ISICR

INTERNATIONAL SOCIETY FOR INTERFERON AND CYTOKINE RESEARCH

July 2006
Volume 13, No. 2

ISICR Award Recipients

Seymour and Vivian Milstein Award Winners

Takashi Fujita

Professor, Laboratory of Molecular Genetics, Department of Genetics and Molecular Biology, Institute for Virus Research, Kyoto University

B.A. in Biology, 1977 Waseda University Tokyo, Japan
Ph.D. in Biology, 1982 Waseda University Tokyo, Japan/Studied the mechanism of IFN priming
1982-84/Cancer Institute (Tokyo)/Postdoc.
1984-90/Osaka University/Res. Associate/Studied gene expression of IFN-β and IL-2 in Dr. T. Taniguchi's laboratory.
1990-91/Whitehead Institute/Postdoc.
1991-93/Rockefeller University/Postdoc/Studied gene expression by NF-κB transcription factor family in Dr. David Baltimore's laboratory.
1993-2005/Tokyo Met. Inst. Med. Sci. /Studied the mechanism of IRF-3 activation and identified CARD helicase as a sensing molecule for replicating viruses.
Sept. 2005- Institute for Virus Research, Kyoto University/Professor

Our current interest is to understand how RIG-I family activates innate antiviral responses. It involves determining how exact RNA structures are recognized by the helicase family as substrates, as well as how the CARD-containing helicases switch on the signaling. Furthermore, we hypothesize that the RIG-I family is regulated by certain cellular transcript RNA as well as by invading viral RNAs. The pathological phenotype of RIG-I knockout mouse embryo may be relevant to this hypothesis. Our final goal is to understand the physiological role of the RIG-I family among other RNA-interacting proteins.

*(**Award Recipients**, cont. from page 1)*

Michael Gale, Jr.

Associate Professor
Department of Microbiology
Nancy C. and Jeffrey A. Marcus Endowed Scholar in Medicine Research
The University of Texas Southwestern Medical Center
Dallas, Texas

Michael Gale, Jr, PhD, is Associate Professor in the Department of Microbiology at The University of Texas Southwestern Medical Center in Dallas as well as the Nancy C. and Jeffrey A. Marcus Endowed Scholar in Medical Research. He received his undergraduate degree in Zoology at the University of Washington and his PhD in Pathobiology at the University's School of Public Health and Community Medicine in Seattle, Washington. He completed his postdoctoral training at the University of Washington School of Medicine in the laboratory of Dr. Michael Katze. Dr. Gale directs a large molecular virology and innate defense research laboratory, and teaches Basic and Molecular Virology, Infectious Disease Immunology to second year medical and graduate students at The University of Texas Southwestern Medical Center. Dr. Gale is the Chairman of the UT Southwestern Medical Center graduate program in Molecular Microbiology.

Dr. Gale is a formally trained molecular virologist and specialist in virus signaling, interferon biology and innate intracellular immunity to virus infection. He has studied the virology and viral immunology of herpes viruses, retroviruses, including HIV and SIV, influenza virus, hepatitis C virus, and West Nile virus. Dr. Gale directs a research program that is part of the Hepatitis C Virus Cooperative Research Centers national network funded by the National Institutes of Health and is focused on defining the virus-host interactions that regulate host cell innate antiviral defenses and interferon actions to control hepatitis C virus replication, persistence and the response to antiviral therapy. In addition, Dr. Gale's research also encompasses molecular studies aimed at understanding interferon biology, double-stranded RNA signaling, and the virus-host interactions that support and control West Nile virus infection and emergence.

Dr. Gale is a member of several professional societies, including the American Society for Virology, American Society for Microbiology, and the International Society for Interferon and Cytokine Research. He has published several research papers, review articles, and chapters that address fundamental issues of virology, interferon biology, and innate antiviral host response to infection. He is a recipient of the International Society for Interferon and Cytokine Research Milstein Young Investigator Award, is a recipient of the Ellison Medical Foundation New Scholar in Global Infectious Disease Research Award, and has received both the Burroughs Welcome Investigator in Infectious Disease Research Award and the Research Achievement Award from the W.M. Keck Foundation. Dr. Gale sits on the editorial review boards of *Virology, The Journal of Virology, Antiviral Therapy, The Journal of Interferon and Cytokine Research*, and serves as an *ad hoc* reviewer for other major biomedical research journals.

ISICR Honorary Members - 2006

Wolfgang K. Joklik

The Society's recognition of Wolfgang K. "Bill" Joklik at the 2006 meeting in Vienna with Honorary ISICR Membership is a most fitting tribute to Bill's numerous contributions. It is also a special occasion in that Vienna was his birthplace 80 years ago. Bill Joklik's seminal contributions relevant to the interferon field emerged from his pioneering work in the area of mammalian molecular virology and his landmark research on poxviruses. Bill's accomplishments are many, and include seminal studies in the biology of poxviruses, especially the purification of the virus, gene expression and virus multiplication; findings that facilitated subsequent investigations initially by his laboratory

*(**Award Recipients**, cont. from page 2)*

and then by many groups worldwide. He also pioneered studies on both the mode of interferon antiviral action as well as the antagonistic actions of poxvirus gene products on the interferon system response. In recognition of Bill's groundbreaking scientific contributions in the area of animal virology, he has received many honors. These include election to the National Academy of Sciences of the United States in 1981 and to the Institute of Medicine in 1982, and in 1991 he received the ICN International Prize in Virology.

Born in Vienna, Austria, in 1926, Bill moved with his family to Australia where he earned his B.Sc. (1947) and M.Sc. (1948) degrees in Biochemistry at the University of Sydney. He then earned his D. Phil. in Virology (1952) at the University of Oxford, Sir William Dunn School of Pathology, where he carried out studies on T1 and T2 phage multiplication. His postdoctoral training was with Prof. Kalckar in Copenhagen, where he and Paul Berg together carried out seminal studies on the enzymatic synthesis nucleoside triphosphates. Bill then was a Fellow at the Australian National University in Canberra (1953-62) where he initiated his studies on poxviruses which became a cornerstone of his scientific career. He spent a sabbatical year at NIH in 1959-60 with Dr. Harry Eagle (and subsequently created Joklik's modification of Eagle's MEM), was an Associate Professor and then Siegfried Ullman Professor of Cell Biology at Albert Einstein College of Medicine (1962-1968) in New York where he began seminal work on the double-stranded RNA virus, reovirus. In 1968 Bill moved to North Carolina and Duke University Medical Center as Chairman of the Department of Microbiology and Immunology (1968-1992) and James B. Duke Distinguished Professor of Microbiology. Bill built the Microbiology Department at Duke into one of the very top departments in the USA before becoming a Distinguished Professor Emeritus in 1996.

Bill Joklik was a Charter member, both of The International Society for Interferon Research and of the Editorial Board of the Society's official journal, then called the *Journal of Interferon Research*. Bill contributed in many ways to his profession. He served generously on numerous national and international Advisory Committees and on the Editorial Boards of several journals in addition to *JIR*. Bill was Editor-in-Chief of *Virology* for 19 years, he was an Associate Editor of the *Journal of Biological Chemistry* for ten years, and he was Editor-in-Chief of *Microbiological Reviews*. Bill Joklik was also the Founding President of the American Society for Virology (ASV).

Bill Joklik made especially substantive contributions to the interferon and virology fields over a lengthy scientific career. He was a leader and pioneer in both the basic and applied research arenas. He has been and continues to be an ambassador for the interferon and virology fields in a unique manner that spans the Austrian/German and British/American cultures. Recognition of Bill in Vienna as an Honorary Member of our Society is a well-deserved distinction given his numerous scientific and professional achievements.

