Future ISICR Meetings

Oct. 6 - 11, 2002
Torino, Italy
Joint ISICR/ICS/SLB/ECS
www.marionegri.it/cyto2002/

•

Oct. 26 - 30, 2003
Cairns, Australia

•

Oct. 21-25, 2004
San Juan, Puerto Rico
(Joint with ICS)

ISICR WWW Site

www.ISICR.org

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ISICR

INTERNATIONAL SOCIETY FOR INTERFERON AND CYTOKINE RESEARCH

January 2002
Volume 9, No. 1

Seymour Milstein
1920 - 2001
A Commemoration

On Oct 2, 2001 the world lost Seymour Milstein. For those of us who have had the pleasure and honor of knowing Mr. Milstein, this was an especially great loss. He had an enormous positive influence on many people, cities, states, countries and many institutions.

Seymour Milstein, son of Rose and Morris Milstein, was born in New York City on July 21, 1920. After graduating from DeWitt Clinton High School, he attended New York University where he earned a B.S. degree in 1941. Mr. Milstein served as a master sergeant with the U.S. Army during World War II. In 1945, he was one of the founders of the Mastic Tile Corporation of America and became President of the company in 1955. In 1959, after Mastic Tile was acquired by the Ruberoid Company, he became a Senior Vice President of Ruberoid, and served as a Director and Board Member until 1967. Mr. Milstein served as Chairman of the Board of Mastic Development Corporation, Biltmore Capital Corporation, and was active in private real estate development in New York as Chairman of Milstein Properties. Corporation. Milstein Properties Corporation was one of the most significant contributors to real estate development in New York City from the late 1960's through the late 1980's, and today remains one of the largest residential property owners/managers in Manhattan. Mr. Milstein took the lead role in financing the acquisition and development of all of the family's real estate assets. He served as co-Chairman of the Board of Trustees and Chairman of the Executive Committee of the Emigrant Savings Bank.

Seymour Milstein

Mr. Milstein also served as Chairman of the United Brands Company. He was elected Chairman and CEO of United Brands in 1978, after serving as President and COO. In addition, Mr. Milstein also served as President of the Company's United Fruit Division. In this capacity, he personally negotiated with the leaders of many of the Latin American countries in which the company operated. He testified before the Senate Foreign Relations Committee on behalf of the Panama Canal Treaty and before the National Bipartisan Commission on Central America as a representative of the Council of the Americas. In 1984, Nicolas Barletta, the President of Panama, presented Mr. Milstein with the Vasco de Balboa Decoration in recognition of his service to the people of Panama. During his tenure at United Brands, he guided the company from the brink of bankruptcy to becoming the largest and most successful banana and fruit company in the world. Who has not

Continued on page 2

Milstein, *from page 1*

enjoyed a Chiquita banana! Mr. Milstein retired as Chairman of the United Brands Company in 1984. From his position in a company integrated into the fabric of Central and Latin America, he maintained a strong interest in these regions and supported the Escuela Agricola Panamericana, an agriculturally oriented institution in Honduras.

Mr. Milstein was a civic and philanthropic leader with remarkable vision, a caring humanist, a wise compassionate counselor who dedicated a great deal of time to help many institutions and individuals, and an astute sensitive businessman. He had a vast influence in revitalizing Columbia-Presbyterian Medical Center (CPMC) and made innumerable contributions to many other institutions in the City of New York and elsewhere. As chairman of the Board of Trustees of Columbia-Presbyterian Medical Center from 1989 to 1996, he mended a financially ailing, but outstanding institution and transformed it into the vibrant and remarkable center it is today. At his death at age 81, he was Chairman Emeritus of the Board of Trustees of The New York Presbyterian Hospital. During his chairmanship, the hospital eliminated large budget deficits, was modernized and improved its involvement in and network of neighborhood clinics. In 1989, he and his family gave the single largest donation ever received by CPMC to make possible the construction of the Milstein Hospital Building of the CPMC, a model new hospital named in his and his family's honor. During the past several decades, he supported many academic initiatives of the College of Physicians and Surgeons and of Columbia University. From 1964 through 1973, Mr. Milstein was Chairman of the Board of the Bronx Lebanon Hospital Center in New York. He was a Director of the New York City Partnership, the Americas Society, and a Trustee of the Council of the Americas and Caribbean/Central American Action Organization. He was also a member of the World Business Council, the Center for International Private Enterprise, and from 1964 through 1982 a member of the Advisory Committee of the Chase Manhattan Bank. In May 1993, Mr. Milstein received an honorary Doctor of Laws Degree from Columbia University.

His enormous philanthropic efforts made major contributions to the world, the nation, New York City and to numerous individuals. For example, Mr. Milstein and his wife Vivian were founders of the United States Holocaust Memorial Museum. To list the individuals and institutions that benefitted from his philanthropic interests could easily fill several of these newsletters and make exciting reading. From our personal interactions with him, we were constantly amazed by his uncanny ability to make incisive suggestions to solve difficult problems in a wide range of areas. Thus, it was not surprising that he was constantly sought as an advisor and served not only Columbia University, but also Memorial Sloan-Kettering Cancer Center, Rockefeller University and many other institutions. His and Vivian's contributions can be seen on many New York cultural edifices such as Lincoln Center. His support of scientific research for several decades was extensive and provided essential funds at a time when funds from government agencies were drying up.

A pioneer in the support of interferon research, in 1988 Mr. Milstein established the Milstein Award, which is presented at the annual meeting of the International Society for Interferon and Cytokine Research (ISICR) . In 1997, Mr. Milstein and his wife Vivian were presented with the ISICR Achievement Award for their contributions to this field and to the ISICR. He was also a member of the International Society of Interferon and Cytokine Research where he not only established the annual major Milstein Award, but also five Young Investigator Awards to recognize and stimulate scientists initiating their careers. He and his wife Vivian attended the Annual Meeting of the ISICR to present the prestigious Milstein Awards of the Society. It was a special occasion each year for members of the Society to meet Seymour and Vivian, who took an active role in the award ceremony. There are many scientific awards, but rarely do the benefactors participate in the awards themselves, attend the award lectures and meet the scientists attending the meetings. His courtly manner, his capturing smile and genuine interest in others was alluring so that many members of the society were able to talk to him and his charming wife Vivian at these meetings.

Mr. Milstein was extraordinary in helping people. Often he would call one of us to find a physician and/or a treatment for someone with an "incurable" ailment, particularly if he thought interferon might possibly help. Many times we were able to refer his friends and associates to physicians in various parts of the world; and he would keep us advised of their progress. He showed remarkable insight into each disease of his friends and associates, but always prefaced his remarks by "I don't know much about this." Yet he knew a vast amount about new therapies and was an ardent reader of the literature. Frequently, we received clipped articles from newspapers or journals with a simple note: "Is this interesting? Seymour" or "In case you missed it. Seymour." They stimulated us to seek information about these intriguing areas. One of his acquaintances, treated with interferon in an early

clinical trial, was maintained on the natural interferon preparation by her physician for many years since she was doing very well and the physician was given sufficient interferon to last for a lengthy period. Because the Food and Drug Administration never finally approved this natural interferon preparation for commercial therapeutic use, the patient and physician finally ran out of it. Since the supply of this interferon was no longer available, Seymour called one of us to find out how she could get an interferon that would work for her. After discussions, her physician was advised to use a recombinant interferon that was now available and it continued to support the patient very successfully. On these occasions, we learned about his compassion and sensitivity to the needs of others, and his determination to help them.

Seymour Milstein is survived by his wife of fifty-six years Vivian, his sister Gloria Flanzer, his brother Paul, his children Constance and Philip, and six grandchildren.

We personally were privileged to know this great man who made a major impact on us and thousands of others.

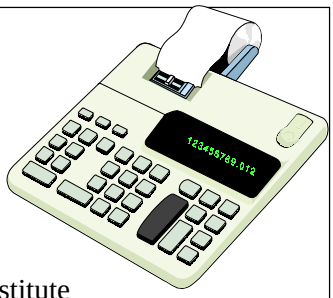
Sidney Pestka[1]
Allan Schwartz[2]
Joan Pestka[3]

[1]Professor and Chairman, Dept. of Molecular Genetics and Microbiology, Robert Wood Johnson Medical School-UMDNJ; Adjunct Professor of Pathology, College of Physicians and Surgeons, Columbia University; Secretary, International Society of Interferon and Cytokine Research; Chairman, PBL Biomedical Laboratories

[2]Harold Ames Hatch Professor of Clinical Medicine, Chief, Division of Cardiology, College of Physicians and Surgeons, Columbia University

[3]Manager of Operations and Human Resources, PBL Biomedical Laboratories

Funding Opportunities - Cancer Research Institute



Please be advised that the Cancer Research Institute has made changes to the deadlines and guidelines for its predoctoral training grants, postdoctoral fellowships, and clinical investigation program. The revised guidelines are as follows:

— **Predoctoral Emphasis Pathway in Tumor Immunology** —
New Deadline: March 1 (changed from May 1).

— **Postdoctoral Fellowship Program** —
New Stipend: $40,000 in year one, $42,000 in year two, and $44,000 in year three plus annual institutional allowance of $1,500 per year. New stipend applies to fellowships awarded after October 1, 2001. April 1 and October 1 deadlines remain unchanged.

— **Clinical Investigation Program** —
The Clinical Investigation Program is now comprised of three distinct funding mechanisms: (1) A Grants Program that supports preclinical and clinical research in three specific areas: cancer antigen identification for vaccine and antibody therapies; characterization of the immune response to cancer antigens; and the fashioning of vaccine and antibody-based therapies for cancer; (2) the Cancer Antigen Discovery Collaborative, which mobilizes invited experts to work cooperatively on defined tasks toward a common goal of identifying the targets on cancer cells that can serve as the basis for vaccines and antibody therapies; and (3) the Cancer Vaccine Collaborative, created in partnership with the Ludwig Institute for Cancer Research, which is a unique network of coordinated early-phase cancer vaccine trials at academic institutions, initially in New York City.

Applications are accepted for the — Grants Program — with approved grants receiving a three-year commitment of $300,000 for preclinical research and $450,000 for clinical trial grants. The deadline for receipt of applications is — February 1. — This is now the Institute's ONLY deadline for grant applications. Specific deadlines for prostate cancer, melanoma, and HPV no longer exist. Applications for the Cancer Antigen Discovery Collaborative and the Cancer Vaccine Collaborative are by invitation only.

Sincerely,

Lynne A. Harmer
Director of Grants Administration
www.cancerresearch.org

A complete program update information sheet follows on page 6.

Inside Industry byThomas Tan

An innovative herpes treatment based on Immunomodulation?

