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*
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INTERNATIONAL SOCIETY FOR
INTERFERON AND CYTOKINE RESEARCH
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The Milstein Award

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

The 2004 Milstein Awardees are:

Ernest C. Borden, MD
Director, Taussig Cancer Center
Cleveland Clinic Foundation
Cleveland, OH USA
http://www.clevelandclinic.org/cancer/physician/docs.asp?StaffID=2933

&

Keiko Ozato, Ph.D.
National Institute of Child Health &
Human Development
National Institutes of Health
Bethesda, MD USA
http://dir2.nichd.nih.gov/labs/unit.php3?55

The Milstein Young Investigator Awards

Every year Young Investigator Awards are presented to ISICR members who have made notable contributions to either basic, translational 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 Foundation.

*(See **Milstein Awards**, page 2)*

*(**Milstein Awards**, cont. from page 1)*

The 2004 Milstein Young Investigator Awardees are:

Chen Dong, Ph.D.
Department of Immunology
MD Anderson Cancer Center
Houston, TX USA

Albert S Mellick, Ph.D.
Griffith University, Gold Coast Campus
School of Health Science
Queensland, Australia

Ehssan Sharif-Askari, Ph.D.
McGill University/Lady Davis Institute
Dept. of Microbiology & Immunology
Montreal, Canada

Tomohiko Tamura, MD, Ph.D.
National Institute of Child Health & Human Development
National Institutes of Health
Bethesda, MD USA

The Christina Fleischmann Memorial Award to Young Women Investigators

Every year the Christina Fleischmann Memorial Award is presented to a young 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.

The 2004 Christina Fleischmann Awardee is:

Brenda L. Fredericksen, Ph.D.
University of Texas Southwestern Medical Center
Department of Microbiology
Dallas, TX USA

New appointment for ISICR member Larry Pfeffer

The University of Tennessee Health Science Center (UTHSC) is pleased to announce that Mohammad Jahanzeb, MD, UT's Van Vleet Professor in Medical Oncology, has been named interim director of the UT Cancer Institute and Lawrence Pfeffer, PhD, Muirhead Chair of Excellence in Pathology, has been named interim deputy director.

Dean of the UT College of Medicine, Henry G. Herrod, MD, commented, "We are excited to have these two individuals officially named as part of the UT Cancer Institute's leadership team. As we begin building the basic science facility in December of this year and expanding research opportunities, their expertise and leadership will play a key role in moving the institute forward."

Dr. Pfeffer is vice chair and director of the graduate program in pathology, as well as director of basic research for the Cancer Institute. In his new position, he will be assuming a more direct role in organizing and directing the research initiatives within the Cancer Institute.

Dr. Pfeffer joined UT in 1991 after moving here from New York where he was a faculty member at the Rockefeller University for twelve years. He received a doctorate degree from Sloan-Kettering Division of the Cornell University Graduate School of Medical Sciences and was a postdoctoral research fellow at Rockefeller University.

Perspective: Cytokine Gene Polymorphisms in Human Diseases

Venky Ramakrishna PhD, Medarex, Inc., NJ

1. Introduction

Genes that regulate products involved in immunity are highly polymorphic and contribute to inter-individual differences that can influence the final outcome of antigen-specific and non-specific responses. These products broadly fall under two main categories of cytokines: pro-inflammatory or T-helper 1 (T_H1 - IL-2, IFNγ, IL-12, TNFα) and anti-inflammatory or T-helper 2 (T_H2 - IL-4, IL-5, IL-10), and are produced in response to specific and non-specific stimuli in cancer, infectious disease and autoimmune pathologies. While a T_H1 cytokine profile supports the development of a cytotoxic T lymphocyte (CTL) and a delayed-type hypersensitivity (DTH) response, a T_H2 profile will typically induce a humoral response (antibody production via B-cell activation) [1-2]. There are several different cytokines produced by other cells of the immune system (macrophages, monocytes, neutrophils, mast cells, keratinocytes, dendritic cells etc.) that can either synergize with or antagonize a T_H1 or T_H2 response. Monitoring the different types of cytokines produced and the analysis of cytokine receptor genes has, as a result, gained importance not only from the standpoint of understanding the etiology of the disease but also for potential better management of patients undergoing therapy.

However, the rationale for establishing the link between cytokine gene polymorphisms and susceptibility to human diseases stemmed from the genuine need to understand the causes and the etiological as well as pathological basis of the disease. These efforts have essentially contributed to the identification of biomarkers that underscore not only predisposition to development of the disease but also predict its severity and clinical outcome. In the process, potential targets for therapeutic intervention have been identified that form the basis of designing smart treatment strategies in the clinic. Of note, the stratification of information is helping researchers to identify responders and non-responders in clinical trials not only to streamline accrual of 'likely-to-benefit' patients but also to intervene in the event of an undesired clinical outcome in affected patients. This review will briefly discuss the overall impact that these studies are likely to have on establishing new guidelines and benchmarks needed to achieve effective clinical management of diseases.

2. Degree of cytokine gene polymorphism

The vast majority of polymorphisms seen among cytokines and cytokine receptors are thought to arise from the non-translated regions of the genes. While most cytokines have corresponding receptors, there are a few (TNFα, IL-1) that have multiple receptors. The increase in the number of novel cytokine polymorphisms that have been reported to date have been aided, in large part, by the availability of sophisticated technologies (TaqMan PCR, RFLP, SSCP, reverse SSOP, ARMS, dsDNA, RSCA, and oligonucleotide microarray) and sequence databases that permit analysis of larger gene segments controlling cytokine production. The high volume and high throughput features of these technologies now enables researchers to extend their window of analyses from 2 kb up to nearly 8 kb in their 5' promoter regions and also to discover single nucleotide polymorphisms (SNPs) in cytokines previously shown to be non-polymorphic (IL-2, IL-6, IL-6R, IL-8, IL-12 and IL-18; reviewed in Ref. 3). The extent of polymorphism known about a gene is, therefore only limited by the sophistication of the research tool used. The most comprehensive document on cytokine gene polymorphisms is available as online databases [www.pam.bris.ac.uk/services/GAI/cytokine4.htm and Ref. 3].

3. Influence of polymorphism on cytokine production

The induction and release of pro-inflammatory or anti-inflammatory cytokines is crucial to the maintenance of immune homeostasis i.e. regulating the balance between immune activation (Th1) versus immune suppression (Th2). This obviously raises the question of whether individuals with genetic polymorphisms for cytokine genes vary in their ability

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

to produce cytokines and whether there is a link with their susceptibility to disease. Polymorphisms found in the 5' or 3' regulatory sequences can alter binding sites of transcription factors and thereby decrease or shut down transcription or alter promoter activity. Other polymorphisms found in the intronic sequences can affect mRNA splicing or cause structural anomalies in enhancers and silencers. Conservative mutations generally have less influence on cytokine production levels compared to those that cause structural alterations in proteins.

The gene for the anti-inflammatory cytokine IL-10 has been extensively investigated. It is believed that IL-10 gene polymorphisms account for half of all inter-individual variability in IL-10 production levels. Several research groups have taken one of two approaches, haplotype analysis or SNP analysis. Earlier studies showed that the IL-10 1082G allele correlated with high IL-10 production. However, subsequent studies identified other genetic variants- -1082, -819 and -592 which combined to form the haplotypes- GCC, ACC and ATA; with GCC correlating with high IL-10 production. Interestingly, SNP analysis has identified three alleles 3575A, 2849A/G and 2763A that combine to form the low IL-10 producer haplotype (Table 1). Similarly in the case of the TNFα gene, some studies have reported high transcriptional activity of the 308A allele that correlates with high TNFα production level. In other studies on TNFα gene polymorphisms, a similar correlation was not observed suggesting that differences in experimental models or methods of induction of gene transcription may explain the observed discrepancies (Table 1).