Mariano Esteban
Professor of Biotechnology
Centro Nacional de Biotecnologia, Madrid

Thomas C. Merigan
George and Lucy Becker Professor of Medicine
Stanford University School of Medicine, Palo Alto

Charles E. Samuel
C. A. Storke Professor of Biochemistry and Virology
University of California, Santa Barbara

Sidney Pestka

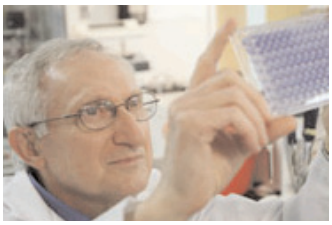


Photo by Sandy Burstein, Courtesy of the Lemelson-MIT Program

ISICR Honorary Membership is awarded to Dr. Sidney Pestka

The following is a shortened press release from the Lemelson-MIT program about Dr. Sidney Pestka that highlights his many contributions to the field of Interferon research.

*(**Award Recipients**, cont. from page 3)*

Dr. Sidney Pestka RECEIVES LEMELSON-MIT LIFETIME ACHIEVEMENT AWARD

On May 3, 2006, Dr. Sidney Pestka, Chairman of the Department of Molecular Genetics, Microbiology and Immunology at the UMDNJ-Robert Wood Johnson Medical School, received the Lemelson-MIT Lifetime Achievement Award for his seminal work on interferons. This work led to groundbreaking treatments for chronic hepatitis B and C, multiple sclerosis and cancers. The annual award, which recognizes a remarkable individual for his or her lifelong commitment to improving society through invention, was given on May 3rd at a private ceremony at the Museum of Contemporary Art in Chicago.

"Dr. Pestka's interferon discoveries and subsequent inventions have made a profound impact on medicine and health care," said Merton Flemings, director of the Lemelson-MIT Program, which gives the annual award. "His work has opened doors to new treatments for millions of people who suffer from devastating diseases and it has fueled the multi-billion dollar biotherapeutics market."

Dr. Harold L. Paz, former Dean of Robert Wood Johnson Medical School in Piscataway, N.J., considers Pestka's work to be "a critical catalyst in the development of the biotechnology industry."

In the Beginning

Alick Isaacs and Jean Lindenmann of the National Institute for Medical Research in London discovered interferons in 1957, the year Pestka earned his undergraduate degree from Princeton University. They observed that when a virus attacked chicken cells, the cells secreted a protein. Isaacs and Lindenmann called this protein interferon.

"The great promise of interferon as an antiviral agent was evident from the moment of its discovery," said Pestka. But little was understood about interferons at the time, especially how to produce them in the quantities and quality needed to manufacture effective therapies.

Pestka's patented inventions are the foundation of a $6 billion global market for interferon biotherapeutics, which provide life-saving treatments for millions of people. For instance, there are more than 600 million people in the world with hepatitis B and C who could potentially be treated with interferon therapies.

But according to Pestka, the best is yet to come. "Interferons have not yet been used to their full capacity," he said. "We still have to develop new ways to use them and treat viral diseases, cancers and other illnesses."

In 1990, Pestka founded Pestka Biomedical Laboratories (PBL) to continue his research on antiviral compounds and provide high-quality interferons to the research community. PBL (http://www.pblbio.com) is the only company that supplies all the human interferons to investigators worldwide. Pestka and his team plan to utilize interferons to develop new treatments for many diseases, especially for cancer and viral diseases. They have also developed and patented ultra interferons(TM), which are 20 to 30 times more potent than current interferon drugs. A major goal is to deliver these interferons directly to tumor sites to minimize the toxic side effects of systemic administration.

The Next Generation

In addition to his work as founder and chief scientific officer at Pestka Biomedical Laboratories, Pestka continues to pass on his knowledge by teaching classes and chairing the Department of Molecular Genetics, Microbiology and Immunology at Robert Wood Johnson Medical School. Over the past 35 years he has trained numerous postdoctoral fellows, visiting scientists and pre-doctoral students from 20 countries and five continents.

ABOUT THE LEMELSON-MIT PROGRAM

The Lemelson-MIT Program aims to enable and inspire young people to pursue creative lives and careers. It particularly encourages young people to engage in invention and to pursue sustainable new solutions to real world problems. It accomplishes this mission through outreach activities and annual

*(**Award Recipients**, cont. from page 4)*

awards, including the Lemelson-MIT Prize and the Lemelson-MIT Lifetime Achievement Award, which recognizes the nation's most talented inventors and innovators, and promotes them as living role models to encourage future generations to follow their examples.

Jerome H. Lemelson, one of the world's most prolific inventors, and his wife Dorothy founded the Lemelson-MIT Program at the Massachusetts Institute of Technology in 1994. It is funded by The Lemelson Foundation, a private philanthropy that celebrates and supports inventors and entrepreneurs in order to strengthen social and economic life. More information is online at http://web.mit.edu/invent/.

Seymour and Vivian Milstein Young Investigator Award Winners

Sudhakar Kalakonda
University of Maryland School of Medicine
Baltimore, MD

Markus J. Hofer
University of Sydney
Sydney, Australia

Gregory A. Peters
Cleveland Clinic Foundation Lerner Research Inst.
Cleveland, OH

Brendan J. Jenkins
Monash Institute of Medical Research
Clayton, VIC, Australia

Alexander Niessner
Emory University
Atlanta, GA

Christina Fleischmann Memorial Award Winner

Dedicated to the memory of outstanding IFN research scientist, Dr. Christina Fleischmann.
At the time the newsletter was formatted, the winner had not yet been selected.

ISICR Travel Award Winners

Jesper B.Andersen
Nina Ank
Florence Baychelier
Luisa Cimmino
Eliana M.Coccia
Ana P.Costa-Pereira
Natalie Dror
Heather Ezelle
Noriyuki Fujikado
Ana M. Gamero
Michael P. Gantier
Janette M. Harro
Bret A. Hassel
Mike Hiroi
Aaron T. Irving
Cassandra M.James
Brian Keller
Christopher D.Krause
Xiaoling Li
Yueh-Ming Loo
Barbora Lubyova
Giorgio Mangino
Ashley S.Mansell
Isabelle Marie
Luis Martinez-Sobrido
Andrea Paun
Courtney R. Plumlee
M. R. Sandhya Rani
Srijata Sarkar
Joel E. Schaley
Olga N. Scheglovitova
Martina Severa
Anette H. Van Boxel-Dezaire
Deborah J. Vestal
Carola Vogt
Wei-Bei Wang
Christine L. White
Zhihong Yang
Howard C.H. Yim
Sung-il Yoon
Xia Zhang

Interviews with ISICR Milstein Award Winners

Thomas Tan

ISICR: Congratulations on receiving the Milstein Award this year! Where were you when you first found out that you have been selected to receive the prestigious Award?

T Fugita: I was in my office at Kyoto University one morning. I received a call from ISICR President, Professor Otto Haller.

M Gale: I was in my office meeting with one of my students, actually discussing mechanisms of RIG-I signaling. Otto Haller called me with the nice message that I had been selected to share this award with my friend, Takashi Fujita. Takashi and I enjoy a productive collaboration on research involving RIG-I and IPS-1. I am very happy to share this award with Takashi.

ISICR: What do you feel are your most important contributions to the field of cytokine research?

T Fujita: Many attempts were made in the last 50 years to identify molecule(s) that initiate type I interferon activation signal. It was known that replicating viral RNA triggers the signal, but its sensor was not identified. I identified RIG-I helicase as the long sought sensor for replicating virus.

M Gale: My own research interests are focused on understanding how viruses trigger and control host defense and IFN actions, and on how regulation of host defense and IFN processes can define the outcome of infection. A major area of our work has been centered on hepatitis C virus, which is a global public health problem. An important contribution of my group's research is having defined a major intracellular host defense pathway that is responsive to and regulated by HCV. Our work suggests that the RIG-I/IPS-1/IRF pathway is targeted and regulated by HCV during infection, which in part allows the virus to persist in millions of infected people. We defined a new class of antiviral drugs, the HCV protease inhibitors, as host response modulators because they release the HCV blockade to the RIG-I pathway by interfering with a viral enzyme that otherwise cleaves and disables IPS-1. This gives us hope that these compounds will function to restore innate antiviral defenses in clinical practice.