Genital herpes remains one of the fastest growing sexually transmitted diseases in the world, resulting from exposure to the herpes simplex virus (HSV). An estimated more than 86 million people worldwide are affected by HSV, of which 22 million display symptoms of painful genital blisters and sores with typically five to eight outbreaks annually. The virus can be transmitted when lesions are present or when no lesions are recognized. Current therapies for genital herpes are limited to 3 nucleoside analogs (i.e. DNA polymerase inhibitors): acyclovir (Zovirax, Glaxo),Valtrex (valacyclovir, Glaxo), Famvir (famciclovir, Novartis). None of these have any post-treatment benefit. The current suppressive (preventative of recurrences) therapies require at least once daily dosing on a continual basis in order to obtain a suppressive effect on the outbreaks. However, patient compliance with this dosing regimen is not strong, particularly because of the reluctance to be reminded daily of the social stigma society has placed on this sexually transmitted disease. On cessation of treatment, symptoms return. Likewise, current therapies have not presented data demonstrating a long-lasting post-treatment (acute and suppressive regimen) effect that would place the infection into clinical remission or data supporting prevention of viral transmission. Thus the genital herpes market has significant unmet medical needs, including reduction or elimination of occurrences and transmission, as well as enhanced patient compliance through improved dosing regimens.

3M Resiquimod represents a new treatment for herpes and is currently in Phase III clinical trials for genital herpes. On September 25, Eli Lilly and Company and 3M announced they have signed an agreement to collaborate on resiquimod, which is one of a new family of immune response modifier (IRM) molecules developed by 3M Pharmaceuticals. IRMs act in a novel way to stimulate the human body's immune system to fight viral infections, although the exact mechanisms have not been clearly worked out. The IRMs act by stimulating the body to produce cytokines, which are believed to be particularly well-suited for enhancing immunity to herpes. Because the IRMs assist the immune system – rather than target specific viruses or tumors – they have potential uses in a wide variety of diseases. The scope of the Lilly-3M license agreement covers herpes genitalis and other related diseases caused by HSV-II, HSV-I, and other related herpes viruses, such as herpes zoster (shingles) and oral labial herpes (fever blisters) and others.

Resiquimod is a topical patient-applied gel application administered episodically during acute outbreaks to suppress recurrences; a course of therapy is expected to be twice per week for three weeks. Current therapies are oral pills (tablets) typically administered episodically for acute treatment at least twice

Continued on page 5

New ISICR Members

The ISICR welcomes the following new members to the society.
We look forward to their active participation in the Annual Meeting and in those
ISICR committees that they wish to serve on.

Khaldun Al-Khatib ..... Oklahoma City, OK
Sheela B. Ampute ..... Newark, NJ
Claudio A. Bonjardim ..... Belo Horizonte - Minas Gerais, Brazil
Joseph Carozza ..... Bayville, NY
Tatiana Chernovskava ..... Mosco Region, Russia
Jihong Dai ..... Newark, NJ
Lucile Espert ..... Montpellier, France
F.W. Falkenberg ..... Bochum, Germany
Ye Feng ..... Baltimore, MD
Idhaliz Flores ..... Ponce, Puerto Rico
Ming Guo ..... Baltimore, MD
Chunsheng Han ..... The Woodlands, TX
Finn L. Hansen ..... Bagsvaerd, Denmark
Karen Kolz ..... Union, NJ
Florence Le Roy ..... Piscataway, NJ
Xiaojing Ma ..... New York, NY
Abhijit Mazumdar ..... Houston, TX
Karen L. Mossman ..... Hamilton Ontario, Canada
Narayan Raman ..... Heights, OH
Jason J. Rodriquez ..... New York, NY
Maria C. Rodriguez Galan .... Frederick, MD
Rick L. Ryan ..... St. Charles, MO
Eric M. Schaffer ..... Baltimore, MD
Peter J. Sims ..... La Jolla, CA
Inderpal Singh ..... North Grafton, MA

Journal of Interferon & Cytokine Research

Manuscript Excellence Award

Prize: $750

The Award is open to a pre- or post-doctoral fellow who is first author on the manuscript. All submissions will be peer-reviewed and published in the *JICR* upon acceptance. The winner will be selected by the Section Editors of the *JICR*. The paper will represent innovative experimentation deemed to advance the field of interferon and other cytokine research. Authors, upon submission of their manuscript, must indicate their intent to have the original paper considered for this Award. The winner will be recognized at the annual meeting of the International Society for Interferon & Cytokine Research.

Papers appearing in the *JICR* during the year 2001 may be considered for the Award upon notification by the first author to the Editor-in-Chief that they are eligible.

Deadline for submission of manuscripts for 2001:
January, 2002

Submit manuscripts to:

Interferons
Philip I. Marcus, Editor-in-Chief
University of Connecticut, U-3044
Dept. of Molecular and Cell Biology
75 North Eagleville Road
Storrs, CT 06269
Tel.: (860) 486-4254
Fax: (860) 486-5193
E-mail: pmarcus@uconn.edu

Cytokines
Lawrence B. Lachman, Editor-in-Chief
University of Texas
M.D. Anderson Cancer Center
Dept. of Bioimmunotherapy
1515 Holcombe Boulevard
Houston, TX 77030-4095
Tel.: (713) 792-8587
Fax: (713) 797-9764
E-mail: lachman@odin.mdacc.tmc.edu

Inside Industry, *from page 4*

per day and up to five times per day for 1-2 weeks. Current therapies are also administered for suppressive (preventative of recurrences) treatment at least daily on a continual basis in order to obtain a suppressive effect, although this is less frequently utilized as patient compliance is difficult. Ongoing clinical trials suggest that resiquimod significantly increases the time between genital herpes outbreaks and may produce a long-lasting suppressive effect without the need for daily therapy. Through its novel approach, some clinical investigators believe resiquimod may potentially reduce viral transmission and, with multiple courses of therapy, place the disease into clinical remission. ISICR

Special Thanks to

Dr. Kathy Zoon

for her service to the ISICR as President 2000-2001

Funding Opportunites from Page 3

Cancer Research Institute Research Funding Programs

CRI's funding programs include:

- PREDOCTORAL EMPHASIS PATHWAYS IN TUMOR IMMUNOLOGY: Through the predoctoral pathway, universities are invited to apply for training grants establishing multiyear programs that support doctoral students interested in pursuing careers in cancer immunology. The grants provide the institution with $450,000 over a four-year period. The application deadline is March 1.
- POSTDOCTORAL FELLOWSHIPS are designed to foster the training of qualified young immunologists and cancer immunologists at leading universities and research centers around the world. These three-year funding commitments have been raised to $40,000 in the first year, $42,000 in the second year, and $44,000 in the third year. Fellowships also include an institutional allowance of $1,500 per year. Deadlines are April 1 and October 1.
- INVESTIGATOR AWARDS support immunologists and cancer immunologists at the assistant professor level as they undertake their first independent investigations. Funds may be used at the recipient's discretion for salary, technical assistance, supplies, or capital equipment. Investigator awards provide $50,000 a year for four years. The deadline for applications is March 1.

Clinical Investigation Program

The Clinical Investigation Program is comprised of three distinct funding mechanisms:

- A Grants Program that supports preclinical and clinical research in three specific areas: cancer antigen identification for vaccine and antibody therapies; characterization of the immune response to cancer antigens; and the fashioning of vaccine and antibody-based therapies for cancer. Grants provide a three-year commitment of $300,000 for preclinical research and $450,000 for clinical trial grants. The deadline for receipt of applications is February 1.
- The Cancer Antigen Discovery Collaborative, which mobilizes invited experts to work cooperatively on defined tasks toward a common goal of identifying the targets on cancer cells that can serve as the basis for vaccines and antibody therapies. Participation in the program demands that the researchers involved collaborate and communicate, sharing reagents, data, and ideas. Collaboratives have been established in colon cancer, breast cancer, and prostate cancer. Applications are by invitation only.
- The Cancer Vaccine Collaborative was created in partnership with the Ludwig Institute for Cancer Research. It is a unique network of coordinated early-phase cancer vaccine trials at academic institutions, initially in New York City. These multiple, yet parallel trials, which use defined antigens, standardized treatment protocols, uniform monitoring methodologies, and centralized data collection, will provide comparable results that will teach us how to effectively immunize against cancer. Applications are by invitation only.

CRI does not provide funds for indirect costs. CRI supported research may be conducted in the United States or abroad, at nonprofit medical centers or hospitals. There are no citizenship restrictions. For additional information or applications, please contact Brian Brewer by phone at 212-688-7515, fax 212-832-9376, or e-mail grants@cancerresearch.org.

Forms may be downloaded from the Institute's Web site: www.cancerresearch.org.

Another Guaranteed ISICR Recipie

(not for the cholesterol challenged)

Pumpkin Créme Brulée

3 c heavy cream
6 egg yolks
2/3 c pumpkin purée (canned)
1/2 cup granulated sugar
1/2 tsp ground cinnamon
1/4 tsp ground ginger
1/4 tsp ground nutmeg
1 tbl rum
1 tsp vanilla extract
3 tbl dark brown sugar

Preheat oven to 325° and adjust oven rack to middle position.

Over medium heat, in a saucepan, combine the cream and sugar, stirring continuously until sugar dissolves. Remove from heat. In a bowl, whisk egg yolks until fluffy, gradually add pumpkin and spices and whisk until combined. Whisking constantly, add back the hot cream mixture and whisk until combined. Add rum and vanilla and whisk to combine.

Pour mixture into oval custard dish (about 2 inches deep) and place in a larger, roasting pan with deep sides. Place pan on the oven rack. Add enough water to the roasting pan to reach halfway up the outside of the custard dish. Bake until custard is set but still wobbly in center. Remove soufflé and cool. Cover and refrigerate overnight (at least 6 hours).

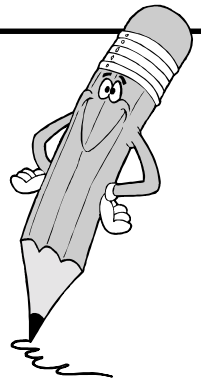
To serve, preheat broiler, sprinkle with brown sugar, and broil 2 - 3 min, until brown sugar is bubbly (do not allow to burn). Serve immediately.

ISICR Election Results:

For President 2004-2005

Howard Young

New Newsletter Associate Editor



The ISICR Newsletter Welcomes **Seng-Lai (Thomas) Tan, Ph.D.,**
Senior Virologist, Infectious Diseases Research, Eli Lilly and Company
Adjunct Assistant Professor, Department of Microbiology and Immunology,
Indianapolis University School of Medicine
Tel: 317-277-2626 Email: **TAN_SENG-AI@Lilly.com**

Thomas will be giving a perspective from inside industry as well as anything else interesting he thinks would be newsletter worthy. As always, all ISICR members are encouraged to contribute to the newsletter, either by providing information/articles to be included in future issues or sending chocolate to the editors.