4. Disease associations- role of ethnic factors

Evidence has accumulated in recent years showing cytokine polymorphisms in genetically diverse populations appear to have an ethnic basis. Comparing Caucasians to non-Caucasians (Asians) groups for IL-10 or TNFα gene polymorphisms shows a similar trend of discrepancy in the allele frequency with a ratio 8:1 or 4:1, respectively. Whilst a majority of studies have been conducted in Europe and North America, their impact on ethnic groups is either minimal or irrelevant [4-5]. As a result, the assessment of true impact of ethnicity on cytokine polymorphisms and disease susceptibility may be undermined by small differences in the estimates that can have a tighter association, primarily by mismatch rather than disease susceptibility. Therefore, new benchmarks are needed in designing high impact disease association studies, especially in the United States where large ethnic populations are localized in clusters.

5. Impact of cytokine gene polymorphisms on Immune monitoring studies

Cytokine monitoring is typically done on serum or plasma samples with conventional ELISA kits or using more sensitive assays with multiplex bead-based technologies available from commercial vendors (Luminex Lab Map™; Beadlyte Upstate Inc., VA; LINCO Research MO, BD-BioSciences CA, BIO-RAD, CA, R&D Systems, MN; Hypromatrix, MA; Cytokine Arrays from EMD-Novagen, WI and Schleicher & Schuell, NH, SearchLite, Pierce, IL). Several parameters that are critical to the success of cytokine monitoring include sample source, method of preparation, storage and age of samples which, in most cases, have a short shelf-life ranging from minutes to a day.

However, there are caveats and nuances that can further complicate the interpretation of endogenous cytokine levels (serum, plasma) in patients. As outlined below, cytokine perturbations in the serum can be related to a range of factors such as genetic polymorphisms, complex cytokine-cytokine network interactions or a purely pathological basis. For example, in a post-transplant setting, serum cytokine levels associated with acute allograft rejection include IL-1, IL-2, IL-2 receptor (IL-2R), IL-5, TNFα, and IFNγ for liver and IL-2, IL-2R, TNFα and IL-6 for kidney [6]. Some other studies also found elevated levels of IL-10 and TGFβ contributing to acute graft rejection (Table 2). It may be noteworthy to mention that opportunistic infections are common in patients with disease and are always a confounding problem in cytokine analysis. In addition, patients with a history of lupus or rheumatoid arthritis already have elevated levels of TNFα, IL-10 and IL-6.

Consideration of these variables is as important as

*(See **Ramakrishna**, page 5)*

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

having standards for monitoring. Assay standardization has therefore become the mainstay in cytokine immune monitoring in many clinical trials such as those run by a few accredited centers in the U.S (Laboratories of Dr. Theresa Whiteside at Univ. Pittsburgh, PA; Dr. Kim Lyerly at Duke Univ. Med. Ctr., NC and Dr. Jeffrey Weber at Univ. Southern Calif., CA).

The literature with regard to cytokines and cancer is relatively new, yet a number of studies have reported associations between TNFα and TNFα-LTα SNPs as a risk factor in the development of CLL, NHL and breast cancer although other studies have not been able to confirm this finding. In this regard, the polymorphisms in the IL-10 gene are intriguing since IL-10 has both anti-inflammatory and anti-angiogenic properties. Interestingly, genotypes associated with high IL-10 production level have a protective effect in melanoma [7] and prostate cancer [8] whereas low IL-10 expressing genotypes were determined to be a risk factor for disease susceptibility. These findings are consistent with the anti-angiogenic properties of IL-10. Furthermore the positive associations of IL-10 gene polymorphisms in 10 different cancers have been confirmed in 12/15 trials [Table 2].

6. Conclusions

While it is important to recognize that cytokine gene polymorphisms are strongly associated with disease-susceptibility for a subset of cytokines (IL-10, TNFα and IL-6R), ethnic factors, if unaccounted, can diminish the value of these predictive studies. It is not clear whether knowing about cytokine gene polymorphisms or their products is more vital to the design of therapies, especially, in the light of polymorphisms that have been extensively described for other immune response genes such as MHC alleles [9], KIRs [10], FcγR [11], and Toll-like receptors [12]. By the same token, the presence or absence of cytokines produced by immune cells does little to correct for pathogen-induced or tumor-induced immunomodulation.

For example, in cancer patients, the Th1/Th2 balance is often skewed towards a Th2 state. This is especially true in the areas of tumor-infiltrated mononuclear cells and antigen presenting macrophages/dendritic cells which become dysfunctional owing to a tumor-derived suppressive milieu?? (IL-10, TGFβ), thus contributing to tumor-escape variants (metastasis). Thus, whilst a positive detection of a cytokine in clinical immune monitoring can be a good thing, the absence of a cytokine can mean one of several possibilities for patients who may require an immunosuppressive or immunostimulatory regimen of treatment.

Identifying cytokine gene polymorphisms has progressed in recent years but is still beset with problems owing to a lack of standards between practicing laboratories and conflicts in the data have not been resolved. In the final analysis, it would seem imperative that both cytokine gene polymorphisms and cytokine product analysis need be carried out on a cluster of these cytokine genes and immune response genes to better define the haplotypes. This data will help us to understand whether the polymorphisms in question have any functional consequences, so that effective therapeutic interventions can be developed in the future.

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*(See **Ramakrishna**, page 6)*

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Table 1 **Summary of selected Cytokine Gene Polymorphisms linked to Disease Susceptibility**

Cytokine gene	Polymorphism of allele/ haplotype	Associations, disease susceptibility and clinical outcome
IL-10	-1082/GCC	Increased IL-10 level, Cutaneous melanoma protection, Non-invasive growth phase
	-1082/GG	Non-invasive growth phase of tumor
	-1082/AA	Susceptible to malignant melanoma, Stage III/IV, greater thickness of tumor
	-1082/AA	Low IL-10 level, Higher risk factor, greater tumor thickness
	-1082, -819, -592/ACC, ATA	Shorter survival in cutaneous malignant melanoma but not cervical cancer. Susceptibility to gastric carcinoma with possible association with EBV-negative cancer, myelo-dysplasia, acute myeloid leukemia, aggressive NHL.and acute lymphoblastic leukemia
	1082, -819, -592/ATA	SCC post renal transplant, confers susceptibility
	1082, -819, -592/GCC	SCC post renal transplant, confers protection
	IL-10G- 136/136	Multiple myeloma susceptible, rheumatoid arthritis
	IL-10R- 112/114	Multiple myeloma susceptible
	IL-10R- 114/116	Multiple myeloma protection
	-1082/AA	Susceptibility to prostate cancer, conflicting data for breast cancer
	-1082/AG	Susceptibility to cervical cancer
	SNP-3575A, -2849A, -2763A	Decreased IL-10 production from combined allele interaction
	SNP-2849G	Increased IL-10 production
TNF α	308A	Susceptibility to NHL, CLL and breast cancer
TNF α+LT α(TNF β)		Susceptibility to NHL, CLL and breast cancer
LT α(TNF β)		Lung cancer survival, myasthenia gravis, NIDDM, severe sepsis, CAD hyperinsulinemia
IFN γ	Intron 1	Grave's disease, IDDM, renal transplant rejection
IFN γR mutation	Val14Met	SLE
IL-1Ra	VNTR	IDDM, IBD, AML
IL-6	AT-rich minisatellite	SLE, juvenile RA, bone loss (mineral density)

Table 2 **Cytokine polymorphisms involved in allograft rejection**

Organ	Cytokines elevated in serum
Liver	IL-1, IL-2, IL-2R*, IL-5, TNFα and IFNγ
Kidney	IL-2, IL-2R, TNFα and IL-6
Heart	IL-1β, IL-2, IL-2R, IL-6, TNFα and IFNγ
Lung	IL-1β, IL-2, IL-2R, IL-6, TNFα, IFNγ and Neopterin
Pancreas	Neopterin
Islet cells	TNFα and IFNγ
Ileum	IL-2, IFNγ and IL-6

Note- * IL-2Rs are also elevated in opportunistic infections

Editors note: We welcome comments and feedback on this perspective.