ISICR: Why so many different names - MAVS, IPS-1, VISA and Cardif - for one protein? Do you have a favorite?

T Fujita: Four groups independently identified the downstream adaptor of RIG-I. Although the molecule is registered in the database, it did not have a name. The four groups gave different names. The RIG-I family is troublesome in another way. RIG-I (retinoic acid inducible gene I), MDA5 (melanoma differentiation associated gene 5) and LGP2 (laboratory of genetics and physiology 2) are recently implicated in the regulation of antiviral innate immunity. These genes had names before their functions were discovered. I would propose new names such as HElicases for Cytoplasmic Signaling (HECS-1, -2 and -3).

M Gale: All the names are good and are descriptive acronyms. When we identified this molecule we were going to call it yet another name but have since used IPS-1. I agree with Tak: A nomenclature committee should consider this issue.

ISICR: What ignited the fire in you to become a scientist? Who was your mentor or role model in your scientific career?

T Fujita: I was fascinated by chemistry in high school. Dr. Seiya Kohno, my thesis advisor, gave me my introduction to interferon research as well as being a scientist. I learned the bases of molecular biology from Professor Tadatsugu Taniguchi.

M Gale: I always liked to know the mechanics of how things work. This has not changed. I have a long background in the lab starting from student helper to tech to grad student, post-doc and PI. I was mentored by several outstanding people over this time line. Looking back now, I think the answer to the second part of your question comes from two traditional areas of training, grad school and post-doc. As far as a pure scientist, my mentor in

*(**Interviews**, cont. from page 6)*

graduate school, Dr. Marilyn Parsons, has been instrumental in my understanding of the scientific process and was a major force in my training in molecular biology and cell signaling. She is an outstanding scientist that brought me into a realm of pure science, so this was a powerful mentored experience. As a student, I was highly influenced by the work of Dr. T. Taniguchi and his group's identification of new transcription factors called interferon regulatory factors (IRF) 1 and 2 (Takashi Fujita was involved in this work!). This made an easy decision for me to conduct post-doctoral research in the IFN arena. My interests in IFN and protein kinase signaling came together, as I joined the lab of Dr. M. Katze to study PKR and IFN for my post-doc years. Dr. Katze mentored me in new areas of virology/IFN biology, and really focused on improving my skills in writing, verbal presentation, and grant writing.

ISICR: What do you think are the components of a successful lab?

T Fujita: Free ideas, a love to explore facts, patience.

M Gale: Good interactions, having bright and talented people next to you, and collaborating with other talented scientists.

ISICR: If you weren't a scientist, what would you be?

T Fujita: School teacher

M Gale: Maybe a laid back fisherman or an engineer/chemist working in the area of alternative energy sources.

ISICR: What keeps you up at night?

T Fujita: Various things: Research, how to cook the morning eggs, how to fix my bicycle, a new joke…

M Gale: My teenage daughter is dating...

ISICR: If you could change one thing in your career, what would it be?

T Fujita: The opportunity to do undergraduate or graduate studies in a foreign school.

M Gale: Actually, I would not change a thing.

ISICR: This year's ISICR meeting will take place in the beautiful city of Vienna, Austria. The name of the city alone evokes thoughts of great music. What music is in your CD player these days?

T Fujita: Rachmaninov.

M Gale: Right now I have a CD in the player/iPod from a group called Antigone Rising. I am a piano player since age 8, trained in classical piano, so Mozart is my all time favorite. Vienna will be special.

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

The EXEC DIREC Corner

Internet Improvements at ISICR.org

This year, we at the society office have been working on a number of changes to improve our services for ISICR members. Many of these modifications are internet-based, allowing ISICR to stay on the "cutting edge" with ever-growing technologies and internet usage.

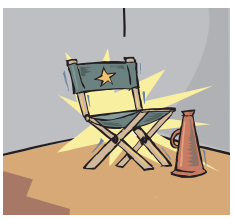
To that end, this year, we have included several new internet features for ISICR members. Earlier this year, you were all encouraged to renew your membership online. The process went very well, with few glitches reported. Feel free to encourage your colleagues to join online too - new memberships can be processed online as well.

Recently, we launched an online awards submission process. While this eased the process somewhat for applicants, it completely revised the review process. Instead of the awards committee having to make copies and mail numerous applications for review, all of the applications could be viewed online. Reviews were submitted by an electronic form and the data easily compiled.

And now, the ISICR website has been updated. The redesigned site has several new features, including: easier navigation, cleaner look and feel, fresh new look with brighter colors. And, the revised website will continue to have the growing slide repository for ISICR members (thanks to Howard Young for keeping the slide repository contents growing and dynamic). A special thanks to Delores Francis, Ray Wolfe and Kim Kline for helping to make these improvements.

As always, feel free to contact me with your comments and suggestions.

Debra L. Weinstein, Ph.D.
Executive Director
dweinstein@faseb.org



NEW ISICR MEMBERS

We welcome the following new members to the ISICR and look forward to their participation in society affairs and the annual meeting.

Samuel E. Adunyah
Nashville, TN

Rafael Aldabe
Pamplona, Spain

Basel Al-Ramadi
United Arab Emirates

Nina Ank
Aarhus, Denmark

Mario Barro
Bethesda, MD

Florence Baychelier
Villejuif, France

Elaine V. Beaulieu
Manchester, England

Herdis Bender
Aachen, Germany

Etty N. Benveniste
Birmingham, AL

Tsung-Hsien Chang
Taipei, Taiwan

Sherman M. Cheng
Hong Kong, China

Luisa Cimmino
New York, NY

Iriana A. Colorado
Fairfield, NJ

Ana P. Costa-Pereira
London, UK

(*New Members*, cont. from page 8)

Helen E. Cumming
Victoria, Australia

Adi Diab
New York, NY

Leopold Eckhart
Vienna, Austria

Heather Ezelle
Baltimore, MD

Jerzy P. Fraczek
Cleveland, OH

Annabel Friend
Beaconsfield, Australia

Michael P. Gantier
Clayton, Australia

Natalia V. Giltiay
Cleveland, OH

Gloria Gonzalez-Aseguinolaza
Pamplona, Spain

Markus H. Heim
Basel, Switzerland

Heike M. Hermanns
Aachen, Germany

Markus J. Hofer
Sydney, Australia

Xiangao Huang
New York, NY

Brendan J. Jenkins
Victoria, Australia

Wolfgang K. Joklik
Durham, NC

Sudhakar Kalakonda
Baltimore, MD

Darrell A. Kapczynski
Athens, GA

Young S. Kim
Daejeon, Korea

Christopher Lallemand
Villejuif, France

Yiu K. Leung
Chicago, IL

Catriona T. Miller
Richmond, VA

Ali Mirazimi
Stockholm, Sweden

Kerri A. Mowen
La Jolla, CA

Marcus Mueller
Sydney, Australia

Alexander Niessner
Atlanta, GA

Lee Noll
Ann Arbor, MI

Lasse D. Olesen
Odesen, Denmark

Mathieu Pampin
Villejuif, France

Courtney R. Plumlee
New York, NY

Zoran Popmihajlov
New York, NY

Marco Prinz
Gottingen, Germany

Mariae E. Remoli
Roma, Italy

Joel E. Schaley
Bloomington, IN

*(**New Members**, cont. from page 9)*

Matthias Schweizer
Bern, Switzerland

Martina Severa
Roma, Italy

Anne M. Sillanpaa
Helsinki, Finland

Aristobolo M. Silva
Belo Horizonte, Brazil

Venkataraman Sriram
Fremont, CA

Ghada Suleiman
London, UK

Peng Sun
Baltimore, MD

Scott J. P. Thomson
London, UK

Anette H. Van Boxel-Dezaire
Cleveland, OH

Cheriyath Venugopalan
Cleveland, OH

Brett Verstak
Melbourne, Australia

Carola Vogt
Freiburg, Germany

Thomas Weichhart
Vienna, Austria

Christine L. White
Cleveland, OH

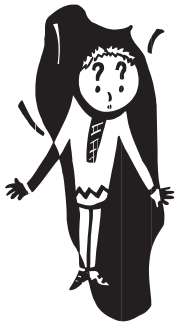
Howard C. H. Yim
Hong Kong, China

Gang Zheng
Boston, MA

DID YOU KNOW?????