2002 MEETING ISICR/ICS/ECS/SLB

Lingotto Congress Center, Torino, Italy
October 6-11, 2002

http://www.marionegri.it/cyto2002/
E-mail: cyto2002@marionegri.it

Joint Meeting of the International Society for Interferon and Cytokine Research (ISICR), the International Cytokine Society (ICS), the European Cytokine Society (ECS) and Society for Leukocyte Biology (SLB)

ORGANIZING SECRETARIAT:
M.A.F. Servizi srl - Congress department
Via G.B. Vico 7 - 10128 Torino
Tel. +39 011 505 900 - Fax +39 011 505 976
www.mafservizi.it
E-mail: cyto2002@mafservizi.it

Local Organizing Commitee:
Santo Landolfo
Gianni Garotta
Pietro Ghezzi
Alberto Mantovani
Josef D. Schwarzmeier
Giorgio Trinchieri

IMPORTANT DATES

Final announcement: **March 31, 2002**

Early registration and abstract deadline: **May 15, 2002**

On behalf of the Organizing Committee I am very pleased to invite you to participate to the IV International Joint Meeting of the ISICR, ICS, SLB and ECS to be held in Turin (Lingotto Convention Center), Italy, October 6-11, 2002. The emphasis of the conference will be on basic, clinical and toxicological aspects of cytokines and leukocytes but, the role of cytokines in inflammation and host defense against pathogens will also be covered. We will offer an exciting program and hope to attract many colleagues, particularly young scientists. Many of you are probably not familiar with Turin. Let me assure that you will visit a beautiful city plenty of historical reminiscences, placed in a nice geographical area with attractive mountain view. The city is only 40 mile away from Malpensa 2000 Airport and can be easily reached by rail and road. Tha final announcement will be sent to all interested in March 2002 and will include more details of the program, the Registration, Accomodations, Abstract Form and additional information. We look forward to welcoming all of you to continue the long tradition of exciting science and medicine in an areas of Italy renowned for its natural beauty, good food and warm hospitality.

Santo Landolfo
Chair of the Organizing Committee

RENEW YOUR MEMBERSHIP NOW OR THIS MAY BE THE LAST ISSUE OF THE ISICR NEWSLETTER THAT YOU RECEIVE.

Your continuing membership is the glue that holds our society together!!!!!!!

Reviews of Interest

Akdis M, Trautmann A, Klunker S et al. Cytokine network and dysregulated apoptosis in atopic dermatitis. *Acta Odontol Scand.* 59:178, 2001

Bradley JR, Pober JS. Tumor necrosis factor receptor-associated factors (TRAFs). *Oncogene* 20:6482, 2001

Godaly G, Bergsten G, Hang L et al. Neutrophil recruitment, chemokine receptors and resistance to mucosal infection. *J. Leuk. Biol.* 69:899, 2001

Greenhalgh CJ, Hilton DJ. Negative regulation of cytokine signaling. *J. Leuk. Biol.* 70:348, 2001

Horuk R. Chemokine receptors. *Cytokine and Growth Factor Rev.* 12: 313, 2001

Kondo N, Matsui E, Kaneko H et al. Atopy and mutations of IL-12 receptor beta 2 chain gene. *Clin Exp Allergy*. 31:1189, 2001

Kurzrock R. The role of cytokines in cancer-related fatigue. *Cancer* 92(6 Suppl):1684, 2001

Levy DE, Garcia-Sastre A. The virus battles: IFN induction of the antiviral state and mechanisms of viral evasion. *Cytokine and Growth Factor Rev.* 12: 143, 2001

Lipsett PA. Serum cytokines, proteins, and receptors in acute pancreatitis: mediators, markers, or more of the same? *Crit Care Med.* 29:1642, 2001

Lusso P. Chemokines and viruses: The dearest enemies. *Virology* 273:228, 2000

Murdoch C, Finn A. Chemokine receptors and their role in inflammation and infectious diseases. *Blood* 95: 3032, 2000

Samuel CE. Antiviral actions of Interferons. *Clinical Microbiology Rev.* 14: 778, 2001

Shtrichman R, Samuel CE. The role of gamma interferon in antimicrobial immunity. *Curr Op in Microbiology* 4:251, 2001

Subramaniam PS, Torres BA, Johnson HM. So many ligands, so few transcription factors: A new paradigm for signaling through the STAT transcription factors. *Cytokine* 15:175, 2001

Swain SL. Interleukin 18: tipping the balance towards a T helper cell 1 response. *J Exp Med* 194:F11, 2001

Vittorio CC, Rook AH, French LE et al. Therapeutic advances in biological response modifiers in the treatment of cutaneous T-cell lymphoma. *BioDrugs*. 15:431, 2001

Clinical Trials

More information on Clinical Trials on this list can be obtained at: http://clinicaltrials.gov http://www.centerwatch.com/search.asp

Study ID Numbers: 880194; 88-DK-0194 **Interferon** Therapy in Patients with Zollinger-Ellison Syndrome and Pancreatic Tumors. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Bethesda, Maryland. Contact: PRPL Tel # 1-800-411-1222 Email: prpl@mail.cc.nih.gov

Study ID Numbers: 010247; 01-DK-0247 **Pegylated Interferon** to Treat Chronic Hepatitis D. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Bethesda, Maryland, Contact: PRPL, Tel # 1-800-411-1222 Email: prpl@mail.cc.nih.gov

Study ID Numbers: 199/12121; SWOG-S9628; SWOG-9628; CLB-S9628
Dexamethasone Plus **Interferon alfa** in Treating Patients With Primary Systemic Amyloidosis. Southwest Oncology Group. Contact: Madhav Dhodapkar, Chair, Tel # 212-327-8114

Study ID Numbers: 199/15753; DMS-0010; NCI-G01-1924
Temozolomide plus **PEG-Interferon alfa-2B** in Treating Patients With Advanced Solid Tumors. Norris Cotton Cancer Center, Lebanon, New Hampshire. Contact: Marc Stuart Ernstoff, Tel # 603-650-5534

Study ID Numbers 199/14752; UCLA-9908051; NCI-G00-1708; BIOMED-101-CLP-01
Biomed 101 and **Interleukin-2** in Treating Patients With Kidney Cancer. Jonsson Comprehensive Cancer Center, UCLA, Los Angeles, California. Contact: Robert Alan Figlin, Tel # 310-825-5788

Study ID Numbers: MCV-MCC/CCHR-9910-2A, NCI-T99-0049
Phase I Randomized Study of **Interleukin-2** With Bryostatin 1 in Patients With Melanoma or Renal Cell Carcinoma Massey Cancer Center, Richmond, Virginia Contact: John D. Roberts, Tel # 804-628-1940

Study ID Numbers: 199/14808; CHNT-IL2-MAXAMINE; EU-99048; MAXIM-MP-502
Interleukin-2 With or Without Histamine Dihydrochloride in Treating Patients With Metastatic Kidney Cancer Christie Hospital N.H.S. Trust, Manchester, England, United Kingdom. Contact: M. Middleton, Tel # +44-161-446-3000

Study ID Numbers: 199/14953; FHCRC-1380.00; NCI-H00-0057 Chemotherapy Followed by Donor White Blood Cells Plus **Interleukin-2** in Treating Patients With Acute Myeloid or Lymphocytic Leukemia Fred Hutchinson Cancer Research Center, Seattle, Washington. Contact: Mary E. D. Flowers, Tel # 206-667-6557

Study ID Numbers: ACTG A5088; AACTG A5088 **Interleukin-2** (IL-2), **Pegylated Interferon** (PEG-IFN alfa-2b), and Ribavirin (RBV) Treatment in Patients with Hepatitis C and HIV Coinfection**.** Johns Hopkins Hosp, Baltimore, Maryland. Contact: Charles Raines, Tel # 410-614-4487

Study ID Numbers: 199/12747; MDA-ID-97027; NCI-T97-0034 **Interleukin-12** in Treating Patients With Cancer in the Abdomen. University of Texas - MD Anderson Cancer Center, Houston, Texas. Contact: Renato Lenzi, Tel # 713-792-2828

Study ID Number: 01-C-0067 A Phase II Study of Liposomal Doxorubicin and **Interleukin-12** in AIDS-Associated Kaposi's Sarcoma Followed by Chronic Administration of Interleukin-12. National Institutes of Health, Bethesda, Maryland. Contact: NIH Patient Recruitment and Public Liaison Office, Tel #: 1-800-411-1222

Study ID Number: IL13-PEI-002 Histologic Effect/Safety of Pre/Post-Operative **IL13-PE38QQR** in Recurrent Resectable Supratentorial Malignant Glioma Patients. University of California San Francisco, San Francisco, California. Contact: Michael Prados, M.D. Tel # 415-353-2966

Study ID Numbers: 960095; 96-D-0095 Evaluation of a **TNF-alpha Modulator** for the Treatment of Oral Lesions in HIV/AIDS Patients. National Institute of Dental And Craniofacial Research (NIDCR), Bethesda, Maryland, PRPL, Tel # 1-800-411-1222

Students and Fellows Science of the Future

Hannah's Scientific Web Adventure

LabVelocity: www.labvelocity.com
Very resourceful bench-mate. Lots and lots to explore and is fun to browse. Reference: Riethof and Balakrishnan (2001). Biotechniques 30 (6), 1310-1315. Free log in for use of this site. Obtain commercial sources of your favorite scientific reagents (such as antibodies, chemicals, vectors, equipment, custom services, software), lab protocols in a variety of life science fields (company-derived), interactive tools for basic tasks (such as a periodic table, buffer calculator, radioactive half-life calculator, conversion tools, bioinformatics links), tables (such as properties of nucleic acids, vector maps), literature search agents and top science stories in a variety of subjects. You can even save information collected on Lab Velocity online using the "Lab Manager".

The Antibody Resource Page: www.antibodyresource.com
"Your complete guide to antibody research and suppliers". Lots to browse here as well. In addition to access to companies selling your favorite antibody as well as custom-made antibody suppliers, you have an educational section which provides a vast array of information and resources on anything relating to antibodies (including your basic Immunology 101 tutorial!), links to a variety of immunology and biotechnology websites, access to antibody databases and software (amino acid sequencing tools, nucleotide antibody sequencing tools, and hybridoma/cell culture databases), an "antibody gallery" (showing structures of select antibodies), and news, journals and books related to antibodies.

Bioinformatics.Org: www.bioinformatics.org
A non-profit, academe-based organization which provides open access to ongoing bioinformatics research projects, online analysis tools and more. What is particularly nice is that they believe in "keeping biological information freely available". Some parts are incomprehensible and intimidating for a bioinformatics idiot like me but those who know the works would definitely appreciate them better. My favorite is the bioinformatics FAQ section, which is essentially a great tutorial on what bioinformatics is all about (and also discusses bioinformatics as a career option). Other goodies include bioinformatics news, job announcements and a new section called bioclusters (computer clusters for bioinformatics).

Glossary of Biochemistry and Molecular Biology: http://db.portlandpress.co.uk/glick/search.htm
Basically a resourceful dictionary of many, many biochemistry and molecular biology terms. The definitions are quite concise and describe terms such as EMSA, fibroblast, acceptor splice site and Michaelis constant.

Bioinformatics User Group

www.cvbig.org/

The Central Valley Bioinformatics Interest Group is a collection of biologists and programmers using and developing bioinformatic tools to solve problems in fields ranging from gene discovery to directed evolution, molecular diagnostics, and targeted therapy. Members come from both academic and industrial laboratories where they work on the bench or at the workstation. We present our work, ask questions, share tips and tricks, or just hang out.

The best way to keep up to date with CVBIG activities and get in contact with other members is to join the email list. A digest function (one lump a day) and a list archive are available.

Regards,
Verbus M. Counts
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Online Master of Science in Data Mining

http://onlinecsu.ctstateu.edu/

Central Connecticut State University (CCSU) announces the launching of an online Master of Science program in Data Mining, the first such program to be offered online.

