), and Ares-Serono) undertook a collaborative study with the MxA interferon (IFN) bioassay (Pungor, et al., J.I.C.R. 18:1025-1030, 1998) in order to determine whether this method might provide a generally acceptable way of measuring IFN neutralizing antibodies. The Biotech Working Party/Committee on Healthcare and Medicinal Products of the European Medicine Evaluation Agency (EMEA) of the European Union (EU) commissioned the study, and serum samples provided by the three manufacturers were distributed among them in a blinded fashion by NIBSC. Information from Vijay Jethwa at Biogen-Idec and Tony Meager at NIBSC indicates that although the results of the study have not been completely analyzed, the results are in general highly concordant. Unfortunately, the three manufacturers have not agreed to release the results and seem unlikely to pursue this method of bioassay further. An additional problem is that in this bioassay the MxA protein induced by IFN treatment is measured by means of an anti-MxA antibody. Novartis has patented the production of anti-MxA monoclonal antibody, and is not willing to allow others to produce it. EU researchers now propose to evaluate other bioassays.

III. Proposals to Standardize the Design of Interferon Neutralizing Antibody Bioassays and the Reporting of their Results

The need to standardize the methods for performing IFN antibody neutralization tests and the reporting of neutralizing potency of antibodies to IFN (or other cytokines) has been repeatedly stressed in the literature. Patients treated with therapeutic proteins, even if of human origin including IFNs, insulin, erythropoietin, clotting factor VIII, and GM-CSF, often develop neutralizing antibodies that can inhibit therapeutic effects. The results of studies by Yoshimi Kawade and colleagues over the past two decades have led to a recommendation that neutralization potency be expressed as a titer defined as the reciprocal of the antibody dilution that reduces IFN potency from 10 Laboratory Units (LU)/ml to 1 LU/ml (note: **not** International Units (IU)). Although WHO accepted this general recommendation, these is still much confusion in the literature, with data appearing

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from neutralizing antibody assays obtained or reported in a dozen different ways, so that in general results from different studies cannot be compared. To try to rectify this chaotic situation, our Committee (see earlier minutes) previously endorsed unanimously a set of recommendations to WHO, based on considerable theoretical and experimental data, including some from international collaborative assay studies. These recommendations more precisely delineated the design and requirements for the way in which neutralization bioassays should be conducted in order that the amounts of antibody measured can be reported in Tenfold Reduction Units through the use of the formula described by Kawade and colleagues (Grossberg et al., J.I.C.R. 21:729-742 and 743-755, 2001). The Committee also recommended that, when appropriate, a laboratory should also calculate and report titers as it had previously so as to enable comparison with results it obtained earlier, e.g. with samples obtained during clinical trials.

The Director of Biologicals at WHO referred these recommendations to the Informal Consultation on Cytokine Standardization (held at NIBSC, October 2003), but they were rejected. Although the group recognized that the recommended approach was applicable to any type of bioassay, a criterion important to WHO, it called for more extensive comparisons of titers reported by different approaches and methods of calculation. Such data might have been obtained from the manufacturers' study on IFN-β then in progress, but as noted above in Section II, these study results will not be made public.

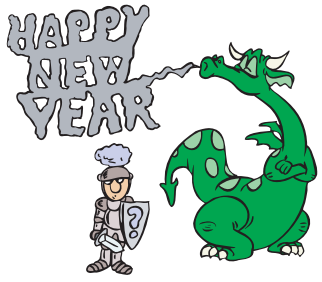
Rather than bring the matter to the attention of WHO again, it was suggested that the editors of appropriate journals should be made aware of the problem and urged to require that the authors of relevant studies should follow the recommendations of the ISICR Committee.

IV. Japanese Manufacturers Problems with the Assigned Potency Value of the 2nd WHO International Lymphoblastoid Interferon Standard Preparation

As summarized in previous minutes of this although these are not coordinate with 95/568. It is possible that this reflects the outcome of a meeting of the International Federation of Committee and in the report of the WHO Informal Consultation on Cytokine Standardization (2003) there is a discrepancy between the unitage used for the 2nd WHO international lymphoblastoid interferon (HLBI) standard (95/568) and for J-501, the Japanese national standard for HLBI. The latter was calibrated against the 1st WHO international lymphoblastoid IFN standard, Ga23-902-530, all originally produced by Glaxo Wellcome. There are currently only four manufacturers of HLBI, all located in Japan. They are required by Japanese law to calibrate their products in biological activity units in terms of J-501, although these are not coordinate with 95/568. It is possible that this reflects the outcome of a meeting of the International Federation of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) in London in 1999. At this meeting, the results of collaborative assays were reviewed, which included very extensive data from Glaxo Wellcome, then the world's largest provider of HLBI. These data may have influenced the value of the units finally assigned to 95/568. Soon thereafter, however, Glaxo Wellcome stopped production of 95/568, but by then WHO had accepted the potency for 95/568 recommended by the IFPMA group. As a result, the Japanese manufacturers face a dilemma. They wish to report their unitage in accepted International Units but must continue to relate to their national standard. To change the labeling indicating the potency of their product could have serious consequences when treating patients as well as cause much confusion among prescribing physicians. Although the ISICR Standards Committee has suggested a remedy for this problem, the matter remains currently unresolved.

There being no further business, the meeting was adjourned.

Respectfully submitted,
Sidney E. Grossberg



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