About the summer ozone problem?

The Cy5 dye is very sensitive to ozone degradation, and ozone concentrations get high during the summer season. You may want to check with the GE-Amersham site for information on this and reagents that can protect the Cy5 from ozone degradation.



There are ozone-free chambers (the size of a small room) that can be assembled over the scanner/work area that will accomplish the same thing. In the short term, trying to do hybridizations in the VERY early AM and looking at the daily ozone reports may be helpful.

THE ISICR SLIDE REPOSITORY

Over 200 slides now available for member only downloads!!!!!!

Ever see a slide in a talk that you wish you could use for your own presentation? Well now this may be possible through the ISICR Slide Repository. Members can now go in and post slides that they have developed or download slides that others have provided to the membership. For this member only feature, you need to have your member number so if you are not sure what that is, please contact the membership office. We urge members to upload general slides that other members can use for lectures, classes, seminars, etc. Slides cannot be changed without permission from the member/organization who donated it and all copyright permissions must be obtained. If you have trouble uploading or downloading slides, please contact Howard Young at younghow@mail.nih.gov.

New Member Minibios

Thomas Tan

Samuel Evans Adunyah, PhD

Dr. Adunyah received his PhD Biochemistry degree in 1987 from the Department of Biochemistry and Molecular Biology at the University of Louisville, Kentucky. His thesis work focused on the "Roles of cAMP and Calmodulin-dependent protein kinases in regulation of Ca2+ homeostasis". After graduation he completed a two-year postdoctoral training at the Cancer Research and Treatment Center at the University of New Mexico, Albuquerque. It was during this time that he was exposed to cytokine research. Subsequently, he was appointed as a research instructor in the Hematology/Oncology Division of the Comprehensive Cancer at UAB, Birmingham, Alabama. Since 1991, he has been a faculty member at Meharry Medical College, Nashville where he has risen to the rank of a tenured Professor of Biochemistry. In 1998 he was appointed Chairman of Biochemistry and served until 2005. Currently, he is the Chairman of Cancer Biology in the School of Medicine. Generally, Dr. Adunyah's research focuses on molecular signal transduction mechanism of cytokines in leukemia cell models. However, he currently focuses on interleukin-17 (IL-17) and interleukin-21(IL-21). He teaches PhD level courses in cytokines and in molecular genetics. In addition, he teaches medical students. He has played a major role in training a large number of African-American students.

Reasons for joining the ISICR: Since 1987 I have been very passionate about cytokine biology; in particular the signaling mechanisms underlying their biological effects. I believe that the ISICR will provide an excellent opportunity to meet some of the top researchers in the field and to exchange scientific information on these interesting biological molecules, which are the major immune and hematopoietic system regulators.

Ana P. Costa-Pereira, PhD
Imperial College London
Faculty of Medicine,
Department of Oncology
Hammersmith Hospital,
Cyclotron, 5th floor
Du Cane Road
London W12 0NN,
United Kingdom

Ana Costa-Pereira received her PhD from the University College Cork, Ireland, in 1999, where she worked on Fas-induced apoptosis under the supervision of Prof. Thomas G. Cotter. She then joined Dr. Ian M. Kerr's group at Cancer Research UK - London Research Institute (formerly known as Imperial Cancer Research Fund), where she worked as a Postdoctoral Research Fellow until last October. She joined Imperial College London in October 2005 as a Principal Investigator and Lecturer in Cell Signalling.

Ana's main research interest at the time of joining Ian's laboratory, was childhood leukaemia and apoptosis, but she was soon 'infected' by Ian's enthusiasm for the interferons. Ana believes that the years spent in his lab have been pivotal in shaping her as a scientist and defining her current and future research. Accordingly, her group continues to study signal transduction pathways activated by the interferons and IL-6-type cytokines. In particular, her group is currently focusing their attention on 'novel' candidate molecules identified through a number of siRNA screens carried out in mammalian cells.

Ana has been attending the ISICR meetings since 2000. She feels that joining the Society will not only provide her with greater networking opportunities, but will also allow her to be a more active member of the 'interferon and cytokine community'.

*(**Mini Bios**, cont. from page 9)*

Michael Gantier, Ph.D.

I have recently graduated from the University College Dublin (Ireland), where I was working in the laboratory of Seamas Donnelly on RNA interference for my PhD (the title of my PhD was 'RNAi in mammalian cells: studying the emerging roles of double stranded RNAs'). A few months ago I thus moved to Professor Bryan Williams' lab, newly opened in the Monash Institute of Medical Research in Melbourne, to carry out a postdoctoral project linking RNAi and innate immunity. This is a very active field of research, of prime importance for the development of therapeutic approaches of RNAi in humans.

Reasons for joining the ISICR
I joined the ISICR to get to know more people working in the exciting field of innate immunity - and potentially create collaborations around the world.

Editor Minibio

Who makes this newsletter happen?

Dr. Hannah Nguyen, Ph.D.
Group Leader
Department of Pharmacology and Cell Biology
MethylGene, Inc.
Montreal, Quebec, Canada

Hannah Nguyen received her Ph.D. with honors in the field of Microbiology and Immunology at McGill University in Montreal, Canada. Her thesis work, done in the Hiscott lab, focused on the regulation of gene expression and cell growth by the interferon regulatory factors. She performed her postdoctoral studies in the Stark lab at the Lerner Research Institute of the Cleveland Clinic Foundation, where she investigated STAT1-dependent and -independent pathways of interferon-induced gene expression. Hannah is currently Group Leader in the Department of Pharmacology and Cell Biology at MethylGene, Inc., a biopharmaceutical company in Montreal focused on the discovery and commercialization of novel and proprietary enzyme inhibitors for the treatment of cancer and infectious diseases. Since joining MethylGene in 2002, her research and development efforts have included contributions to the development of novel small molecule, orally available, multi-targeted kinase inhibitors for oncology specific for c-met and other kinases synergistically involved in the initiation and maintenance of angiogenesis and tumour growth, the determination for Phase I/II combination clinical trials of chemotherapeutic agents that collaborate synergistically with MethylGene's rationally designed, isotype-selective small molecule histone deacetylase inhibitor MGCD0103, and the target validation and inhibition of histone methyltransferases. Although her work does not directly involve interferons and cytokines, Hannah enjoys contributing as newsletter editor to the ISICR, a society which, for her, positively impacted her career and love of research - not only because of the support from her Ph.D. and postdoctoral mentors, but also because it provided a close-knit, friendly network for research collaborations as well as opportunities with Travel Awards to attend and present her work at ISICR meetings. Aside from science, Hannah loves classical music and keeps in touch by teaching piano and performing chamber music works with fellow violinists.

ISICR Members in the News

Dr. Elizabeth Kovacs, a member of the ISICR Awards committee, has been appointed the Associate Director of the Burn and Shock Trauma Institute and Vice Chair for Research of the Department of Surgery at Loyola University Medical Medical Center, Stritch School of Medicine, Chicago, Illinois. Dr. Kovacs is also Department of Surgery Professor, Department of Cell Biology, Neurobiology & Anatomy Member, Immunology & Aging Program and Director, Alcohol Research Program at Loyola.