Data mining is the search for interesting patterns and trends in large databases using statistical methods. The MIT Technology Review chose data mining as one of ten emerging technologies that will change the world. Data mining expertise is the most sought after among information technology professionals, according to the 1999 Information Week National Salary Survey. In a 2001 KDNuggets survey, 27% of data mining professionals earned more than $100,000 (US) annually.

All courses in the data mining MS program are offered online. This means that class is as close as your computer, whether you live in students can work when they the afternoon, or 3:00 in the morning.

The 33-credit program, which can be completed in two years, consists of courses in data mining, artificial intelligence, statistical analysis, and computer science. The MS in data mining is fully licensed by the State of Connecticut Department of Higher Education.

The program stresses the solution of real-world problems, using
applications and case studies, while gaining a deep appreciation of the underlying models. These applications include customer relationship management, credit-card fraud, and profit/cost optimization. Students will apply methodologies such as decision trees, market basket analysis, neural networks, association rules, and cluster detection. Students will gain strong exposure to state-of-the-art software such as the Clementine data mining suite from SPSS.

Courses available online, starting in January, include Introduction toData Mining, Data Mining Methods, Linear Models, Foundations of Computer Science, Database Concepts, and Mathematical Statistics II.

Some prerequisite courses are also offered online. To register for these courses, proceed to OnlineCSU at http://onlinecsu.ctstateu.edu/.

For more information about the data mining program, including how to apply, please visit www.ccsu.edu/datamining, or contact Program Director Daniel T. Larose, Ph.D. at larosed@ccsu.edu or 860-832-2862.

Protein Annotation for Fully Sequenced Genomes.

http://www.bmm.icnet.uk/3dgenomics/

The database has a focus on protein structure (SCOP doamins). These are the main features:
- general overview of the annotation status of a particular genome
- assignment of SCOP superfamilies to genomes
- comparison of occurence and frequencies of SCOP superfamilies in different genomes
- SCOP superfamilies in globular parts of membrane proteins in different genomes
- PFAM, SwissProt, PIR assignments + text search of annotation
- annotation of protein from human disease genes
- a detaild report for each processed protein sequence, including:
- prediction of transmembrane,

coiled-coil and low complexity regions
- signal peptides
- SCOP, PFAM, PDB, SwissProt+PIR assignments
- Prosite pattern matches
- detection of internal repeats
- Position Specific Sequence Profiles (from PSI-BLAST)
- secondary structure prediction
- search for homologous sequences using BLAST, PSI-BLAST, IMPALA or 3D-PSSM and filter the restuls for one ore more taxonomic groups, source databases or genomes
- access alignments (mutiple alignnment style or pairwise alignments)
- sequence searches + alignments are precompiled and easy to access (I hope ;-)

The web-site is a side-product of ongoing research projects in our lab, but it's free to access. The web-resource is still under construction and may change in future. In particular we try to speed things up. Just give it a try...

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PIR BIBLIOGRAPHY SUBMISSION

http://pir.georgetown.edu/biblisubmit.html
Direct Online Submission & Bibliography Information Retrieval

The Protein Information Resource (PIR) is introducing the Bibliography Submission page for direct online submission at:
http://pir.georgetown.edu/biblisubmit.html

The site will guide users to provide relevant literature information on protein entries. The information will be used to enhance and validate annotations in public domain protein sequence databases. Such submissions from authors and scientists will assist protein functional assignments based on attributed, experimentally verified data, thereby to better serve the scientific community.

Also included in the submission form page is the existing bibliography information (from both PIR-PSD and user submission), as illustrated in the following example entry:
http://pir.georgetown.edu/cgi-bin/bibliosubmit?id=A29635
Please visit the pages, submit papers, and give us your feedback!

PIR-NREF

http://pir.georgetown.edu/pirwww/search/pirnref.shtml

The Protein Information Resource (PIR) is pleased to announce the beta-release of the PIR-NREF (Non-redundant REFerence) Protein Database containing 800,917 non-redundant protein sequences. The PIR-NREF is designed to provide a timely and comprehensive collection of all protein sequence data, keeping pace with the genome sequencing projects and containing source attribution and minimal redundancy. The database contains all sequences in PIR-PSD, Swiss-Prot, TrEMBL, RefSeq, GenPept, and PDB, and is updated biweekly. Non-redundancy is achieved based on clustering by sequence identity and taxonomy at the species level. The NREF report provides source attribution with protein IDs and names from associated databases, in addition to protein sequence, taxonomy, and bibliography.

The web site supports direct retrieval of NREF reports based on sequence Unique identifiers, as well as full-scale BLAST search and peptide/pattern match for functional identification of query proteins or peptides. The results are linked to the underlying databases for retrieval of up-to-date source entries.

An example NREF entry is at:
http://pir.georgetown.edu/iproclass/nfretr.html

An example BLAST search output is at:
http://pir.georgetown.edu/iproclass/NFBLASTex.html

The database is downloadable in XML format (data file) and FASTA format (sequence file) from our FTP site at:
ftp://nbrfa.georgetown.edu/pir_databases/nref/

Please visit the pages and give us your feedback!

The work is supported in part by NIH Grant# P41 LM05798.

Please contact Cathy Wu at wuc@nbrf.georgetown.edu for any comments and suggestions, and for inquiries regarding setting up reciprocal links or mirror site.

Protein Methods

I have just updated my website and I welcome everyone to submit protein related methods, links, reviews etc. You can reach it on:
http://www.methods-online.net
http://www.methods-online.de
http://www.methods.info
I also welcome submission in German!
Thanks in advance, Alexei.

Science Advisory Board

http://www.scienceboard.net

Scientific Experts Needed! You are invited to join The Science Advisory

Board, an international group of more than 5,400 life science professionals. Share your experiences with colleagues and voice your opinion of the technologies transforming science and medicine. Board members convene electronically to participate in online conferences, surveys, and discussions addressing issues of importance to their individual areas of investigation and/or clinical specialties.

You are no doubt aware that many major companies also rely on the advice of a "Science Advisory Board," which generally consists of a handful of prestigious individuals who advise on R&D and product development. Unfortunately, not everyone enjoys this high level of access. Our goal is to give life scientists — like yourself — a prominent voice to express your opinion on the tools and techniques of your profession. Individually, it is often hard for one person's opinion to make a difference, but collectively through our online Board, it is possible to exert tremendous influence. The power of the Internet provides a medium for communicating with the life sciences industry about their products on a scale that has never before been possible.

Currently, the Board is examining the tools and techniques of protein science and proteomics research. Board members are also commenting on innovative product concepts for the culturing of neuronal cells. Interested? Please contact us at inquiries@scienceboard.net. Your participation in these, and future, studies is strictly confidential, and you will be compensated for your time. Learn more by visiting us at http://www.scienceboard.net.

SWISS-PROT/ENZYME Databases

www.expasy.org/sprot/
www.ebi.ac.uk/swissprot/
www.expasy.org/enzyme/

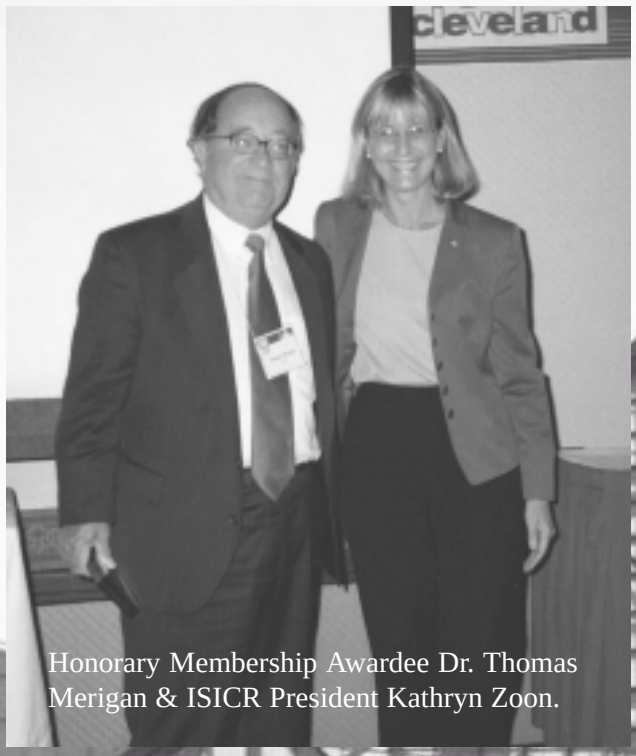
Name: SWISS-PROT
Description: Protein sequence database.
Release: 40.0 of October 2001
Statistics: 101'602 fully annotated sequences , 37'315'215 amino acids, 91'880 references.
Citation: Bairoch A., Apweiler R. The SWISS-PROT protein sequence database and its Supplement TrEMBL in 2000. Nucleic Acids Res. 28:45-48(2000).
Availability: FTP: ftp://ftp.expasy.org/databases/swiss-prot ftp://ftp.ebi.ac.uk/pub/databases/swissprot

Name: ENZYME
Description: Enzyme nomenclature database.
Release: 27.0 of October 2001
Statistics: 3'870 enzymes described.
Citation: Bairoch A. The ENZYME database in 2000. Nucleic Acids Res. 28:304-305(2000).
Availability: FTP: ftp://ftp.expasy.org/databases/enzyme ftp://ftp.ebi.ac.uk/pub/databases/enzyme

(II) SUMMARY OF CURRENT CHANGES AND FUTURE DEVELOPMENTS IN SWISS-PROT, PROSITE AND ENZYME

Note: a much more complete description of the changes and future developments that are listed below is available from the release notes.
The release notes can be accessed from the WWW at the address: http://www.expasy.org/sprot/relnotes/ or downloaded by FTP from: ftp://ftp.expasy.org/databases/swissprot/release/relnotes.txt ftp://ftp.ebi.ac.uk/pub/databases/swissprot/release/relnotes.txt

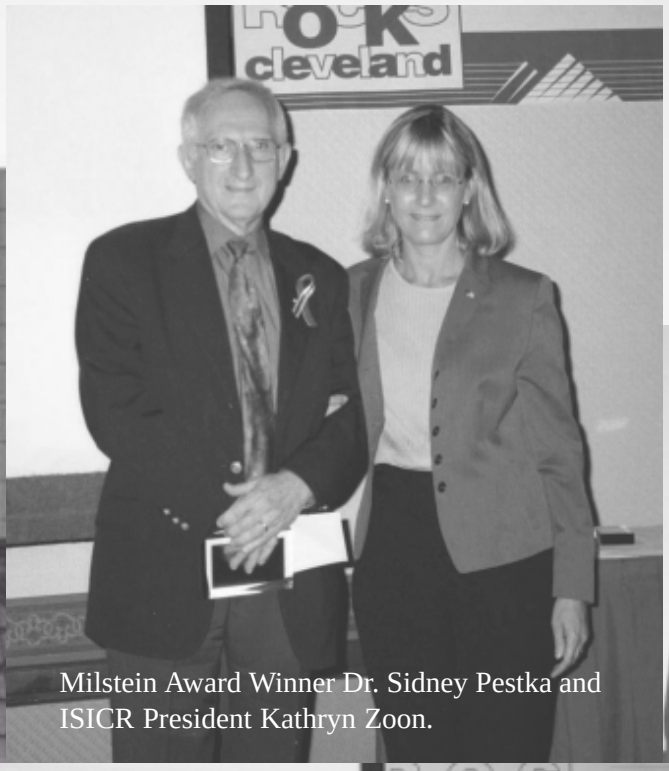
A) Summary of the changes in SWISS-PROT release 40 and ENZYME release 27. In SWISS-PROT:
- The name of the database changed from 'SWISS-PROT protein sequence database' to 'SWISS-PROT knowledgebase' to emphasize the fact that SWISS-PROT collects, by far, more than just information on protein sequences and that it is a central linking and linked database which connects the various findings in the diverse fields of proteomics research.
- Release 40.0 of SWISS-PROT contains 101'602 sequence entries, comprising 37'315'215 amino acids abstracted from 91'880 references. 15'184 sequences have been added since release 39, the sequence data of 2'908 existing entries has been updated and the annotations of 44'684 entries have been revised. With this release SWISS-PROT has passed the symbolic mark of 100 thousand entries.
- In order to handle the large amount of "raw" data coming from the microbial genomic sequencing, the High quality Automated Microbial Annotation of Proteomes (HAMAP) project was initiated. The latter aims to automatically annotate a significant percentage of proteins which originate from microbial genome sequencing projects. See: http://www.expasy.org/sprot/hamap/
- The Human Proteomics Initiative (HPI) project is progressing. There are currently 7'471 annotated human sequences in SWISS-PROT. These entries are associated with 19'922 literature references, 18'974 experimental or predicted PTM's, 1'697 splice variants and 12'061 polymorphisms. See: http://www.expasy.org/sprot/hpi/
- There can now be more than one AC (ACcession) line per SWISS-PROT entry.