Dr. Ramakrishna received his Ph.D. in Immunology from the Weizmann Inst. of Science, Rehovot, Israel in 1992 with post-doctoral work in G protein signaling (Mario Negri Inst., Italy) and ovarian cancer immumotherapy using bi-specific mAbs (Parmiani, NCI Milan). He joined Upstate Biotechnology Inc. in 1997 (formerly Argonex Inc., Charlottesville, Va) and collaborated with Victor Engelhard and Don Hunt to develop the ovarian cancer antigen discovery group. He moved on to Medarex in 2002 and is currently Director of Immunology at Celldex Therapeutics, a Medarex subsidiary, focused on dendritic cell-specific antibody-targeted vaccines for cancer, infectious disease, autoimmunity and bio-defense.

Congratulations to Jean Lindenmann on the occasion of his 80th birthday

Otto Haller

Jean Lindenmann, the discoverer of interferon together with the late Alick Isaacs and honorary member of our Society, celebrates his 80th birthday this year. He regularly visits his former Institute at the University of Zurich and is, as always, in good spirits, full of enthusiasm and curiosity. For those among us who are fortunate enough to have met or worked with him, his 80th birthday is an occasion of great joy. Jean made several seminal discoveries. Interferon was appreciated early on as an important substance. The ups and downs of interferon research are a legend. Today, the interest in interferon seems to be on the rise again. After interferon, Jean discovered the myxovirus resistance gene Mx in A2G mice. Unexpectedly, Mx turned out to be an interferon-regulated gene and is now widely recognized as an important antiviral pathway. While these discoveries had an immediate impact, another early observation by Jean Lindenmann went almost unnoticed until recently. He reported that infection of cells with a live virus inhibited the subsequent induction of interferon by an inactivated virus. He called this phenomenon "inverse interference". The paper appeared in 1960 in the Zeitschrift für Hygiene and was presumably the first description of a viral interferon-antagonistic function. Recently, much research is devoted to interferon antagonists which are now being recognized as viral pathogenicity factors. As is well known, Jean's interests went beyond interferons. He used viruses to lyse tumour cells in a process called "viral oncolysis", and attempted to induce antitumour immunity. Interestingly, the idea of generating viruses that are useful as oncolytic agents is fashionable again. Ironically, the new therapeutic concept has again to do with interferons, since mutations in tumour cells often cripple the interferon system, allowing better cell growth. The hope is to increase the tumour selectivity by using genetically engineered viruses that lack interferon antagonistic properties and are attenuated in normal but not tumour cells. Jean's scientific interests led to many more original contributions in virology and immunology. More recently Jean turned to historical matters and entered a hot debate with sociologists and philosophers of science who take the extreme view that scientific facts are mere social constructs. Jean´s response to such beliefs is simply delightful (Lindenmann J., Siegel, Schaudinn, Fleck and the Etiology of Syphilis. In: Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences, 32:435-455, 2001; Lindenmann J , Typhus vaccine developments from the First to the Second World War (on Paul Weindling's 'between bacteriology and virology...'). Hist Philos Life Sci. 24:467-85, 2002). His former students, collaborators and friends wish him all the best.

SICR Representation at WHO Conference on Cytokine Standardization

The Chair of the ISICR Standards Committee, Dr. Sidney Grossberg, Professor of Microbiology and Molecular Genetics, and Professor of Medicine, Medical College of Wisconsin, will attend the World Health Organization Committee meeting on cytokine standardization 30 September - 1 October in Geneva, Switzerland, as the representative of the ISICR. A very major part of the meeting is intended to review a rather large document covering updated guidelines for the preparation of International Biological Standards covering cytokines, growth factors, hormones, and antibodies to them as well as other factors.

ISICR Constitution changes

All proposed changes to the ISICR constitution received approximately 90% approval in the votes received. The ISICR constitution containing these changes is in the 2004 Member Directory. If you have not received the Member Directory, please contact the ISICR membership office.

Featured Clinical Trial

Type 1
Juvenile Diabetes
Newly Diagnosed
Diabetes Mellitus Study

Principal Investigator - Staley A. Brod M.D.
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Background Information:
THE UNIVERSITY OF TEXAS DIABETES RESEARCH GROUP NEWSLETTER presents new information on studies of oral (ingested) type I interferon. The Endocrinology Divisions in both Internal Medicine and Pediatrics are now recruiting newly diagnosed type 1 diabetes patients in a phase II randomized, double-blind, parallel-design clinical trial to determine whether ingested (oral) human recombinant IFN-a will preserve residual beta cell function. We have demonstrated that ingested IFN-a prevents type 1 diabetes in the NOD mouse. Ingested IFN-a also preserves residual beta cell function in newly diagnosed type 1 diabetics in a phase I open label clinical trial recently completed here at UT-Houston. The natural history of type 1 diabetes is unique for a phase frequently referred as the "honeymoon", a period in which the insulin need becomes minimal and glycemic control improves. The beta cell partially recovers. However, as with all honeymoons, they end and the patient becomes completely insulin-deficient. The general consensus of the international diabetes community is to test potential preventive therapies for type 1 diabetes in newly diagnosed patients. Preservation of residual beta cell function is considered a positive result. We have recruited ~100 patients so far.

Entry Criteria:
Entry criteria include male or female type 1 diabetes patients requiring insulin within six weeks of diagnosis between the ages of 3-25 without concurrent diseases. 120 eligible patients will be randomized into one of three treatment arms - the active treatment arm will ingest either 5,000 or 30,000 units IFN-a daily and the non-active treatment arm will ingest placebo (saline) for one year.

Prior to enrollment into the study (within 6 weeks of diagnosis), patients will be evaluated at the site (UT-Houston or Bethesda-NIH) with a complete medical exam and routine blood tests. Patients will be seen at 1, 2 and 3 months, and every three months thereafter. Primary outcome measures will be a 30% increase in C-peptide levels released after Boost stimulation at 3, 6, 9, and 12 months after entry. If successful, this will lead to a larger and longer phase III trial of preservation of residual beta cell function in type 1 diabetes patients.

Procedures:
All study visits will be in the University Clinical Research Center (UCRC) located in Hermann Hospital. We will take a brief general medical history from you, your blood pressure weight and temperature will be taken, you will undergo routine blood and urine tests, research tests to find good or bad effects, and a pregnancy test (if appropriate). After all tests are complete, you will receive your first treatment of salt water or interferon alpha at 5,000 or 30,000 units in one tablespoon of salt water. The medication will be given as a liquid that you will swallow with a glassful of water. We will also get blood samples before the first dose and at 1, 2, 3, 6, 9, and 12 months at the time of your visit to see any possible effect of the drug. You will continue taking either salt water or interferon alpha for up to twelve months.

Time Commitment:
If you qualify for the study, you will receive either salt water or salt water with interferon alpha at 5,000 or 30,000 units for up to 12 months every day. The total time in the study will be no more than 12 months. You will need to spend 3-4 hours at entry and at follow up visits at 3, 6, 9, and 12 months of the study to receive medication, blood sampling and exam. You will need to spend 15 minutes at follow up visits at 1, 2, 4, 5, 7, 8, 10, 11 months to receive medication.

Sponsored by The University of Texas Health Science Center - Houston, General Clinical Research Center (GCRC). Any questions about this study please contact Dr. Staley Brod (713) 500-7046 or Madelene Ottosen, R.N. M.S.N.. (713)704-4137.