Dr. Howard Young, Past ISICR President, is a 2006 recipient of the National Public Service Award. The American Society for Public Administration (ASPA) and the National Academy of Public Administration (NAPA) proudly established the National Public Service Awards (NPSA) to honor individuals who make outstanding contributions and whose accomplishments can be viewed as models of public service within and outside the work environment. The National Public Service Awards Program recognizes individuals who exhibit the highest standards of excellence, dedication, and accomplishment over a sustained period of time and who are creative and highly skilled career managers at all levels of public service. For the list of the 2006 winners, see: http://www.napawash.org/about_academy/npsa2006winners.html

Dr. Neil Foster has taken a new position. He is now at the School of Veterinary Medicine and Science, Sutton Bonington Campus, The University of Nottingham, Loughborough United Kingdom LE12 5RD
Email: N.Foster@nottingham.ac.uk
Telephone (UK) 0115 9516433

Dr. Kathryn Zoon, Past ISICR President and Honorary Member selectee (2005), has been named Director of the Intramural Research Program, National Institutes of Allergy and Infectious Diseases. The NIAID intramural program (http://www3.niaid.nih.gov/about/organization/dir/default.htm) consists of 19 laboratories, 4 branches and 1 section. Scientists in the Division of Intramural Research (DIR) conduct laboratory and clinical research covering a wide range of biomedical disciplines related to infectious diseases, immunology, and allergy. Much of the research in DIR involves investigation of the multitude of interacting cells, antibodies, receptors, proteins, and chemicals that compose the immune system.

Cartoon courtesy of Ken Frauwirth (kfrauwir@umd.edu)

Clinical Trials

Hannah Nguyen

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

The **Role of Stromal Cell-Derived Factor-1 (SDF-1)/CXC Chemokine Receptor 4 (CXCR4)** in Metastasis of Laryngeal and Hypopharyngeal Squamous Cell Carcinoma. ClinicalTrials.gov identifier NCT00174096. Location: National Taiwan University Hospital, Taipei, 100, Taiwan. Principal Investigator: Ching-Ting Tan, MD, PhD, National Taiwan University Hospital, 886-2-23123456 Ext. 5222, christin@ha.mc.ntu.edu.tw. Study ID Numbers: 9461700624

The Role of **Cytokine**-Serotonin Interactions in Post-Stroke Depression. ClinicalTrials.gov identifier NCT00254020. Location: Sunnybrook and Women's College Health Sciences Centre, Toronto, Ontario, M4N 3M5, Canada. Principal Investigator: Krista L Lanctot, PhD, Sunnybrook and Women's College Health Sciences Centre, (416) 480-6100 Ext. 2241, krista.lanctot@sw.ca. Study ID Numbers: 380-2004

Implantation and **Cytokine** Expression (to identify pre-implantation endometrial and embryo cytokine expression profiles associated with successful and unsuccessful embryo implantation in assisted reproduction cycles). ClinicalTrials.gov identifier NCT00264992. Location: University Medical Center Utrecht, Utrecht, 3584 CX, Netherlands; Principal Investigator: Nick Macklon, Prof. dr., University Medical Center Utrecht, 0031 30 250 6427, n.s.macklon@umcutrecht.nl. Study ID Numbers: ICE-STUDY

Cyclophosphamide and Fludarabine Followed by Cellular Adoptive Immunotherapy, Vaccine Therapy, and **G-CSF, GM-CSF,** CpG 7909, or **Interleukin-7** in Treating Patients With Metastatic Melanoma. ClinicalTrials.gov identifier NCT00324623. Location: Centre Hospitalier Universitaire Vaudois, Lausanne, CH-1011, Switzerland. Study Chairs: Verena Voelter, MD 41-213-140-165 Centre Hospitalier Universitaire Vaudois, and Serge Leyvraz, MD, Centre Hospitalier Universitaire Vaudois. Study ID Numbers: CDR0000468827; CHUV-CEPO-ITA-02

Denileukin Diftitox and **Interleukin-2** in Treating Patients With Metastatic Kidney Cancer. ClinicalTrials.gov identifier NCT00278369. Location: Robert H. Lurie Comprehensive Cancer Center at Northwestern University, Chicago, Illinois, 60611-3013, United States. Clinical Trials Office - Robert H. Lurie Comprehensive Cancer, 312-695-1301, cancer@northwestern.edu. Study chair: Timothy M. Kuzel, MD, Robert H. Lurie Cancer Center. Study ID Numbers: CDR0000456408; NU-04U1

IL-1 Trap for Treatment of CIAS1 Associated Periodic Syndromes (CAPS). ClinicalTrials.gov identifier NCT00288704. Location: 19 US States. Contact: Denise Resnik, 1-888-604-3074. Study ID Numbers: IL1T-AI-0505

Study of **TNFerade™** Biologic With 5-FU and Radiation Therapy for the Treatment of Pancreatic Cancer. ClinicalTrials.gov identifier NCT00051467. Location and Contacts in 11 US States. Study ID Numbers: GV-001.004

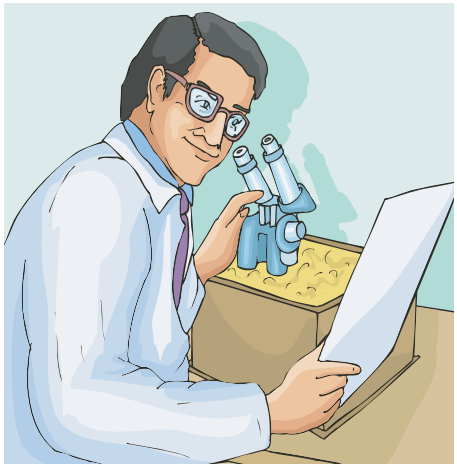
Australian Trial in Acute Hepatitis C (all participants will be offered a 24 week course of **pegylated interferon alfa 2a** which will be commenced within 12 weeks of screening (patients coinfected with HIV will be offered 24 weeks with **pegylated interferon alfa 2a** plus ribavirin). ClinicalTrials.gov identifier NCT00192569. Location: numerous locations throughout Australia. Contact: Barbara Yeung, +61 2 9385 0900, byeung@nchecr.unsw.edu.au. Principal investigators: John Kaldor, PhD, National Centre in HIV Epidemiology and Clinical Research and Greg Dore, MB BS FRACP, National Centre in HIV Epidemiology and Clinical Research. Study ID Numbers: 1R01DA 15999-01; ATAHC

(*Clinical Trials* continued from page 13)

A Phase II Study of **ONCOVEXGM-CSF** in Stage IIIc and Stage IV Malignant Melanoma. ClinicalTrials.gov identifier NCT00289016. Location: 6 US States. Contact: Glenn E Morrison, PhD, 818-665-4212, gmorrison@symbionresearch.com. Principal Investigator: John Nemunaitis, MD, Mary Crowley Medical Research Center. Study Director: Janice Steiner, D Phil FRCP, BioVex Limited Study ID Numbers: ONCOVEX GM-CSF 002/03

A Study to Assess the Safety of Live Intranasal **Sendai Virus Vaccine** in Children and Toddlers (to try to prevent croup caused by parainfluenza virus type 1). ClinicalTrials.gov identifier NCT00186927. Location: St. Jude Children's Research Hospital, Memphis, Tennessee, 38105, United States; Contact and Principal Investigator: Jerry L Shenep, MD, 1-866-278-5833, info@stjude.org. Study ID Numbers: SENDAI

Vicriviroc, a **CCR5 Inhibitor**, Added to an Optimized Antiretroviral Therapy for Previously Treated HIV (VICTOR-E1) (Study P03672). ClinicalTrials.gov identifier NCT00243230. Location: 15 US States, Columbia and France. Contact: SP Clinical Trial Registry Call Center, 1-888-772-8734. Study ID Numbers: P03672; EudraCT number 2005-001057-21



Basic Guide for Scientists

(author unknown)

I. Science Classification

If it's green or it wiggles, it's part of Biology.

If it stinks, it's Chemistry.

If it doesn't work, it belongs to Physics.

II. Rules for Laboratory Workers

When you don't know what you're doing, do it neatly.

First draw your curves, then plot the data.

Experience is directly proportional to the equipment ruined.

Experiments must be reproducible. They should all fail the same way.

A record of data is essential. It indicates you have been working.

In case of doubt, make it sound convincing.

Do not believe in miracles, rely on them.