Honorary Membership Awardee Dr. Thomas Merigan & ISICR President Kathryn Zoon.

Kathryn Zoon, Christina Fleischmann Memorial Award Winner Kristi Peters, and Keiko Ozato

Kathryn Zoon, Young Investigator Award Winner Rune Hartmann and Keiko Ozato.



Milstein Award Winner Dr. Sidney Pestka and ISICR President Kathryn Zoon.

Kathryn Zoon, Young Investigator Award Winner Gary Geiss, and Keiko Ozato

Kathryn Zoon, Young Investigator Award Winner Betsy Barnes, and Keiko Ozato

Elvis is over there!!!

- The OX (Organism taXonomy cross-reference) line has been introduced to indicate the identifier to a specific organism in a taxonomic database.
- The RX line format changed, and it now provides identifiers not only to Medline but also to PubMed.
- We have introduced two new 'topics' for the comments (CC) line type:
  o The topic 'BIOTECHNOLOGY' has been introduced to describe the use of a specific protein in the biotechnological industry.
  o The topic 'PHARMACEUTICAL' has been introduced to describe the use of a specific protein as a pharmaceutical drug.
- We are continuing a major overhaul of various comment line topics. A special effort has been done in making the ALTERNATIVE PRODUCTS and SIMILARITY topics more standardized.
- We have added cross-references from SWISS-PROT to the following databases: ANU-2DPAGE, COMPLUYEAST-2DPAGE, GlycoSuiteDB, Leproma, MEROPS, MypuList, PHCI-2DPAGE, PMMA-2DPAGE, ProDom, Siena-2DPAGE and SMART.
- A new FT key: SE_CYS was introduced to describes elenocysteineresidues.
- We have introduced feature identifiers (FTId) to the feature keys CARBOHYD and VARIANT. These stable feature identifiers allow to construct links directly from position-specific annotation in the feature table to specialized protein-related databases.
- We are gradually converting SWISS-PROT entries from all 'UPPER CASE' to 'MiXeD CaSe'. The line-types that have been converted between release 38 and 40 are: DE (DEscription), most RC (Reference Comment) topics (SPECIES, TISSUE, PLASMID and TRANSPOSON) and DR (Database cross-Reference). The new OX line and the new CC topics PHARMACEUTICAL and BIOTECHNOLOGY have been introduced in mixed case. The CC topic MASS SPECTROMETRY has been converted to mixed case.
- The SQ line syntax was changed to replace the 32-bit CRC (Cyclic Redundancy Check) value by a 64-bit CRC.
- Many new documents were introduced such as DBXREF.TXT (list of databases cross-referenced in SWISS-PROT), UMCHR01.TXT to HUMCHR15.TXT, INTEIN.TXT (Index of intein-containing entries referenced in SWISS-PROT), or PLASMID.TXT (List of plasmids).
- The ExPASy WWW server was the target of many improvements that are all described at the address: http://www.expasy.org/history.html

In ENZYME:

- Many new enzymes were added to the database. The description of many more was updated.

In PROSITE:

- A new release of PROSITE will be announced in a few weeks.

B) Future developments

Here is what was announced as planned changes for release 41:

- We are planning to elongate the mnemonic code for the protein name in the ID line from up to 4 characters to up to 5 characters.
- Starting with release 41, there can be more than one RP (Reference Position) line per reference in a SWISS-PROT entry.
- We are in the process of cleaning up the CC comments topics PATHWAY and COFACTOR.
- Conversion to mixed case will continue and will affect the GN (Gene Name) line, the RC (Reference Comment) line topic STRAIN, and the CC (Comment) line topics CATALYTIC ACTIVITY and PATHWAY.

Of course the above list is far from being definitive, we await your suggestions!

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TrEMBL ver. 18.0

TrEMBL is a computer-annotated protein sequence database supplementing the SWISS-PROT Protein Knowledgebase. TrEMBL contains the translations of all coding sequences (CDS) present in the EMBL Nucleotide Sequence Database not yet integrated in SWISS-PROT. TrEMBL can be considered as a preliminary section of SWISS-PROT. For all TrEMBL entries which should finally be upgraded to the standard SWISS-PROT quality, SWISS-PROT accession numbers have been assigned.

RELEASE 18.0 OF TrEMBL
==========

The goal of this TrEMBL release is to achieve synchronization with the SWISS-PROT Protein Knowledgebase release 40.0. Therefore all sequence entries present in SWISS-PROT release 40.0 have been removed from TrEMBL release 18. In addition, there was further upgrading of existing TrEMBL entries and some new entries were incorporated. It contains 558'150 entries and 160'420'778 amino acids.

TrEMBL is split in two main sections: SP-TrEMBL and REM-TrEMBL:
SP-TrEMBL (SWISS-PROT TrEMBL) contains the entries (484'551) which should be eventually incorporated into SWISS-PROT. SWISS-PROT accession numbers have been assigned for all SP-TrEMBL entries.

SP-TrEMBL is organized in subsections:

arc.dat (Archaea): ...18384 entries

fun.dat (Fungi): .....12481 entries

hum.dat (Human): ....22925 entries
inv.dat

(Invertebrates): ..... 54665 entries
mam.dat

(Other Mammals): ...8280 entries
mhc.dat

(MHC proteins): .....6813 entries

org.dat (Organelles): 41585 entries
phg.dat

(Bacteriophages): .....3892 entries

pln.dat (Plants): .....50806 entries
pro.dat

(Prokaryotes): .....125274 entries

rod.dat (Rodents): ....21335 entries
unc.dat

(Unclassified): .....135 entries

vrl.dat (Viruses): .....108309 entries
vrt.dat

(Other Vertebrates): .9667 entries

17'914 new entries have been integrated in SP-TrEMBL. The sequences of 1634 SP-TrEMBL entries have been updated and the annotation has been updated in 120'529 entries.

In the document deleteac.txt, you will find a list of all accession numbers which were previously present in TrEMBL, but which have now been deleted from the database.

REM-TrEMBL (REMaining TrEMBL) contains the entries (73'599)
that we do not want to include in SWISS-PROT.

ACCESS/DATA DISTRIBUTION
==========

FTP server:
ftp.ebi.ac.uk/pub/databases/trembl
SRS server: http://srs.ebi.ac.uk/
TrEMBL is also available on the SWISS-PROT CD-ROM.
SWISS-PROT + TrEMBL is searchable on the following servers at the EBI:

FASTA3
(http://www.ebi.ac.uk/fasta33/)

BLAST2
(http://www.ebi.ac.uk/blast2/)

Bic_sw
(http://www.ebi.ac.uk/bic_sw/)

Scanps (http://www.ebi.ac.uk/scanps/)

MPSrch
(http://www.ebi.ac.uk/MPsrch/)

TrEMBL HAS BEEN PREPARED BY:
==========

Rolf Apweiler, Kirsty Bates, Margaret Biswas, Sergio Contrino, Kirill Degtyarenko, Wolfgang Fleischmann, Gill Fraser, Henning Hermjakob, Alexander Kanapin, Youla Karavidopoulou, Paul Kersey, Minna Lehvaslaiho, Michele Magrane, Maria Jesus Martin, Virginie Mittard, Nicola Mulder, Claire O'Donovan, John F. O'Rourke, Eleanor Whitfield and Allyson Williams at the EMBL Outstation - European Bioinformatics Institute (EBI) in Hinxton, UK; Amos Bairoch, Isabelle Phan, Sandrine Pilbout and Alain Gateau at the Swiss Institute of Bioinformatics in Geneva, Switzerland.

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XEMBL - EMBL/ Genbank/DDBJ Nucleotide Sequences as XML

http://www.ebi.ac.uk/xembl/

What is the XEMBL Project?

XEMBL is all about bringing EMBL Nucleotide Sequence data to our users in a variety of formats. The publically available EMBL/ GenBank/DDBJ data is kept at the EBI in an Oracle database, from which flatfiles are created at every

release for the purpose of distribution. As you might be aware of, flat-files have severe limitations, and we have been asked various times if we are going to distribute the EMBL data in different formats as well, XML being the one most prominently mentioned. In short, the XEMBL project will bring to the user several alternative formats of EMBL data.

Which formats do you support?

———————————————-

At the moment, we have BSML (an XML standard from Labbook) and AGAVE (an XML standard from DoubleTwist) as our first formats. BSML comes nearest to matching the exact information that is contained in EMBL database entries, AGAVE is more centred on (genomic) annotations. Later, we will make available more formats for your use, e.g. GAME, BIOML, etc.

How do I use these formats?
There are several ways you can make use of these formats. You can write your own parsers for the resulting XML files and couple this with database import or analysis programs, or you can use available viewers or programs that support these formats. For the formats we have now (BSML & AGAVE), both Labbook and DoubleTwist respectively have free genomic viewers that you can download at their site (see below). We imagine other viewers will be available in the near future as well. Important to mention here is that the BioPerl project is writing modules that can read and write BSML and AGAVE formats, opening up a whole range of usable applications.

How can I use XEMBL?
XEMBL is running as a normal CGI script AND as a WebService (using SOAP) at the main EBI web servers. To reach XEMBL via your browser use the url below (which retrieves the Osamy-B gene in rice).

http://www.ebi.ac.uk/cgi-bin/xembl/XEMBL.pl?id=X64620&format=Bsml

If you want to use it as a real WebService (via SOAP) you can find both Perl and Java examples at the XEMBL home page.