Clinical Trials

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

Safety of and Immune Response to an HIV Vaccine (VRC-HIVDNA009-00-VP) Administered With **Interleukin-2/Immunoglobulin (IL-2/Ig)** DNA Adjuvant in Uninfected Adults. Contacts: Alexander Sliwinski, Tel.: 617-525-7327, E-mail: asliwinski1@partners.org, Harvard Medical School/Brigham and Womens' Hospital, Boston, Massachusetts, 02115; Kent Curtis, Tel.: 212-388-0008; E-mail: kcurtis@nybc.org, New York Blood Center - Union Square, New York, New York, 10003; Pamela Brown-Peterside, Tel.: 718-588-8900, E-mail: pbrownpeterside@nybc.org, New York Blood Center - Bronx, Bronx, New York, 10456; Raphael Dolin, MD, Study Chair, Harvard Medical School. Study ID Numbers HVTN 044

Use of **Immune** Cell Markers, **Cytokines**, and Transcription Factors (including **SOCS1, 3 & 5**) as Markers of Intraocular Inflammatory Activity. Contact: National Eye Institute (NEI), 9000 Rockville Pike, Bethesda, Maryland, 20892; Patient Recruitment and Public Liaison Office Tel.: 1-800-411-1222; E-mail: prpl@mail.cc.nih.gov; TTY: 1-866-411-1010. Study ID Numbers 040260; 04-EI-0260

Intravenous **Mepolizumab (mAb to hIL-5)** In Subjects With Hypereosinophilic Syndromes (HES). Contacts in California, Colorado, Maryland, Massachussetts, Minnesota, Ohio, Tennessee, Texas, Utah, Virginia and Wisconsin. California contact: San Diego, California, 92103, Study Coordinator Tel.: 619-294-6241. Study ID Numbers 100185

A Study to Evaluate the Use of a Protease Inhibitor and of **Interleukin-2** in the Treatment of Early HIV Infection. Contacts: Dr Brian Conway, Tel.: 604 689 9404, E-mail: brian_conway@viridae.com, Viridae Clinical Sciences / University of British Columbia, Vancouver, British Columbia, Canada; Danielle Rouleau, Tel.: 514-281-6000 Ext. 6265, E-mail: danielle.rouleau@ssss.gouv.qc.ca, Centre Hospitalier de la Universite de Montreal (CHUM), Montreal, Quebec, Canada; Dr Jean-Pierre Routy, Tel.: 514 843 2090, E-mail: routyjp@muhchem.mcgill.ca, Institut Thoracique de Montreal, Montreal, Quebec; Dr Christos Tsoukas, Tel.: 514 934 8035, E-mail: tsoukas@is.much.mcgill.ca, Centre de traitement d'immunodeficience, Montreal, Quebec; Rafick-Pierre Sekaly, Principal Investigator; Brian Conway, Principal Investigator. Study ID Numbers AIEDRP AI-07-001; CTN #124

A Single Arm, Phase II Study of **TNFerade™** gene therapy + Radiation + 5-FU and Cisplatin in Locally Advanced, Resectable, Esophageal Cancer. Contacts in California, Illinois, Kentucky, Maryland, Ohio, Texas, and Virginia. California contacts: Jackie Canavan-Bol, Tel.: 650-493-5000 Ext. 62044, E-mail: jackiebo@hotmail.com, Palo Alto VA Health Care Systems, Palo Alto, California, 94304; and Elyse Roth, Tel.: 714-456-3860, E-mail: eroth@uci.edu, University of California, Irvine, Orange, California, 92868. Study ID Numbers GV-001.005

Cytokine Gene Polymorphisms in Bone Marrow Failure. Contact: National Heart, Lung and Blood Institute (NHLBI), 9000 Rockville Pike, Bethesda, Maryland, 20892; Patient Recruitment and Public Liaison Office; Tel.: 1-800-411-1222; E-mail: prpl@mail.cc.nih.gov; TTY: 1-866-411-1010 Study ID Numbers 040213; 04-H-0213

Clinical Trials, continued

Efficacy and Safety Study of Oral **SCIO-469** in Relapsed, Refractory Patients with Multiple Myeloma. (Scio-469 inhibits **p38 MAP kinase**, whose activation controls the production of a number of factors that play a pathogenic role in the development of multiple myeloma (MM), most prominently **interleukin-6**, as well as **interleukin-1, tumor necrosis factor**, PGE2, interleukin-11, VEGF, **macrophage inflammatory protein-1 (MIP-1)**, and **RANKL**). Contacts in California, Florida, Georgia, Massachussetts, Minnesota, New Jersey, New York, Pennsylvania and Washington; Stephanie D Hanson, Tel.: (510) 248-2652, E-mail: hanson@scios-inc.com. Study ID Numbers B003

Interferon beta in Treating Patients With Metastatic Cutaneous Melanoma or Ocular Melanoma. Contact: Ernest C. Borden, MD, Study Chair, Cleveland Clinic Taussig Cancer Center, Cleveland, Ohio, 44195, MD, Tel.: 216-444-8183; Joanna M. Brell, MD, Tel.: 216-844-5413; Ireland Cancer Center, Cleveland, Ohio, 44106-1714. Study ID Numbers CDR0000368630; CCF-4049; CWRU-CASE-1604

Safety and Exploratory Pharmacogenomic Study of Orally Administered Recombinant Human **Interleukin-11 (rhIL-11)** in Patients With Mild to Moderate Left-Sided Ulcerative Colitis. Contact: Lawrence Wruble, MD, Summit Research Solutions, PPLC, 80 Humphries Center, Suite 220, Memphis, TN 38120, Tel.: 901-747-4100. Centerwatch Study Posting 2233.

Cisplatin, Metronomic Low-Dose **Interferon alfa**, Gemcitabine, and Fever-Range Whole-Body Hyperthermia in Treating Patients With Inoperable or Metastatic Pancreatic Cancer. Contact: Joan M.C. Bull, MD, Principal Investigator, University of Texas Health Science Center-Houston, Houston, Texas, 77225, Tel.: 713-500-6820, E-mail: joan.m.bull@uth.tmc.edu. Study ID Numbers CDR0000360863; UTHSC-MS-02117

Phase I Trial of Adenovirus- Mediated **Interleukin-12** Gene Transduction in Patients with Radiorecurrent Prostate Cancer. Contact: Cynthia Knauer, Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029. Tel.: (212)241-8121, Fax: (212)876-3246, Email: cynthia.knauer@mountsinai.org. Centerwatch Study Posting 2348.

A Phase II Study of TroVax Vaccine Given in Conjunction With **Interleukin-2** for Treatment of Stage IV Renal Cell Cancer. Contact: Gail DeRaffele, RN, Tel.: 212-342-0232, E-mail: gd2023@columbia.edu; Josie Mitcham, Tel.: 212-342-0233, E-mail: jm2124@columbia.edu; Columbia Presbyterian Medical Center, New York, New York, 10032; Howard L Kaufman, MD, Principal Investigator. Study ID Numbers TV2 Renal

WWW

Send us websites that help your research so ISICR members can benefit from your experience.

BBID-Biological Biochemical Image Database
http://bbid.grc.nia.nih.gov/

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

Bioprotocols
http://www.bioprotocol.com/protocolstools/index.jhtm

About Protocols
Protocols contributed by scientists from over 125 academic laboratories
World renowned Editorial Board
Wide variety of life science disciplines covered
Searchable protocol database
Printable versions available for all protocols
Store protocols of particular interest to you and send protocols to your colleagues using the My Protocols feature

The Cytokine Family Database (dbCFC) Home Page
http://cytokine.medic.kumamoto-u.ac.jp/

The Cytokine Family Database (dbCFC) is a collection of EST (Expressed Sequence Tag) records of cytokines deposited in the **NCBI GenBank**. It provides information about the identification of EST records to cytokine members and related data contained in other databases including GenBank, **dbEST, GDB**, Online Mendelian Inheritance in Man (**OMIM**), The Transgenic/Targeted Mutation Database (**TBASE**), Unique Human Gene Sequence Collection (**UniGene**), Anatomical Expression Database of Human Genes (**BodyMap**), Mouse Genome Database (**MGD**) and **Human/Mouse Homology Relationships**.