Teamwork is essential in the lab. It allows you to blame someone else.

Always leave room to add an explanation when it doesn't work.

III. Finagle's Laws, Creed, and Motto

First Law - If anything can go wrong with an experiment, it will.

Second Law - No matter what result is anticipated, there is always someone willing to fake it.

Third Law - No matter what occurs, there is always someone who believes it happened according to his pet theory.

Fourth Law - No matter what the result, there is always someone eager to misinterpret it.

Creed - Science is truth. Don't be misled by facts.

Motto - Smile; tomorrow it will be worse.

WWW

Atlas of Hematology

http://www.hematologyatlas.com/

This Atlas has the goal of supplying slides to hematologists, laboratory technicians, medical school students, biologists as well as professionals working in the field of morphology of blood cells. The majority of the smears come from blood and bone marrow samples; however note that also shown here are cavitary fluid materials, scraped cells, etc. The panchromic stain used is always "Leishman", and added, in addition, are rare cytochemistry reactions. The pictures taken were scaled up magnifications of: x200; x400; x630; and x1,000 with photomicroscopes from Zeiss and Nikon. These pictures show normal cells from blood and bone marrow and include a substantial variety of hematologic diseases, some of these being rather rare. All these pictures are unretouched; sometimes artifacts and stain precipitates are shown. The nomenclature used is from the Italian school of morphology of the blood (Ferrata school).

In conclusion, I want to make clear that this Atlas will always be under construction, and periodically new photographic sequences will be added.

Nivaldo Medeiros, MD

BioGRID

http://www.thebiogrid.org/

Access to large datasets of biological interactions is critical for interrogation of gene/protein function and analysis of global network properties. BioGRID is a freely accessible database of protein and genetic interactions. BioGRID release version 2.0 includes >116,000 interactions from Saccharomyces cerevisiae, Caenorhabditis elegans, Drosophila melanogaster and Homo sapiens. Over 30,000 interactions have recently been added from 5,778 publications through exhaustive curation of the Saccharomyces cerevisiae primary literature. An internally hyper-linked web interface allows for rapid search and retrieval of interaction data. Full or user-defined datasets are freely downloadable as tab-delimited text files and PSI-MI XML. Pre-computed graphical layouts of interactions are available in a variety of file formats. User-customized graphs with embedded protein, gene and interaction attributes can be constructed with a visualization system called Osprey that is dynamically linked to the BioGRID.

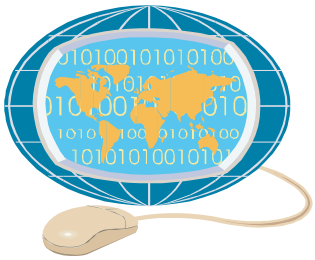
Contact Information:
Email: gridadmin@mshri.on.ca
Fax: Attention BioGRID Administrator
@ (416) 586 - 8869

Cell Line Data Base

http://www.biotech.ist.unige.it/interlab/cldb.html

Istituto Nazionale per la Ricerca sul Cancro
c/o Centro Biotecnologie Avanzate, Torre B - Piano 1
Largo Rosanna Benzi, 10 Genova - Italy
CLDB, the first database set up within the Interlab Project, contains detailed information on 4,850 human and animal cell lines that are available in many Italian laboratories and in some of the most important European cell banks and cell culture collections.

If you want to start an on-line search you can:
Navigate HyperCLDB, also by means of Free text search and by Cell line name index.
HyperCLDB now includes links to PubMed data base of bibliographic biomedical references.



Cell line typology
3,403 human lines
1,446 animal lines from **63** animal species
1,778 lines from **297** pathologies
1,608 tumor lines from **201** tumors
1,552 normal lines
389 transformed lines

Contents
The most relevant data refer to:
Identification (name, typology, karyology, morphology,...)
Origin (tissue, species, tumour, pathology,...)
Properties (specific functions, products and applications)
Preservation and culture characteristics
Retrieval sources (bibliographic references, catalogue codes,...)
Extensively characterized cell lines (immunological profile, cytogenetic analysis...)
Quality control (identity and sterility)
The value of data included in CLDB is witnessed by the following indices:
High percentage of cell lines that have never been described previously in any other catalogue (ca. 54%)
High percentage of cell lines included in well characterized *cell culture collections* (ca. 82%)
These indices show that the CLDB contents are truly original.

For suggestions and information please contact:
paolo.romano@istge.it

US Department of Defense Congressionally Directed Medical Research Programs
http://cdmrp.army.mil/

The Congressionally Directed Medical Research Programs (CDMRP) originated from a unique partnership among the public, Congress, and the Department of Defense. Grassroots advocacy organizations provided much of the impetus that led to a FY 92 appropriation of $25 million targeted to funding research on the screening and diagnosis of breast cancer among military women and dependents. In response to continuing public requests led by the National Breast Cancer Coalition, Congress appropriated an additional $210 million in FY93. Since that time, the CDMRP has expanded to become second only to the National Cancer Institute as a source of funding for breast cancer research.

Current Funding opportunities exist in:

Breast Cancer
Prostate Cancer
Peer Reviewed Medical
Ovarian Cancer
Neurofibromatosis
Tuberous Sclerosis Complex
Chronic Myelogenous Leukemia
Prion Diseases
Minority & Underserved Populations

GeneDesign
http://slam.bs.jhmi.edu/gd/

GeneDesign is a web-based program for the design of synthetic genes. It consists of several modules that automate the tasks associated with the manipulation of synthetic sequences. There are many ways to use GeneDesign. Probably the most common is to start with the protein sequence of an interesting gene and proceed through reverse translation to oligo design. This path is explored in the Design a Gene section of the manual.

Each GeneDesign module can be accessed and used individually, as well. Each module is covered in the GeneDesign Modules section of the manual. Every module has help text that appears at the top of the screen and contains the basic requirements for the use of the module. The help text will also bring to light user errors in the process and help diagnose design flaws in the synthetic sequence. The list of restriction enzymes GeneDesign currently recognizes is here. It is a non-redundant list; only one

isoschizomer for each type of site is used. See Rebase for other available isoschizomers. The GeneDesign manual can be downloaded in pdf form.

The Human Protein Atlas Program

http://www.proteinatlas.org/

The Swedish Human Protein Atlas (HPA) program funded by the Knut and Alice Wallenberg Foundation, has been set-up to allow the systematic exploration of the human proteome with Affinity (Antibody) Proteomics, combining high-throughput generation of affinity-purified (mono-specific) antibodies with protein profiling using tissue arrays. The program is run by Proteome Resource (HPR) Center located in Stockholm and Uppsala, Sweden.

The Swedish Human Proteome Resource (HPR) Center is located at the AlbaNova University Center at the Royal Institute of Technology, Stockholm and the Rudbeck Laboratory, Uppsala University, Uppsala. The main objective of the resource center is to produce specific antibodies to human target proteins using a high-throughput method involving the cloning and protein expression of Protein Epitope Signature Tags (PrESTs). The antibodies are subsequently used for functional analysis of the corresponding proteins in a wide range of assay platforms.

Journal Scan

http://journalscan.com

Dr. Mark Hunter has partnered with Halieus Technologies to develop a cutting-edge, and yet free, web service. JournalScan.com is a simple idea with a profound impact on your ability to collect and organize incoming medical and scientific literature. Here's how it works:

1. You tell us what journals (of the 20,000+ indexed by PubMed) that you would like to regularly review.

2. Each day, JournalScan will automatically search the PubMed database for articles added to your requested journals. When a new article is added to PubMed, the record will be placed in your InBox.

3. From your Inbox, you can review the article titles, sorted by journal, date, or subject, read abstracts, take notes, delete unwanted records, and save interesting articles in a fully customizable series of folders and subfolders.

JournalScan was built to make your life easier and to improve your effectiveness in making this world a better place. So please sign up and give it a try.

It is now and will remain free for all users. Have a look at http://journalscan.com

Please feel free to contact me if you have any questions, and I hope you enjoy this site.