Where can I read more? A comprehensive web page with everything to get you started can be found at http://www.ebi.ac.uk/xembl/

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Need to find bioinformatics or molecular biology web sites or resources? Use BioWurld at http://www.ebi.ac.uk/biowurld

ISICR Committee Proceedings

Board of Directors Meeting Minutes

The meeting was opened by Kathy Zoon on October 7, 2001, at 1:00 p.m. Those present were Ferdinando Dianzani, Sidney Pestka, Keiko Ozato, Otto Haller, Robert Friedman, Bryan Williams, Ganes Sen, and Kathy Zoon.

Kathy Zoon presented the Treasurer's Report in the absence of Samuel Baron. The proposed budget was approved by the Board (see Treasurer's Report). Sidney Pestka then presented the Secretary's Report (see Secretary's Report). Kathy Zoon then provided a summary of the FASEB report, which is attached to this report.

A number of issues were summarized by Dr. Zoon and voted on by the Board of Directors and approved: additional charges for the web page; elimination of members from the directory if dues are not paid after one year. The budget for the on-line membership for ISICR was approved by the Board for implementation by FASEB. The clinical subcommittee was established. There was discussion about the meeting venues for the next few years that are summarized in the minutes of the Meetings Committee. The Officers and Board of Directors also approved the proposal by Sidney Pestka to dedicate the 2002 Annual Meeting in Torino to Seymour Milstein. The meeting was then closed at 3:00 p.m.

International Council Meeting Minutes

The international Council Meeting was held at 11:30 a.m., Thursday, October 11, 2001 at which time it was opened by Keiko Ozato and Sidney Pestka, Vice President and Secretary, respectively, since Dr. Kathy Zoon, the President was not available. International Council members present were: Keiko Ozato, Sidney Pestka, Christine Czarniecki, Joan Durbin, Eleanor Fish, Robert Fleischmann, Dhan V. Kalvakolanu, Michael Katze, Masayoshi Kohase, Allan Lau, Ben-Zion Levi, Larry Pfeffer, Nancy Reich, Gerald Sonnenfeld, Jan Tavernier, Milton Taylor, and Bryan Williams. Guests attending Santo Landolfo, Isabelle Marie and Howard Young.

Dr. Pestka provided a summary of the Secretary's Report (see Secretary's Report) and Keiko Ozato presented the Treasurer's Report in the absence of Samuel Baron (see Treasurer's Report). There was a vote on the budget

which was approved unanimously by the Council. The following reports were then presented. The Membership Committee Report was presented by Howard Young (see Membership Committee Report). The Publications Committee Report was presented by Robert Fleischmann (see Publications Committee Report), a summary of the Standards Committee deliberations were presented by Isabelle Marie (see Standards Committee Report). The summary of the Awards Committee discussions were presented by Keiko Ozato and the summary of the Clinical Committee by Allan Lau (see respective reports). The Meetings Committee Report was presented by Christine Czarniecki. She summarized the plans for the meeting in Torino (October 6-11, 2002); then the meeting in Australia to be held October 26-30, 2003 in Cairns, Australia; and the meeting to be held in Puerto Rico on October 21-25, 2004 at the Caribe Hilton in San Juan. She asked for a vote to approve all these meetings to support the decisions of the Meetings Committee. There was a unanimous vote in favor of all these meetings. Dr. Czarniecki then summarized the initial potential plans for the meeting for 2005 in China to be headed and organized by Xin Yuan Liu. A vote was taken by the International Council which endorsed the meeting in China for 2005 pending a discussion by Dr. Zoon with Dr. Liu to ascertain support and develop thorough plans for the meeting in Shanghai. The International Council approved the proposal by Sidney Pestka to dedicate the 2002 Annual Meeting in Torino to Seymour Milstein as the Officers and Board of Directors had already done. Dr. Pestka then thanked all the committee chairs for their enormous effort during the year and for their excellent and efficient presentations at the International Council. He also thanked Keiko Ozato for her excellent work, not only during the year, but her supportive efforts on the Awards Committee and her efforts in assisting Ara Hovanessian and Kathy Zoon during the year. Then Dr. Pestka congratulated Howard Young as the President-elect to begin in 2002 and also requested that he maintain the editorial responsibilities of the Newsletter which he has so successfully developed and produced. In a motion to the floor, the entire International Council thanked Kathy Zoon for all her work as President of the ISICR for the past two years.

Archive Committee Meeting Minutes

The meeting took place on October 7. Attending were F. Dianzani, S. Grossberg, and R. Friedman (Committee Co-Chairman).

Contributions have been reveived from the following: S. Baron, A. Billau, L. Borecky, D. Burke, K. Cantell, C. Chany, E. & J. DeMaeyer, P. DeSomer (written by A. Billau), F. Dianzani, J. Enders, K. Fantes, R. Friedman, G. Galasso, M. Hilleman, M. Ho, A. Inglot, Y. Kawade, Y. Kojima, E. Knight, R. Lockart, Y. Nagano (written by Y. Kojima), L.Sawicki, D. Tyrell, J. Vilcek, R. Wagner, and J. Youngner.

The Committee is in the process of obtaining additional contributions. The Archive is housed at The Wellcome Trust, 180 Euston Road, London and is catalogued under the designation GC/267, Interferon Collection.

Respectfully submitted,
Robert M. Friedman

Awards Committee Meeting Minutes

Six members (M. Katze, I. Kerr, J. Kirkwood, R. Schreiber, P. Pitha and K. Ozato) attended the meeting. The following are main issues.

A: Identifying Milstein Young Investigator Award Candidates: Members feel that there may be more eligible candidates who are not in the application pool, and are not receiving proper recognition/evaluation. A mechanism to evaluate all submitted abstracts might allow the Awards Committee to identify excellent candidates. The possibility to extend the eligibility from within 4 years of degree receiving to 8 years may need to be considered.

B: Increasing ISICR Members by the Awards mechanism.
The ISICR has an outstanding series of Awards to support young researchers in the field. This merit-based support system should be attractive to many non-members. The Awards Committee might to like to coordinate with the Membership Committee to help increase our members by more effectively publicizing the ISICR Awards.

C: European Travel Awards for the 2002 Joint Meeting and Adjustment by ISICR. The 2002 Joint Meeting plans to award a total of $ 50,000 to European participants. This will help attendance by young people world wide. Several options are considered for the ISICR to adjust to this extra opportunity. For example, European applicants may be asked to apply for only one Travel Award (either ISICR Travel Award or Meeting Travel Award).

These issues will be dealt among all committee members during the next months and will be finalized by the Chairman Dr. Ara Hovanessian. ISICR members are encouraged to give suggestions to the Awards Committee regarding the above issues.

Respectfully submitted,
Keiko Ozato

ISICR Meetings Committee Minutes

The meeting was called to order on Sunday, October 7, 2001 at 1:00 p.m.
present were , Joan Durbin, Gianni Garotta, Paul Hertzog, Santo Landolfo, Allen Lau, Nancy Reich, George Stark, Byoung Kwon (guest). The meeting was chaired by Christine Czarniecki.

2000 - Amsterdam, Netherlands:
Huub Schellekens was not able to attend the committee meeting in Cleveland. The financial report was provided to the Committee Chair by Sam Baron after the Committee meeting.
[Post meeting notes: There were 801 attendees: 163 ISICR members, 130 ICS members, 44 ISICR/ICS members, 160 students, 184 non-members, 60 invited speakers/organizing committee members, 60 accompany persons. Registration and donations brought in 1,052,996.60 Dutch Guilders with the following breakdown: 658,166.77 Dutch Guilders from registration fees; 373,872.83 from contributions; 20,957 Dutch Guilders ($10,000) provided by the ISICR in 1999. Total expenses of 907,553.12 Dutch Guilders, leaves a balance of 145,443.48 Dutch Guilders. After 20,957 Dutch Guilders ($10,000) was returned to the ISICR, the remaining balance was split between the ISICR and the ICS. The ISICR received a check for $34,409.46.]

2001 - Cleveland, Ohio:
George Stark provided a summary for the current meeting reporting 260 paid registrants. Total income was reported as approximately $306,000 of which $190,000 is from Sponsors and Exhibits and $116,000 is from Registration fees. After expenses the Organizers expect a surplus of approximately $25,000 to be returned to the ISICR.
[Post meeting note: George Stark reports 360 attendees and $28,000 to be returned to ISICR]

2002 – Torino, Italy
Santo Landolfo and Gianni Garotta presented a report on the status of the 2002 meeting. This meeting will be a joint meeting of the ICS, ISICR European Cytokine Society and SLB (Society for Leukocyte Biology). It will be held on October 6-11, 2002 at the Lingotto Congress Center in Torino Italy.
Santo Landolfo presented a list of potential lecture topics prepared by the Local Organizers and they are now seeking suggestions for speakers.

The meeting will have the usual four day set up with Plenary sessions and Workshops starting on Sunday and ending on Thursday. Two Satellite sessions are being planned. The topic of one will be ”Advances in Drug Delivery Systems” and the other will be “Clinical Toxicities”. The plan is to hold one satellite on Friday and one possibly on Saturday after the Meeting. The Meetings Committee reminded the Organizers that in order for any satellite symposium to have sponsorship of the ISICR the program for the symposium must be reviewed and approved by the Meetings Committee for scientific quality and fair balance.

The Meetings Committee reminded the Organizers that for past joint meetings the recommendation has been to have each session chaired by one ICS member and one ISICR member.

The Organizers asked the Committee members to let them know of any other potential competing conferences that might be planned for that time.

The preliminary budget is based on 800 registrants and estimated costs of $600,000 and the Organizers are hoping to raise approximately 50% from Industry Sponsorship.

A website is being developed and it is planned that electronic submission of abstracts will be utilized. Mary Ann Leibert’s Organization will publish the Abstracts.

There was discussion of how funds would be distributed for travel awards due to the fact that the European Cytokine Society plans to provide travel awards for applicants from Europe.

[Post meeting note: The members of the ISICR Board requested that the Local Organizers determine how surplus funds will be shared by the different participating Societies.]

2003 – Cairns, Australia

Paul Hertzog reminded the Committee members of the change in site from Melbourne to Cairns. Paul then provided an update.

The Convention Center is booked with the first choice of meetings dates of October 26-30, 2003. The Local Cytokine Society, SCIO, will participate in the planning of this meeting. An Organization called ASN has been contracted to handle the administrative aspects. The International Organizing Committee has been established and fundraising activities have been initiated with contacts made with Astrazeneca and local Universities, Monash and Queens.

A website is expected to be established by the end of 2001.

2004 – San Juan, Puerto Rico

At the 2000 meeting in Amsterdam the ICS a joint steering committee (made up of ISICR and ICS members) was established to choose a site for the 2004 meeting. Nancy Reich, a member of this joint subcommittee provided a summary report.

Sherwood Reichard is handling the reservations for the meeting. He is the Executive Manager of the ICS and Matt Fenton (ICS and ISICR) has worked with him previously as meeting planner for all of the US-based meetings of the ICS since the beginning of the society. Prior to that, Sherwood served in the same capacity for numerous annual cytokine conferences that were traditionally held at Hilton Head prior to the creation of the ICS. He works with several other societies, in addition to the ICS. He has over 20 years of experience in the areas of US and international meeting planning, society management, publications, newsletters, etc. Thus, he is highly qualified to serve as meeting planner for the 2004 joint meeting.