EST sequences in the dbCFC were periodically BLAST-searched by us, and the identification of each EST record in the dbCFC is not necessarily identical to the identifier that is found, for example, in the DEFINITION line of the GenBank record.

Details of cDNA libraries (tissue types, etc.) are available for the EST records deposited by **Washington U-Merck EST Project**, and **The I.M.A.G.E. Consortium**.

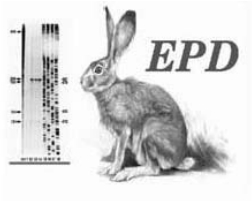
If you have any comments and suggestions, send email to **dbCFC-admin** (csp@kaiju.medic.kumamoto-u.ac.jp)

Cytokine Family Database (dbCFC) was started November 22,1995 by **S. Tanase** and **H. Nomiyama**.
Department of Biochemistry, Kumamoto University School of Medicine 2-2-1 Honjo, Kumamoto 860-0811, Japan

WWW (continued)

This database is supported in part by a Grant-in-Aid for Publication of Scientific Research Result, from the Japan Society for the Promotion of Science. The EST database research group consists of the following investigators:
H. Nomiyama (Kumamoto University, School of Medicine)
S. Tanase (Kumamoto University, School of Medicine)
S. Kuhara (Kyushu University, Graduate School of Infomation Science and Electrical Engineering)
Y. Sakaki (University of Tokyo, Institute of Medical Science, Human Genome Center)

EPD
The Eukaryotic Promoter Database
Current Release 79
http://www.epd.isb-sib.ch/



The Eukaryotic Promoter Database is an annotated non-redundant collection of eukaryotic POL II promoters, for which the transcription start site has been determined experimentally. Access to promoter sequences is provided by pointers to positions in nucleotide sequence entries. The annotation part of an entry includes description of the initiation site mapping data, cross-references to other databases, and bibliographic references. EPD is structured in a way that facilitates dynamic extraction of biologically meaningful promoter subsets for comparative sequence analysis.

Gene Ontology Consortium
http://www.geneontology.org/

The goal of the Gene OntologyTM (GO) Consortium is to produce a controlled vocabulary that can be applied to all organisms even as knowledge of gene and protein roles in cells is accumulating and changing. GO provides three structured networks of defined terms to describe gene product attributes. GO is one of the controlled vocabularies of the Open Biological Ontologies.

What does the Gene Ontology Consortium do?

Biologists currently waste a lot of time and effort in searching for all of the available information about each small area of research. This is hampered further by the wide variations in terminology that may be common usage at any given time, and that inhibit effective searching by computers as well as people. For example, if you were searching for new targets for antibiotics, you might want to find all the gene products that are involved in bacterial protein synthesis, and that have significantly different sequences or structures from those in humans. But if one database describes these molecules as being involved in 'translation', whereas another uses the phrase 'protein synthesis', it will be difficult for you - and even harder for a computer - to find functionally equivalent terms.

The Gene Ontology (GO) project is a collaborative effort to address the need for consistent descriptions of gene products in different databases. The project began as a collaboration between three model organism databases: FlyBase (Drosophila),the Saccharomyces Genome Database (SGD) and the Mouse Genome Database (MGD) in 1998. Since then, the GO Consortium has grown to include many databases, including

several of the world's major repositories for plant, animal and microbial genomes. See the GO web page for a full list of member organizations.

The GO collaborators are developing three structured, controlled vocabularies (ontologies) that describe gene products in terms of their associated biological processes, cellular components and molecular functions in a species-independent manner. There are three separate aspects to this effort: first, we write and maintain the ontologies themselves; second, we make associations between the ontologies and the genes and gene products in the collaborating databases, and third, we develop tools that facilitate the creation, maintainence and use of ontologies.

The use of GO terms by several collaborating databases facilitates uniform queries across them. The controlled vocabularies are structured so that you can query them at different levels: for example, you can use GO to find all the gene products in the mouse genome that are involved in signal transduction, or you can zoom in on all the receptor tyrosine kinases. This structure also allows annotators to assign properties to gene products at different levels, depending on how much is known about a gene product.

Geneid
http://genome.imim.es/software/geneid/

Geneid is a program to predict genes in anonymous genomic sequences designed with a hierarchical structure. In the first step, splice sites, start and stop codons are predicted and scored along the sequence using Position Weight Arrays (PWAs). In the second step, exons are built from the sites. Exons are scored as the sum of the scores of the defining sites, plus the the log-likelihood ratio of a Markov Model for coding DNA. Finally, from the set of predicted exons, the gene structure is assembled, maximizing the sum of the scores of the assembled exons. Geneid offers some type of support to integrate predictions from multiple source via external gff files and the redefinition of the general gene structure or model is also feasible. The accuracy of Geneid compares favorably to that of other existing tools, but Geneid is likely more efficient in terms of speed and memory usage. Currently, Geneid v1.2 analyzes the whole human genome in 3 hours (approx. 1 Gbp / hour) on a processor Intel(R) Xeon CPU 2.80 Ghz.

Genomes Online Database
http://www.genomesonline.org/

GOLD: Genomes Online Database, is a World Wide Web resource for comprehensive access to information regarding complete and ongoing genome projects around the world.
GOLD provides the largest available and most detailed monitoring of genome sequencing projects.
Ref: Bernal, A., Ear, U., Kyrpides, N. (2001) Genomes OnLine Database (GOLD): a monitor of genome projects world-wide. NAR 29, 126-127
Kyrpides, N. (1999) Genomes OnLine Database (GOLD): a monitor of complete and ongoing genome projects world wide. Bioinformatics 15,773-774

WWW (continued)

International Mouse Strain Resource (IMSR) database
http://www.informatics.jax.org/imsr/index.jsp

The IMSR is a catalog of mouse strain availability at facilities around the world. Currently, IMSR contains strain data from JAX Mice® (JAX), the Mutant Mouse Regional Resource Centers (MMRRC), the Center for Animal Resources and Development (CARD) in Japan, and the Oak Ridge National Laboratory (ORNL) Mutant Mouse Database. Other sites will be added soon. Users can search for available strains by strain designation, strain status (e.g., live mice, cryopreserved embryos, sperm, etc.), mutations carried by a strain, and chromosome. The database provides strain holder information, links to information on specific strains and alleles, and links to the holder site for inquiries and order placement. We encourage participation of additional institutions and individuals who hold mice or cryopreserved embryos/gametes for distribution to participate by listing their holding in the IMSR.

NetPhos 2.0 Server
http://www.cbs.dtu.dk/services/NetPhos/

The NetPhos 2.0 server produces neural network predictions for serine, threonine and tyrosine phosphorylation sites in eukaryotic proteins.

Reactome - a knowledgebase of biological processes
http://www.reactome.org/

The **Reactome** project is a collaboration among Cold Spring Harbor Laboratory, The European Bioinformatics Institute, and The Gene Ontology Consortium to develop a curated resource of core pathways and reactions in human biology. The information in this database is authored by biological researchers with expertise in their field, maintained by the Reactome editorial staff, and cross-referenced with with PubMed, GO, and the sequence databases LocusLink, Ensembl and SwissProt.

Reactome is a free on-line resource, and Reactome software is open-source.

YinOYang 1.2
Prediction Server
http://www.cbs.dtu.dk/services/YinOYang/

The YinOYang WWW server produces neural network predictions for O-ß-GlcNAc attachment sites in eukaryotic protein sequences. This server can also use NetPhos, to mark possible phosphorylated sites and hence identify "Yin-Yang" sites.

NEW ISICR MEMBERS

The ISICR welcomes these new members and encourages their participation in the annual meeting and in ISICR committees. Please contact the membership office for contact details.