Mark Hunter, M.D.
JournalScan.com

MnM - Minimotif Miner

http://sms.engr.uconn.edu/servlet/SMSSearchServlet

Minimotif Miner (MnM) analyzes protein queries for the presence of short functional motifs that, in at least one protein, has been demonstrated to be involved in posttranslational modifications, binding to other proteins, nucleic acids, or small molecules, or proteins trafficking. The low sequence complexity of motifs, suggest that "false positive" motifs may occur and any prediction made by MnM should be experimentally tested. To aid in the selection of motifs, MnM ranks motifs based on frequencies in proteomes, protein surface prediction, and evolutionary conservation. Using annotation of motifs in the Swiss-Prot database, we have found that higher scores are globally correlated with experimentally validated motifs when compared to a similar analysis using randomized motifs with the same amino acid composition. We suggest that the known biology of the protein of interest and of motifs be used in selecting motifs for experimental study.

MOLECULAR HEMATOLOGY

http://www.blood.interhealth.info/

Your free tutorial for human hemogenetics & hemobiology in health & disease. Established by Daniele Focosi of the University of Pisa, Italy. Information on human immunobiology and immunogenetics in health and disease for physicians and researchers, with sections on immunotherapy and immunooncology.

National Disease Research Interchange

http://www.ndriresource.org/

NDRI is the national resource for investigators who need human biomaterials for their research studies. We have more than 25 years of experience getting it right. Researchers tell us time and again they like our timely, efficient service and have come to rely on the quality specimens we provide.

Quality Tissue Samples
NDRI's national tissue retrieval network stretches from coast-to-coast. NDRI will prepare and ship human tissues and organs precisely according to your research needs. NDRI can help you find tissue specimens that may not be available to you locally. Trained procurement personnel are on 24-hour call. Just one phone call will start your application process. You could be receiving the human tissues and organs you need in just two to three weeks.

Funding Support
NDRI's Human Tissue and Organs for Research Program is funded by the National Institutes of Health, including core support from the National Center for Research Resources (NCRR); the National Eye Institute (NEI); the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); the National Institute of Allergy and Infectious Diseases (NIAID), the National Institutes of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), and the Office of Rare Diseases (ORD). Additional support comes from voluntary health organizations and private donations.

NDRI Innovations
Nationwide access to human tissue from NDRI's established network of tissue retrieval sites. Expert review of researcher protocols for collection, preservation and delivery of human tissues and organs by NDRI. Computerized matching of researcher requests with available tissue. World's largest database of researchers who study human cells, tissues and organs. Retrieval kits for selected organs or tissues designed for efficient collection that preserve quality and viability. Immediate access to NDRI's Online Biospecimen Catalog. Long-established relationships with national voluntary health organizations.

PRIDE

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

Project description

The PRIDE PRoteomics IDEntifications database is a centralized, standards compliant, public data repository for proteomics data. It has been developed to provide the proteomics community with a public repository for protein and peptide identifications together with the evidence supporting these identifications.

PRIDE has been developed through a collaboration of the EMBL-EBI and Ghent University in Belgium. The original motivation behind its development was to provide a common data exchange format and repository to support proteomics literature publications. This remit has grown with PRIDE, with the hope that PRIDE will provide a reference set of tissue-based identifications for use by the community. The future development of PRIDE has become closely linked to HUPO PSI.

In addition to identifications, PRIDE is able to capture details of post-translational modifications coordinated relative to the peptides in which they have been found.

WWW (continued)

All PRIDE software is freely available to all users, academic or commercial, under the terms of the Apache License, Version 2.0.

Data:
PRIDE is updated continually as data is submitted.

Direct data submission:
PRIDE encourages and welcomes direct user submissions of protein and peptide identification data to be published in peer-reviewed publications.

Lennart Martens, Henning Hermjakob, Philip Jones, Chris Taylor, Kris Gevaert, Joel Vandekerckhove, Rolf Apweiler. (2005) **PRIDE: The PRoteomics IDEntifications database** Proteomics Vol 5 Issue 13 Pages 3537-3545.

Philip Jones, Richard Cote, Lennart Martens, Antony Quinn, Chris Taylor, William Derache, Henning Hermjakob, Rolf Apweiler. (2006) **PRIDE: a public repository of protein and peptide identifications for the proteomics community** Nucleic Acids Research Vol 1 Issue 34 (Database issue) D659-D663

Reviewed by Kevin Ahern in Genetic Engineering News

Sense About Science

http://www.senseaboutscience.org.uk/
Sense About Science is an independent charitable trust to promote good science and evidence in public debates. We respond to the misrepresentation of science and scientific evidence on issues that matter to society, from scares about plastic bottles, fluoride and the MMR vaccine to controversies about genetic modification, stem cell research and radiation.

Operon supports the ISICR annual meeting as part of their 20th Anniversary Celebration

In honor of Operon's 20 years of business, the company created a special celebration fund to sponsor scientific events and they have chosen the 2006 ISICR-ICS meeting as one of the meetings worthy of sponsorship.

Operon Biotechnologies (www.operon.com) is the premier global provider of custom oligonucleotide synthesis. As a global market leader, Operon provides high throughput synthesis as well as a wide range of quality DNA oligonucleotides and array-ready oligo sets (AROS™). Driven by incomparable customer service and reliable delivery, Operon employs advanced synthesis technologies and consistently pursues unique innovations to maintain the highest level of excellence in both products and support. At Operon, quality, experience, and reliability are not merely catchwords; they are the foundation and descriptive core of a business that has endured for 20 years. Operon has earned the trust and loyalty of an established customer base by continually pursuing new technologies and innovations in the biotechnology field.

The ISICR is most grateful to Operon and all the 2006 meeting sponsors.

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BIOTECH NEWS

April 13: Company Advances Anti-Inflammatory Clinical Program with Antibody Targeting Interferon-Alpha

GAITHERSBURG, Md., /PRNewswire-FirstCall/ -- MedImmune, Inc. (Nasdaq: MEDI) announced today that it has begun dosing lupus patients in a Phase 1 clinical trial to evaluate the safety and tolerability of MEDI-545, its monoclonal antibody (MAb) targeting interferon-alpha. The MAb is being developed for the potential treatment of patients with systemic lupus erythematosus (SLE or lupus). MedImmune's Lupus Interferon Skin Activity (LISA) study is a Phase 1, randomized, double-blind, placebo-controlled, dose-escalation study involving a single intravenous dose of the anti-interferon-alpha antibody in patients who have mild SLE with lupus rash or skin lesions. Forty-five individuals will be enrolled at approximately 20 centers in North America.

MedImmune's development of MAbs targeting interferon-alpha stems from a collaboration agreement entered into with Medarex, Inc. in 2004 to focus on two specific antibodies, one of which was MDX-1103 (now known as MEDI-545). Under the terms of the agreement, MedImmune is responsible for all ongoing clinical development activities.

About MEDI-545 (Anti-IFN-alpha MAb)
MEDI-545 is a fully human monoclonal antibody (MAb) targeting interferon- alpha. Published preclinical data indicate that levels of interferon-alpha are elevated in many patients with active systemic lupus erythematosus (SLE or lupus) and other autoimmune disorders, and may be associated with disease activity. Preclinical data from animal models suggest that MEDI-545 may suppress the abnormal immune activity associated with lupus by binding to multiple interferon-alpha subtypes seen in the serum of lupus patients.

[May 26, 2006] Plans for phase II study of interferon alpha for oral warts in HIV patients. Amarillo Biosciences has submitted to the FDA a protocol for a phase II study to test low-dose **interferon alpha** lozenges administered orally to HIV-positive subjects with oral warts. Clinical sites have been contacted but additional sites are being sought to help enroll 75 patients in a study in which treatment will last 24 weeks. Enrollment will begin in the third quarter of 2006. Two previous studies demonstrated the ability of interferon alpha lozenges to significantly reduce oral wart load in HIV-positive patients. If the new study demonstrates the efficacy and safety of this treatment regimen, Amarillo intends to conduct a phase III study before filing an NDA, seeking marketing approval for interferon alpha lozenges in the treatment of oral warts in HIV-positive patients. The company has orphan drug designation for natural human lymphoblastoid interferon alpha for the treatment of papillomavirus warts in the oral cavity of HIV-positive patients (Amarillo Biosciences News Release).