As for the question of whether to hold the meeting jointly with the Society for Leukocyte Biology, several ICS Officers indicated that they wanted to defer answering this question until after the Maui meeting (the first joint ICS/SLB meeting) in order to assess the compatibility of the three societies.

The Caribe Hilton in Puerto Rico has been reserved for meeting dates of October 21-25, 2004. The Caribe Hilton has extensive meeting facilities and Infrastructure and is located in downtown San Juan, near both the airport and the Old City.

Meeting space is being held on October 21 for Council Meetings, a Keynote Address and Welcome Reception. October 22, 23 and 24 are full days with general sessions, breakouts, poster sessions and miscellaneous small meetings. Additionally a theme banquet will be held on the night of October 24. October 25 is a half-day with sessions ending around noon.

Space for general sessions is being held in a large ballroom, which will seat up to 1,000 theater style. In addition there are several breakout rooms seating 125, 200, and 300 respectively. The general session ballroom can be divided into a number of smaller rooms if required. Another large room is being held which is quite suitable for exhibits, posters and coffee breaks. There is also a separate large hall that can accommodate poster sessions and exhibits.

Sherwood was able to secure an agreement with the Caribe Hilton to reserve about 400 rooms at $175 per night for the dates of the meeting. He is currently trying to reserve a block of low cost rooms at the Normandy Hotel, a more modest hotel located near the Caribe Hilton.

It will be possible to offer a number of sightseeing options to participants including tours of the city, the El Yunque Rain Forest, San Juan Bay Cruises or even a tour of a local rum factory. The most famous site is the city of Old San Juan which is only 5 minutes away from the Hilton. It can be visited as an organized tour or as an afternoon activity for small groups on their own since the old city is best visited on foot.

The Caribe Hilton itself offers a number of options for free time during the meeting with a 16th Century Castle (San Geronimo Fortress) right on the property, a private secluded beach and a number of world-class restaurants. The hotel is building a Grand Casino next door and Nancy informed us that the famous Pina Colada drink was invented at the Hilton in the early 50's.

Proposals for 2005

Shanghai, China and Jejudo, Jeju Island, Korea

Dr. Xinyuan Liu informed the Committee Chair that while he was unable to attend the Committee meeting in Cleveland, he requested that the Committee consider his meeting proposal for Shanghai (which was first submitted in 1997 for 2002 and updated in 2000) be considered for 2005. The Committee Chair presented the proposal for discussion. In his detailed proposal (presented at the Committee Meeting in Amsterdam in 2000), Dr. Liu proposed the Sheraton-Hua Ting Hotel and Towers as a possible meeting venue. It is described as a 5-Star Hotel, conveniently located with excellent transportation links to city center and the main airports as well as information regarding possible accommodations in a variety of price ranges. The proposal also included the Local Organizing Committee Membership (made up of members from the Chinese Society for Interferon and Cytokine Research, Chinese Society for Virology and the Chinese Society for Biotechnology), and a proposed program including Keynote Speakers, and Invited lecturers covering State of the Art Scientific Topics as well as Symposia and Posters "in keeping with the requirements of the ISICR". The proposed budget was calculated assuming a 5-day meeting with 300 full-price participants, 300 local and student participants with a reduced registration fee and 100 accompanying persons. The figures were in US dollars using 2000 costs as basis. The Committee reviewed the proposed budget and felt that it seemed reasonable.

The Committee Chair reminded the Committee that this proposal had been presented to the ICS as a possible meeting site for a joint ISICR/ICS Meeting for 2002 and 2004 and the ICS was not in favor of this site for these proposed years.

The Committee members felt that since the 2004 meeting will be a joint meeting with the ICS and will take place in the US, holding the ISICR (single society) meeting in 2005 in the part of the world represented by Shanghai was a reasonable proposal.

Before a decision could be made, the Committee was asked to review a new proposal presented by Dr. Byoung Kwon, the President-elect of the Korean Society of Immunology. Dr. Kwon was asked by the ICS to present this proposal for a joint ISICR/ICS Meeting for 2005 and to provide feedback to the ICS at their meeting in Maui in November.

The proposed venue is the International Convention Center in the heart of Jejudo. This was described as a new Convention Center on a resort island. Information regarding potential airfare costs, and accommodations was provided. Membership of the Local Organizing Committee and Program Committee was also provided.

The Committee was favorably impressed with the Meeting Proposal. However there was extensive discussion regarding the fact that 2004 and 2006 are scheduled to be joint ISICR/ICS Meetings and 2005 was to be a single society meeting of the ISICR. A vote was taken and it was evenly split regarding whether it is preferred to have joint meetings every year or to maintain the alternating pattern. The Committee felt that it needed feedback from the ISICR Board and Council regarding the idea of breaking the alternating year rule. There was also extensive discussion regarding the fact that Dr. Liu's proposal is for a site in the same part of the world for that year.

There was some discussion on fundraising potentials and the Committee voted to recommend to the ISICR Board that the meeting site for the ISICR Meeting for 2005 be Shanghai, China. The Committee also recommended that the ISICR Board request from Dr. Liu an updated Budget, including potential sources of income.

[Post meeting note: At meetings of the ISICR Board and the ISICR Council, the 2005 proposals were discussed and it was decided that the alternating year rule be upheld for 2005.]

Other business: There was no other new business and the meeting was adjourned.

Respectfully submitted,
Christine W. Czarniecki
Chair, ISICR Meetings Committee

Membership Committee Meeting Minutes

Members present: Bret Hassel, Robert Silverman, Howard Young

The meeting was called to order at 4:05 PM. The first order of business was a discussion of the membership numbers (attached). It was pointed out that the society loses about as many members each year as it gains. While it was realized that graduate students will go into different areas, it was felt that the numbers are too high to represent just students. The committee believed that the following information needed to be obtained from FASEB:

1. What is the membership category of the non-renewals (student/postdoc, regular, associate)?
2. Are individuals who don't renew just members for one year?

The committee felt that the current questionnaire on the bottom of the renewal form for individuals who do not renew is probably ineffective. A recommendation was made that prepaid postcards to be used by people who don't renew, be inserted into renewal form letters as it was felt that this might provide better feedback.

The committee recommended that International Council members be notified of members in their countries who have not renewed. The IC members should then try and make direct contact with the individuals regarding membership.

The committee also believes that all regular members should encourage other members of their laboratories to join the society. In addition, it was recommended that the President write a letter to Milstein winners to encourage them to renew their own membership and encourage members of their laboratories to join the ISICR.

It was recommended that individuals who do not renew be removed from the mailing list by the time the membership directories are mailed. Individuals who do not pay their membership should not get the directory or any newsletters following the first one of the year.

The committee recommends that as a benefit to membership, ISICR full members be given online access to the JICR. It was pointed out that ASBMB members get JBC online. At this point of the meeting, a one page flyer recently received by Howard Young describing 10 reasons to join the ASBMB was discussed. There was some discussion as to whether or not the ISICR should develop a similar flyer but no consensus was reached.

The committee was pleased that the credit card surcharge was dropped from the membership renewal process, that the postdoc fee was maintained at $10 and that online membership renewal is being developed for launch next year. It was believed that all of these issues help maintain membership.

The committee recommended that the ISICR consider discontinuing Associate memberships since only individuals from 1 country use this method of membership.

There being no further discussion, the meeting was adjourned at 4:40 PM.

Addendum:
39 poll sheets were filled out at the meeting with the following results:

1. Willingness to be part of an ISICR ListServ
   Yes 36 No 3
2. Directory
   Printed 19 CD-Rom 16 Either 3 Both 1
3. Newsletter
   Printed 17 Pdf 22

Respectfully submitted,
Howard Young

Publications Committee Meeting Minutes

The Publications Committee met on Sunday, October 7, 2001. The meeting was called to order at 3:05 pm. Publications Committee members in attendance included Drs. Robert Fleischmann, Sandra Pellegrini, Milton Taylor, Jerry Tilles, and Deborah Vestal. Dr. Phil Marcus was also in attendance in his role as an ex officio member.

According to the established policy of term limits, membership of one third of the Editorial Board and of the Section Editorship was subject to change. A number of suggested changes were put forward by Phil Marcus and the Section Editors in advance of the annual meeting. This information was presented to the Publications Committee membership by e-mail and included a very brief biosketch, indicating the area of interest and the citations for several pertinent publications by each proposed new member. A vote was taken in advance of the annual meeting. Eight new members of the Editorial Board and three new Section Editors were approved. Phil is in the process of notifying the new members of their selection.

Phil discussed action on the proposal, endorsed last year by the Publications Committee, for an annual Best Paper Award for the Journal of Interferon and Cytokine Research. He was pleased to announce that Mary Ann Liebert has agreed to present a Best Paper Award in the amount of $750 beginning with this year's manuscript submissions.

Phil then discussed the status of the Journal. The bottom line is that things are going well. The number of accepted manuscripts and the number of pages is about the same as in previous years. Significantly, the impact factor of the Journal has remained above 2, maintaining the boost that occurred in 1999. Acting on the assumption that the boost in 1999 was at least partially due to the success of the Special Topics issue on oral administration of interferons and cytokines, the Journal will endeavor to publish one Special Topics issue each year. The two week review program appears to be very popular with manuscript authors. The manuscript acceptance rate appears not to be affected by the rapid turn around of the two week review program.

The Publications Committee then discussed the criteria for nomination and renomination to the Editorial Board. While many other factors will be taken into account, publication in the Journal will become an increasingly important consideration in the future.

It was noted that the charge by the Journal for publication of color figures is very costly. Deborah will gather and distribute to the Publications Committee information about the charges for color figures levied by other journals. This will enable the Publications Committee to determine whether the Journal charges are on a par with those of other journals or represent a charge that may cause authors to submit their manuscripts elsewhere.

The meeting concluded with a plea for Society members, but particularly Editorial Board members to support the Journal by submitting their manuscripts for publication in the Journal.

The meeting adjourned at 5:40 pm

Respectfully submitted,
Bob Fleischmann, Chair

Standards Committee Meeting Minutes

Attendees: Sheila Jacobs, Vijay Jethwa, Yoshimi Kawade, Masayoshi Kohase, Tony Meager, and Sidney Grossberg (Chairman)

Dr. Grossberg opened the meeting at 1300 hours and asked attendees to introduce themselves and state their affiliations. Tony Meager agreed to keep the Minutes of the meeting.

1. Approval of Minutes

The minutes of the previous Committee meeting on 5 November 2000 in Amsterdam, The Netherlands, were approved as distributed.