Frank A. Attard
Bethesda, MD

Ehtesham Baig
Ontario, Canada

Sujata Balasubramanian
Toledo, OH

Robert A. Bogosian
Portland, ME

Arindam Chakrabarti
Cleveland, OH

Geeta Chaudhri
Canberra, Australia

Jiabing Chen
Ontario, Canada

Nikhat Contractor
Bethesda, MD

Jessica H. Cotto
Vienna, VA

Pieter W. Faber
Cleveland, OH

Brenda L. Fredericksen
Dallas, TX

Noriyuki Fujikado
Tokyo, Japan

Ibtisam Ghazawi
Queensland, Australia

Jaya Goyal
Cambridge, MA

Janette M. Harro
Baltimore, MD

Hua Huang
Maywood, IL

Mahmoud Mohamed Huleihel
Beer-Sheva, Israel

Yuko Ishida
Ishikawa, Japan

Vijay Jethwa
Research Triangle, NC

Nancy Jewell
Columbus, OH

Meleri Jones
London, UK

Gunasegaran Karupiah
Canberra, Australia

John C . Kash
Seattle, WA

Antonio R. Khouri
Bahia, Brazil

Sunhwa Kim
Boston, MA

Youngsun Kim
Piscataway, NJ

M. Gabriela Kramer
Navarra, Spain

John A. Lewis
Brooklyn, NY

Kui Li
Galveston, TX

Yueh-Ming Loo
Dallas, TX

Gengshi Lu
Baltimore, MD

Tao Lu
Cleveland, OH

Geraldine Maloney
Dublin, Ireland

Melinda S. Merchant
Bethesda, MD

Thibault Mesplede
Cedex, France

Ross J. Molinaro
Cleveland, OH

Michele Mondini
Turin, Italy

Thomas T. Murooka
Ontario, Canada

Kenneth S. Nally
Cork, Ireland

Andrea Paun
Perth, Australia

Miki Pawlowski
Research Triangle Park, NC

Yulan Qing
Cleveland, OH

Ramtin Rahbar
Ontario, Canada

Ali A. K. Rahimi
Ontario, Canada

Ana L. Romero
Frederick, MD

Shaun P. Rosebeck
Toledo, OH

Andres M. Salazar
Washington, DC

Noriko Sato
Bethesda, MD

Annett Schoenemeyer
Worcester, MA

Ehssan Sharif-Askari
Quebec, Canada

Protul A. Shrikant
Buffalo, NY

David B. Shultz
Cleveland, OH

Patricia T. Smith
Merseyside, UK

Julianne Stack
Dublin, Ireland

Meena Subramanyam
Cambridge, MA

Yaping Sun
Toledo, OH

Tatiana Tareeva
Moscow, Russia

Chandar S. Thakur
Cleveland, OH

Elena M. Toniato
Ontario, Canada

Irina A. Udalova
London, UK

Sarah E. Ward
Ontario, Canada

Joanna R. Zorzitto
Ontario, Canada

The 2005 Annual Meeting of International Society for Interferon and Cytokine Research (ISICR)

20-24 October, Shanghai, China

1. Shanghai is a very beautiful and famous city.
   - ▲ Shanghai, literally means "a port on the sea". It is known as the "Oriental Pearl".
   - ▲ Shanghai is one of the largest cities in the world with a population of 17 million people.
   - ▲ In the past 10 years, Shanghai's GDP grew over 10% each year.
   - ▲ Shanghai aims to be the:
     International Economic Center
     International Financial Center
     International Trade Center
     International Shipping Center
   - ▲ Shanghai offers visitors:
     - A unique international architectural style.
     - A wide range of delicious cuisines from Shanghainese and Cantonese to French, Italian, Russian and Japanese.
     - A rich history and culture with more than 70 popular historic and cultural sites.
     - A rapidly growing new Pudong district, China's largest Economic Zone. It is characterized by its famous landmark, the Oriental Pearl TV Tower, and a cluster of newly built skyscrapers.
   - ▲ Shanghai has successfully held many significant international forums, such as the Conference of the Asia Pacific Economic Committee (APEC). The World Engineers Meeting will be held in Shanghai in 2004 and Shanghai has won the bid to host the 2010 World Exposition.
   - ▲ Shanghai is within 1-2 hr driving distance of the famous "garden cities" Suzhou and HangZhou. These cities are affectionate known by the Chinese people as "heaven and paradise".
2. The meeting venue will be the Shanghai International Everbright Convention Center (IECC). Its construction, comprised of two identical thirty-story buildings with two levels underground, is in the shape of the Triumphal Arch. The main conference auditorium of IECC can accommodate about 1000 people with more than 10 satellite meeting rooms of different sizes. The hotel has a total of 790 well-furnished guestrooms and offers convenient transportation (i.e. subway, bus and taxi), to the commercial shopping district located in the southwest part of Shanghai.
3. The International & National Advisory committees include Nobel Prize Laureate Ferid Murad and the President of the Chinese Academy of Sciences, Yong-xiang Lu. Committee membership is as follow

Member of International Advisory Committee:

Murad, Ferid (USA)
(Nobel prize winner)
Baron, Samuel (USA)
Cao, Xue-tao (China)
Cidlowski, John (USA)
Dianzani, Ferdinando (Italy)
Fitzgerald-Bocarsly, Patricia (USA)
Fish, Eleanor N (Canada)
Fisher, Paul B. (USA)
Fu, Xinyuan (USA)
Garotta, Gianni (Switzerland)
Haller, Otto (Germany)

The National Advisory Committee:

Lu, Yongxiang, President of Chinese Academy of Sciences (CAS)
Tan, Jiazhen,Chinese Pioneer Biologist
Liu, Xinyuan, Chairman of the 2005 Annual Meeting of ISICR
Chen, Jinpei, Vice Minister of the Ministry of Science and Technology
Xu, Zhihong, Principal of Beijing University
Chen, Zhu, Vice President of CAS
Zhu, Zuoyan, Vice Chairman of National Science Foundation of China
Sang, Guowei, Vice Chairman of SFDA

***(Committee membership** continued)*

Member of International Advisory Committee:

Herberman, Ronald B (USA)
Hou, Yun-de (China)
Hovaniessian, Ara G (France)
Kaempfer, Raymond (Israel)
Kirkwood, John M (USA)
Kishimoto, Tadamitsu (Japan)
Lau, Allan (Hong Kong)
Landolfo, Santo (Italy)
Lengyel, Peter (USA)
Levy, David E (USA)
Liu, Xin-yuan (China)
Matsushima, Kouji (Japan)
Ozato, Keiko (USA)
Pestka, Sidney (USA)
Pine, Richard (USA)
Platanias, Leonidas C (USA)
Revel, Michel (Israel)
Roberts, R. Michael (USA)
Samuel, Charles (USA)
Shi, Yufang (USA)
Silverman, Robert H (USA)
Smith, Kendall A (USA)
Sonnenfeld, Gerald (USA)
Stark, George R (USA)
Schellekens, Huub (The Netherlands)
Taniguchi, Tadatsugu (Japan)
Tovey, Michael (France)
Vilcek, Jan (USA)
Walter, Mark R (USA)
Wallach, David (Israel)
William, Bryan (USA)
Young, Howard A (USA)
Zoon, Kathryn (USA)

The National Advisory Committee:

Shen, Shanjiong, Academician of CAS
Yao, Zhen, Academician of CAS
Shi, Luji, Academician of CAS
Hou,Yunde, The 1st 863 chief scientist of China(CAE)
Qiang, Boqin, The 2nd 863 chief scientist of China (CAS)
Liu, Depei, President of Chinese Academy of, Medicine Science (CAE)
Li, Yiping, Director of Shanghai Science and Technology Committee
Pei, Gang, President of Shanghai Institutes for Biological Sciences, CAS
Xu, Gengjun, Academician of CAS
Gong, Yueting, Academician of CAS
Gu, Jianren, Academician of Chinese Academy of Engineering (CAE)
Li, Zaiping, Academician of CAE
Hong, Guofan, Academician of CAS
Chen, Weifeng, Academician of CAS
Yang, Shenli, Academician of CAE
Qi, Zhengwu, Academician of CAS
Chen, Kaixian, Academician of CAS
Kong, Xiangfu, Academician of CAS
Zhang, Yonglian, Academician of CAS
Zhang, Youshang, Academician of CAS
Liu, Yongjun, USA
Chen, Lieping, USA
Yuan, Junying, USA
Wang, Xiaodong, USA
Ni, Jian, USA
Zhang, Lixin, USA
Zhao Yun, Principal of Zhejiang University of Science and Technology

4. There are twelve scientific program sections

1. Interferon/Cytokine/Chemokine Signal Transduction Pathways & their Regulation
2. Interferons/Cytokines/Chemokines and receptors
3. Regulation of Interferon/Cytokine/Chemokine Expression
4. Interferon/Cytokine/Chemokine induced genes and their functions
5. New Interferons/Cytokines/Chemokines
6. Interferons/Cytokines/Chemokines and Immunology (including T cell/B cell/NK cell/Dendritic cell biology)
7. Interferons/Cytokines/Chemokines and Cancer
8. Interferons/Cytokines/Chemokines and Apoptosis, Anti-angiogenesis, Gene Therapy

Therapy

9. Interferons/Cytokines/Chemokines and infection/inflammation/related disorders
10. Interferons/Cytokines/Chemokines and Autoimmune/Neurological Diseases
11. Clinical use of Interferons/Cytokines/Chemokines
12. Interferons/Cytokines/Chemokines and the Biotech Industry

Note: The TNF superfamily and its receptors are a rapid growing field in cytokine research. We welcome submission of abstracts in this area to all related sections.

100 invited speakers have committed to attend the 2005 ISICR Meeting and present their latest research. They include Nobel Prize laureate Ferid Murad and many prominent members of the ISICR.

5. Organization:

The Chairperson of 2005 ISICR Annual Meeting is Professor Xin-yuan Liu. Professor Liu is a prominent member of The Chinese Academy of Sciences, The National Academy of Science of the Ukraine, and The Third World Academy of Sciences. He has received more than 30 different Awards in his distinguished career.

The Secretary General of the 2005 Shanghai ISICR Annual Meeting is Prof. Zu Xun Gong. The Head of secretary office is Ms. Hua Xu. All communications to the secretariat should be sent directly to her.

Tel & Fax: 0086-21-54921016
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Address: Institute of Biochemistry and Cell Biology, SIBS, CAS
320 Yue Yang Road, Shanghai, P.R.China
Postcode: 200031
Website: www.ISICR2005.org

Words of Wisdom

If you're not familiar with the work of Steven Wright, he's the famous erudite scientist who once said: "I woke up one morning and all of my stuff had been stolen...and replaced by exact duplicates."

Here are some more of his gems:

1- I'd kill for a Nobel Peace Prize.
2- Borrow money from pessimists -- they don't expect it back.
3- Half the people you know are below average.
4- 99% of lawyers give the rest a bad name.
5- 42.7% of all statistics are made up on the spot.
6- A conscience is what hurts when all your other parts feel so good.
7- A clear conscience is usually the sign of a bad memory.
8- If you want the rainbow, you gotta put up with the rain.
9- All those who believe in psycho-kinesis, raise my hand.
10- The early bird may get the worm, but the second mouse gets the cheese.
11- I almost had a psychic girlfriend but she left me before we met.
12- OK, so what's the speed of dark?
13- How do you tell when you're out of invisible ink?
14- If everything seems to be going well, you have obviously overlooked something.
15- Depression is merely anger without enthusiasm.
16- When everything is coming your way, you're in the wrong lane.
17- Ambition is a poor excuse for not having enough sense to be lazy.
18- Hard work pays off in the future, laziness pays off now.
19- I intend to live forever -- so far, so good.
20- If Barbie is so popular, why do you have to buy her friends?
21- Eagles may soar, but weasels don't get sucked into jet engines.
22- What happens if you get scared half to death twice?
23- My mechanic told me, "I couldn't repair your brakes, so I made your horn louder."
24- Why do psychics have to ask you for your name?
25- If at first you don't succeed, destroy all evidence that you tried.
26- A conclusion is the place where you got tired of thinking.
27- Experience is something you don't get until just after you need it.
28- The hardness of the butter is proportional to the softness of the bread.
31- The sooner you fall behind, the more time you'll have to catch up.
32- The colder the x-ray table, the more of your body is required to be on it.
33- Everyone has a photographic memory, some just don't have film.

Cytokines 2004 Meeting Program (as of 8/24/04)					
October 21	**Day 1**				
12:00 pm	Registration opens				
2-5 pm	ISICR Committee meetings				
	Evening Session				
6:00 pm	Opening remarks				
6:15 pm	Tak Mak (Keynote 1)				
7:00 pm	Keiko Ozato (Milstein)				
7:30 pm	E. Borden (Milstein)				
8:00 - 9:30pm	Welcome reception				
October 22	**Day 2**				
	Plenary - Cytokines & Cancer				
9:00 am	Kari Alitalo				
	Frances Balkwill				
	Yosef Yardin				
	Coffee break				
	Cristophe Caux				
	Richard Jove				
12:00 pm					
	JICR Editorial Board Meeting	ICS General Business Meeting	Lunch break		
	Workshops				
2:00 pm		**Signal Transduction**	**Interferons**	**Therapeutics**	**Innate Immunity 1**
		7 talks/session			
4:00 pm					
	Poster Session 1				
4- 6 pm	**Interferons**	**Signaling**	**Therapeutics**	**Innate Immunity 1**	**Innate Immunity 2**
	Evening Session				
6:00 pm	M. Karin (Keynote 2)				
6:45 pm – 7:15 pm	ICS Lifetime Award – Joost Oppenheim				
8:00 pm			Dinner break		
October 23	**Day 3**				
7:45 am	ISICR International Council breakfast meeting: Park Plaza Normandie Hotel				
	Plenary - Signal Transduction				
9:00 am	Tom Maniatis				
	Leon Platanias				
	Takashi Fugita				
	Coffee break				
	John O'Shea				
	Nahum Sonenberg				
12:30 pm					
	Womens' Forum		Lunch Break		
	Workshops				
2:00 pm		**Gene Regulation**	**Receptor Mechanisms**	**Infectious Disease**	**Adaptive Immunity**
		7 talks/session			
4:00 pm					
	Poster Session 2				
4 – 6 pm	**Receptor Mechanisms**	**Gene Regulation**	**Adaptive Immunity**	**Inflammation**	**Infectious Diseases**

	Evening Session – Symposia				
6:00 pm		**Gene Regulation**	**Chemokines**	**Inflammation**	
		Dimitrios Thanos	Barrett Rollins	Jurg Tschopp	
		Kai Lin	Steve Kunkel	Marco Colonna	
		Anjana Rao	Sergio Lira	A. Mantovani	
		Xiomen Chen	Tracey Handel	Kevin Tracey	
8:00 pm			Dinner break		
October 24	**Day 4**				
8:15-9:00 AM	***ISICR Membership Meeting (same room as Plenary Session)***				
	Plenary - Negative Regulation				
9:00 am	Robyn Starr				
	Tadamitsu Kishimoto				
	Akihito Yoshimura				
	Coffee Break				
	Ke Shuai				
	Richard Flavell				
12:30 pm					
	BioSource luncheon	ISICR Board of Directors Lunch Mtg: Park Plaza Normandie Hotel	Lunch break		
	Workshops				
2:00 pm		**Negative Regulation**	**Chemokines**	**Late Breaking Abstracts**	**Cancer Biology & Cell Proliferation**
		7 talks/session			
4:00 pm					
	Poster Session 3				
4- 6 pm	**Negative Regulation**	**Cancer Biology & Cell Proliferation**	**New Cytokines**	**Chemokines**	**New Technologies**
	Evening Session - Symposia				
6:00 pm		**Hematopoiesis & Stem Cells**	**Apoptosis**	**Tumor Immunity**	
		Harvey Lodish	Doug Green	Bob Schreiber	
		Celeste Simon	John Bell	F. Marincola	
		Dan Tenen	David Wallach	Walter Storkus	
7:30 pm					
8-11 pm	Banquet				
October 25	**Day 5**				
	Workshops				
9:00 am		**Proteomics, Genomics, & New Technologies**	**New Cytokines**	**Infectious Diseases**	**Inflammation**
		6 talks/session			
10:30 am	Coffee Break				
	Plenary – Host Defense				
11:00 am	Douglas Golenbock				
	Christine Biron				
	Shizuo Akira				
	Tada Taniguchi				
1:00 pm					
	Closing Remarks				

Reviews of Interest

Bastos KRB, Marinho CRF, Barboza R, Russo M, Alvarez JM, Lima MRD. What kind of message does IL-12/IL-23 bring to macrophages and dendritic cells? *Microbes Infect* 6: 630-636, 2004.