2. Reporting interferon neutralising antibody results: Committee recommendations and implementation.

At the meeting of the Standards Committee in Amsterdam in November 2000, a proposal to revise the World Health Organization recommendations for reporting interferon neutralising antibody results was discussed at length, because of the continuing confusion in the literature and the multiplicity of ways that neutralising antibody titers have been reported, thereby making it difficult to compare the results from different laboratories. The proposal involved a way to calculate the index of neutralization and report the index of the quantity of neutralising antibody as a defined unit, the Tenfold Reduction Unit (TRU), based on two unpublished papers resulting from a WHO international study on human sera with antibodies to IFN-a and IFN-b. Because all the Committee had not had the opportunity to review the findings of the unpublished studies contained in two draft manuscripts describing the testing of the theoretical constructs of Professor Kawade in different laboratories using a panel of sera containing interferon neutralising antibodies, it was therefore agreed to postpone making a recommendation on the findings of these studies and the proposal to change the WHO recommendations until all committee members had read the manuscripts. In June 2001 the final versions of the papers, which had been accepted for publication by the *Journal of Interferon and Cytokine Research*, were duly circulated to the ten Committee members for review. These were accompanied by a letter from Professor Grossberg explaining the need for a common unit for expressing neutralising antibody potency. The letter contained a motion from Dr. Norman Finter recommending that the common unit should be the Ten-fold Reduction Unit (TRU) as established from the Kawade formula and as had been verified by experimental data in the studies described in the two papers. Members were asked to vote by mid-July 2001 on this proposal, which all members approved. The papers were subsequently published in the September 2001 issue of the *Journal of Interferon and Cytokine Research* (21:729-742 & 743-755, 2001), reprints of which were distributed to the attendees.

It was agreed that the proposal should be forwarded to the World Health Organization (WHO), for discussion at the next meeting, if possible, of the WHO Informal Consultation on Standards for Cytokines, Growth Factors, and Endocrinological Substances. Presently, however, there was no information on when this meeting is likely to be held.

3. Up-date on the interferon-beta international collaborative study.

Tony Meager briefly reviewed the Minutes of the last meeting regarding the WHO International Collaborative Study for IFN-beta Standards. The Study so far had produced data that, when statistically analysed, had indicated significant inconsistencies in potency estimations for the IFN-beta candidate international standards that had been included for evaluation. These inconsistencies appeared to stem mainly from problems with instability and recovery of activity of the candidate international standards. Since these candidate international standards were not suitable for use as international standards, a new set of candidate international standards were prepared using improved formulations to

stabilise activity for evaluation in another International Collaborative Study. Four new lyophilised candidate international standards have been prepared at NIBSC. A formulation containing human serum albumin and bovine casein instead of human serum albumin alone was shown to greatly improve both recovery of IFN-beta activity from ampoules following reconstitution of the lyophilised material with water and stability of activity of the reconstituted IFN-beta solution. This formulation was used for the preparation of candidate international standards containing human fibroblast-derived IFN-beta (1 preparation), or recombinant IFN-beta derived from Chinese hamster ovary cells (preparations), or recombinant IFN-beta (ser17) derived from Escherichia coli (1 preparation). Initial tests at NIBSC have shown that all 4 preparations have good stability of activity with potencies estimated from antiviral assays in accord with that of their respective formulations before freeze-drying. The candidate international standard containing human fibroblast IFN-beta was also evaluated by the Toray Company using a well-validated IFN-beta-specific ELISA. The results from this ELISA indicated agreement with the potency of this preparation determined by antiviral assays.

It was remarked that the results of this ELISA were expressed in IU/ml. In previous meetings of this Committee and in several WHO meetings, it had been agreed that the results of immunoassays should be expressed in mass units and not in biological activity units. After a brief discussion, Committee members agreed with the consensus view that immunoassay results should not be expressed in terms of international unit of biological activity.

Participants in the WHO International Collaborative Study will shortly receive these 4 new candidate international standards together with existing international standards for evaluation. Other standards, including the Japanese National Standard for IFN-beta, and additional reference materials will also be included. All preparations will be coded. It is hoped that raw data will be returned to NIBSC for analysis by June 2002.

4. New cytokine standards.

The currently available reference materials, i.e. WHO international standards and reference reagents, for interferons and cytokines were listed in an advertisement compiled at NIBSC. The advertisement, which had been published in Journal of Interferon and Cytokine Research, Journal of Immunological Methods, and Cytokine, was provided to Committee members and are appended to these minutes. While there is a growing number of new cytokines that have been characterised, only a small number were being considered by NIBSC for development as WHO reference materials because of two factors: since novel cytokine products were company-specific, the expected demand for reference material would be low; and NIBSC had limited resources to process new cytokines. Presently, NIBSC was concentrating its efforts on developing reference materials for IL-17 and IL-18, and is planning to develop reference materials for TNF-related, apoptosis-inducing ligand (TRAIL), B-lymphocyte stimulator (BlyS) and some pegylated cytokines, e.g. pegylated IFN-alpha2, and possibly soluble cytokine receptors.

There being no other business, the meeting was adjourned at 1500 hours.

Respectfully submitted,
Tony Meager
Sidney Grossberg

(Appendix to ISICR Standards Committee Minutes)

National Institute for Biological Standards and Control

Human Cytokine Standards and Reference Reagents

WHO International Biological Standards and biological reference materials are available for the calibration of assays of therapeutic substances used in basic research. Reference Materials are available from: Division of Immunobiology, NIBSC, Blanche Lane, South Mimms, Potters Bar, Herts EN6 3QH, UK Tel: +44 (0) 1707 654753, Fax: +44 (0) 1707 650223, e-mail: rthorpe@nibsc.ac.uk or mwadhwa@nibsc.ac.uk.NIBSC does not charge for Reference Materials, although there is a handling charge to cover the costs of administration, storage, and dispatch. The handling charge is currently £40/US$75 per ampoule. A comprehensive catalogue of reference materials is available from the NIBSC website; www.nibsc.ac.uk.

In 1999, several new WHO International Standards for human interferon alphas (IFNa) were established by the Expert Committee for Biological Standards as replacement standards. These are listed below:

IFN a Type	Current WHO International Standard	Discontinued Standard[a]
IFNa leukocyte	94/784	69/19 and Ga23-902-530
IFN a 1 (D)	83/514	-
IFN a 1/8	95/572	-
IFN a 2a	95/650	Gxa01-901-535
IFN a 2b	95/566	82/576
IFN a 2c	95/580	-
IFN a n1 lymphoblastoid	95/568	Ga23-901-532
IFN a n3 leukocyte	95/574	-
IFN a consensus	94/786	-

Availability of Human Cytokine Standards and Reference Reagents

Preparation	Product Code	Status[b]	Potency/ampoule
Interleukin 1 alpha rDNA	86/632	IS	117000 IU
Interleukin 1 beta rDNA	86/680	IS	100000 IU
Interleukin 2 cell line derived	86/504	IS	100 IU
Interleukin 2 rDNA	86/564	RR	202 IU
Interleukin 3 rDNA	91/510	IS	1700 IU
Interleukin 4 rDNA	88/656	IS	1000 IU
Interleukin 5 rDNA	90/586	WRR	5000 U
Interleukin 6 rDNA	89/548	IS	100000 IU
Interleukin 7 rDNA	90/530	WRR	100000 IU
Interleukin 8 rDNA	89/520	IS	1000 IU
Interleukin 9 rDNA	91/678	WRR	1000 U
Interleukin 10 rDNA	93/722	WRR	5000 U
Interleukin 11 rDNA	92/788	WRR	5000 U
Interleukin 12 rDNA	95/544	WRR	10000 U
Interleukin 13 rDNA	94/622	WRR	1000 U
Interleukin 15 rDNA	95/554	WRR	10000 U
M-CSF rDNA	89/512	IS	60000 IU
G-CSF rDNA	88/502	IS	10000 IU
GM-CSF rDNA	88/646	IS	10000 IU
Leukaemia inhibitory factor rDNA	93/562	WRR	10000 U
Oncostatin M rDNA	93/564	WRR	25000 U
Stem cell factor rDNA	91/682	WRR	1000 U
Flt 3 ligand rDNA	96/532	WRR	1000 U
Bone morphogenetic protein-2	93/574	WRR	5000 U
rDNA	92/520	RR	100000 U
RANTES rDNA	92/794	RR	5000 U
MCP-1 rDNA	94/784	1st IS	11000 IU
IFN alpha leukocyte	83/514	1st IS	8000 IU
IFN alpha 1 rDNA			

Preparation	Product Code	Status[b]	Potency/ampoule
IFN alpha 1/8 rDNA	95/572	1st IS	27000 IU
IFN alpha 2a rDNA	95/650	2nd IS	63000 IU
IFN alpha 2b rDNA	95/566	2nd IS	70000 IU
IFN alpha 2c rDNA	95/580	1st IS	40000 IU
IFN alpha n1 lymphoblastoid	95/568	2nd IS	38000 IU
IFN alpha n3 leukocyte	95/574	1st IS	60000 IU
IFN alpha consensus rDNA	94/786	1st IS	100000 IU
IFN omega rDNA	94/754	1st IS	20000 IU
IFN beta fibroblast[c]	Gb23-902-531	IS[d]	15000 IU
IFN gamma rDNA	Gxg01-902-535	IS[d]	80000 IU
TGF beta 1 rDNA	89/514	RR	3000 U
TGF beta 2 rDNA	90/696	RR	1000 U
TGF beta 3 rDNA	98/608	RR	1000 U
TNF alpha rDNA	87/650	IS	40000 U
TNF beta rDNA	87/640	WRR	150000 U
Soluble Interleukin 2 receptor	97/600	WRR	1000 U

a These preparations are no longer available; *b* IS - International Standard; WRR - WHO Reference Reagent; RR – NIBSC Reference Reagent; *c* Standard is likely to change in the near future; *d* Available only from NIAID - The National Institute for Allergy and Infectious Diseases, Solar Building, 6003 Executive Drive, Maryland, USA .

Nomenclature Committee Meeting Minutes

The nomenclature committee met at the Annual Meeting of the International Society for Interferon and Cytokine Research at Oct. 7, 2001 at the Sheraton Conference Centre in Cleveland, Ohio. The following members of the committee were present: Erik Lundgren (chairman), Richard Pine, Eleanor Fish, Margaret Sekellick, Isabelle Marié.

The meeting focused on the discussion on the nomenclature of two newly identified type I IFN-like molecules.

Keratinocyte derived interferon-like activity (human).

In view of the peptide sequence, some receptor binding data, the ability to induce an antiviral state, pattern of gene induction, inducibility by dsRNA, the **committee decided** that this molecule was a type I interferon, however to consider the designation as **provisional** until more precise data on receptor interaction are provided.

The authors (LaFleur et al., JBC in press) proposed that the molecule should be given the greek letter k (kappa) for keratinocyte derivation; the **committee agreed to accept** this denomination, and decided that the keratinocyte derived interferon should be referred to as IFN-κ and the corresponding gene IFNK.

Limitin (mouse)

Although the peptide sequence is not inconsistent with a type I IFN, the committee felt that the data provided (Oritani et al., Nature Medicine, 6; 659, 2000; Cytokine Growth Factor Rev., 12, 337, 2001) concerning antiviral activity and receptor bindning **were not sufficient** to define the molecule as a type I IFN.

The committee members **agreed on a list of criteria** that should be fulfilled by a new molecule in order to be designated as a type I IFN.

- direct binding to IFNAR
- activation of IFNAR shown as rapid tyrosine phosphorylation
- activation of at least part of the established signalling pathways characteristic of type I IFNs.

Therefore the **committee stated** that mouse limitin is a type I IFN-like molecule, but a final designation is pending until more definite data are provided according to the criteria presented above.

Finally, the nomenclature committee recommends all ISICR members reviewing manuscripts to bring to the committee=s attention any suggestion on new nomenclature at a suitable occasion.

Isabelle Marié Erik Lundgren

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