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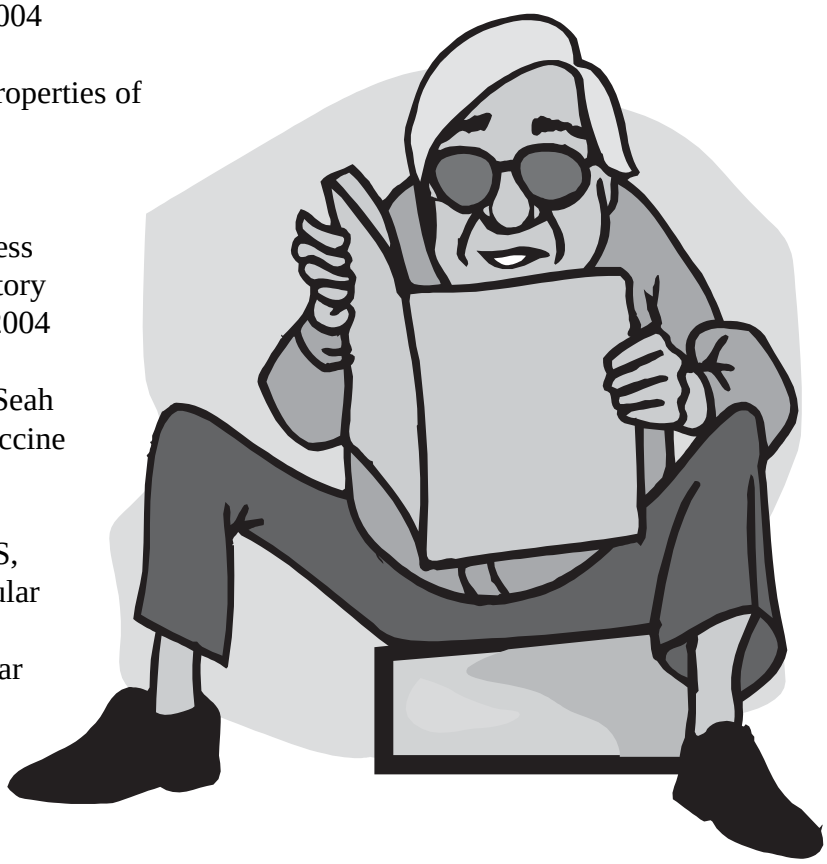

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Children's Science Exam Answers

These are real answers given by children on science tests. Can you imagine being the teacher reviewing these?

Q: Name the four seasons.
A: Salt, pepper, mustard and vinegar.

Q: Explain one of the processes by which water can be made safe to drink.
A: Flirtation makes water safe to drink because it removes large pollutants like grit, sand, dead sheep and canoeists.

Q: How is dew formed?
A: The sun shines down on the leaves and makes them perspire.

Q: How can you delay milk turning sour?
A: Keep it in the cow.

Q: What causes the tides in the oceans?
A: The tides are a fight between the Earth and the Moon. All water tends to flow towards the moon because there is no water on the moon, and nature hates a vacuum. I forget where the sun joins in this fight.

Q: What are steroids?
A: Things for keeping carpets still on the stairs.

Q: What happens to your body as you age?
A: When you get old, so do your bowels and you get intercontinental.

Q: What happens to a boy when he reaches puberty?
A: He says good-bye to his boyhood and looks forward to his adultery.

Q: Name a major disease associated with cigarettes.
A: Premature death.

Q: How are the main parts of the body categorized? (e.g., abdomen.)
A: The body is consisted into three parts -the brainium, the borax and the abdominal cavity. The brainium contains the brain; the borax contains the heart and lungs, and the abdominal cavity contains the five bowels, A, E, I, 0, and U.

Q: What is the fibula?
A: A small lie.

Q: What does varicose mean?
A: Nearby.

Q: Give the meaning of the term Caesarean Section
A: The Caesarean Section is a district in Rome.

Q: What does the word benign mean?
A: Benign is what you will be after you be eight!

Another ISICR Recipe

Need to make your lab happy? Was your zucchini harvest overflowing and you don't know what to do with all the extra zucchinis? Do you have to pay off a lab Food Offense? (don't know about the Food Offense? Contact the Editor for the food Offense guidelines or see Vol. 7.1 of the newsletter). The following recipe was submitted by an ISICR member and is provided for the sake of lab contentment and we all know that a content lab is a productive lab

Blair's Zucchini Loaves

3 large eggs, lightly beaten
1 1/2 cups granulated sugar
3 cups shredded zucchini (1 1/2 pounds)
3/4 cup vegetable oil
2 teaspoons vanilla extract
2 cups all-purpose flour
1 cup whole wheat flour
1/2 cup wheat germ
1/4 cup nonfat dry milk powder
1 teaspoon salt
1 teaspoon baking soda
1 teaspoon baking powder
2 teaspoons ground cinnamon
1/2 teaspoon ground nutmeg
1/4 teaspoon ground cloves
1 cup sifted powdered sugar
1/2 teaspoon vanilla extract
2 tablespoons milk
1/4 cup chopped pecans, toasted

Combine first 5 ingredients in a large mixing bowl, stirring well. Combine all purpose flour and next 9 ingredients, stirring well. Add zucchini mixture, stirring just until blended. Spoon batter evenly into 2 greased and floured 8x 4 x 2 1/2 loafpans.
Bake at 350 for 45 to 50 minutes or until a wooden pick inserted in center comes out clean. Cool pans on wire rack 10 minutes; remove from pans and cool completely on wire rack.

Combine powdered sugar, 1/2 teaspoon vanilla, and milk, stirring until smooth. Drizzle evenly over loaves; sprinkle with pecans. Yield: 2 loaves.

**(These loaves may be frozen up to one month; drizzle with glaze after thawing.)

NOTE: A prominent ISICR member has complained that a previous recipe, Molten Lava Cakes (Newsletter 11.1), certainly did not come out molten and were less than guaranteed. Since we take pride in our recipes, careful analysis indicates that the cakes were likely kept in the oven too long. We recommend that members trying this wonderful treat, cut the oven time down 2 minutes or so.

INTERNATIONAL SOCIETY FOR INTERFERON AND CYTOKINE RESEARCH

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CALL for CANDIDATES

The positions of ISICR Secretary and Treasurer will become open at the end of 2005. The ISICR is very grateful to Drs. Sidney Pestka and Sam Baron for their loyal and dedicated efforts on behalf of the society. Both of these individuals have indicated their desire to step down from serving at that time. In order to have an orderly transition, we will hold elections this fall for these 2 positions so Drs Pestka and Baron can work with the incoming officers during 2005. If you are interested in serving the society in either of these two essential positions for 2006-2008, please consider placing your name on the ballot. Interested individuals should contact Howard Young (youngh@ncifcrf.gov).

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