[May 19, 2006] Actilon granted fast track designation in U.S. as HCV therapy. The FDA has granted fast track designation to Actilon (**CPG-10101**), an investigational Toll-like receptor 9 (TLR9) agonist under development at Coley Pharmaceutical for use in treatment-refractory patients chronically infected with the hepatitis C virus (HCV). The product candidate is designed to induce both rapid and sustained immune responses that can have durable antiviral effects. Positive data from the company's 12-week phase Ib clinical trial of Actilon in combination with pegylated interferon and ribavirin among treatment-refractory patients, who had initially responded but then relapsed after treatment with pegylated interferon and ribavirin, were presented in April 2006 at the European Association for the Study of the Liver (EASL) meeting in Vienna, Austria. A 48-week phase II trial evaluating safety and activity of Actilon in combination with pegylated interferon and ribavirin is currently enrolling treatment-refractory HCV patients who never responded after a minimum of 12 weeks of pegylated interferon and ribavirin treatment (Coley Pharmaceutical News Release).

Indulge Your Lab- - a recommended ISICR Recipe

S'mores Ice Cream Cake

Contributed by Ellen Feibel

This childhood favorite is just as delicious served frozen as it is straight from the campfire. Feel free to substitute other flavors of ice cream as desired. Serve this cake with Hot Fudge Sauce.
Serves 8

4 whole graham crackers
2 cups Marshmallow Fluff
1 pint chocolate ice cream
1 pint vanilla ice cream
Hot fudge sauce (for serving)

1. Line a 9 by 5-inch loaf pan with plastic wrap, letting the ends of the plastic wrap overhang the pan by 6 inches. Break one of the crackers into 4 pieces along the dotted lines. (You will use 3 of the 4 small graham pieces in this recipe.)

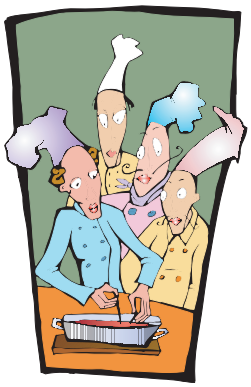
2. Scoop the chocolate and vanilla ice cream into separate bowls, then work to soften. Spread one side of 1 whole graham cracker and 1 graham piece with 1/2 cup of the Fluff and lay in the loaf pan, Fluff facing up. Spoon the chocolate ice cream over the Fluff-topped crackers and smooth the top.

3. Coat both sides of another whole graham cracker and 1 graham piece using 1 more cup Fluff and lay over the chocolate ice cream. Spoon the vanilla ice cream over the Fluff-topped crackers and smooth the top.

4. Spread the remaining whole graham cracker and 1 more graham piece with the remaining ½ cup Fluff. Lay the crackers over the vanilla ice cream, Fluff facing down. Wrap the pan tightly with plastic wrap and freeze until firm, about 6 hours.

5. To serve, unwrap and gently tug at the overhanging plastic wrap to remove the loaf from the pan. (If necessary, dip the bottom of the pan into hot water.) Using the plastic wrap to handle the loaf, invert it onto a serving platter. Peel away and discard the plastic wrap. Allow the cake to sit at room temperature for a few minutes before slicing. Serve with the hot fudge sauce.

To Make Ahead
This ice cream cake can be assembled and held in the freezer, wrapped tightly in plastic wrap, for up to 1 week.



Quote to ponder

" ... a scientist must also be absolutely like a child. If he sees a thing, he must say that he sees it, whether it was what he thought he was going to see or not. See first, think later, then test. But always see first. Otherwise you will only see what you were expecting. Most scientists forget that."
Adams, D. (1984)

What to see and do in Vienna, Austria (www.cntraveller.com)

HOFBURG
Innerer Burghof (00 43 1 533 7570; www.hofburg-wien.at). This imperial relic has had a makeover. A huge, rambling palace, the Hofburg was inhabited by Austria's Habsburg dynasty until the end of World War I, but its royal stable yard now houses Vienna's Museum Moderner Kunst (see below). Today you can sip espresso in the grand parade ground where the Austrian emperor used to put his household cavalry through its paces. Open daily.

HUNDERTWASSERHAUS
Corner of Lowengasse and Kegelgasse (www.hundertwasserhaus.at). This apartment block is an unusual tourist attraction. When you get there, you soon see what the fuss is about. With its erratic contours and psychedelic colour scheme, the Hundertwasserhaus is, without a doubt, one of the most incredible apartment blocks you'll see.

JÜDISCHES MUSEUM
(00 43 1 535 0431; www.jmw.at) Vienna was home to the first Jewish Museum, founded in 1896 but forcibly closed by the Nazis in 1938. Lavishly refurbished with money from the city council, the museum now has state-of-the-art premises, including a bookshop and the excellent Teitelbaum Café. Open Mon, Tues, Wed, Fri and Sun, 10am to 6pm; Thurs, 10am to 8pm; closed Sat..

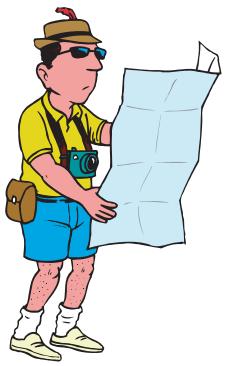
KUNSTHISTORISCHES MUSEUM
The Art History Museum (www.khm.at) contains the fourth largest collection of paintings in the world and Egyptian, Greek and Roman antiquities. The Museum has Venetian works by the likes of Tintoretto, Veronese and Titian, Velazquez portraits, paintings by Rembrandt and whole rooms devoted to van Dyck and Rubens. Open Tues-Sun, 10am-6pm. The picture gallery is also open on Thursday until 9pm.

KUNSTHAUS WIEN
Weissgerber strasse 13 (00 43 1 712 0491; www.kunsthauswien.com). The work of Friedensreich Hundertwasser, plus visiting exhibitions, in a converted furniture factory. Hundertwasser's florid paintings give you an insight into the evolution of his unique style, but it's the architectural models that really grab the imagination.

LEOPOLD MUSEUM
MuseumsQuartier (00 43 1 525 700; www.leopold-musuem.org). Not only Egon Schiele, but also Klimt and Oskar Kokoschka, in this cool, contemporary gallery, devoted to the art collection of Rudolf and Elisabeth Leopold.

MUSEUMSQUARTIER
This strikingly designed museum complex, one of the largest in the world, is a redevelopment of what were formerly the imperial stables and a winter-riding school in the 1980s. General information on the MuseumsQuartier is available at www.mqw.at. The visitor centre is open 10am-7pm daily.

MUSEUM MODERNER KUNST
MuseumsQuartier (00 43 1 525 000; www.mumok.at). Cutting-edge exhibitions in a monolithic museum, whose permanent collection includes Klee, Kandinsky. Also based in the MusuemsQuartier is the city's chief permanent collection of modern art, the Museum moderner Kunst. Aesthetically, it is the antithesis of the Leopold, almost windowless and grimly faux-industrial with exposed ventilation and lighting systems. Here you should get to see a range of 20th century works by Picasso, Miro, Magritte, Klee, Kandinsky and Kirchner. Closed Mon



(What to see, continued from page 24)

SECESSION
Friedrichstrasse 12 (00 43 1 587 5307; www.secession.at). Initially denounced as 'painted pornography', Klimt's Beethoven Frieze is on permanent display in the basement. The building that houses it, once dismissed as 'an assault on good taste', is now acknowledged as an equally important work of art. Closed Mon

THE BELVEDERE
(00 43 1 795 57134). This is the finest Palace in Vienna, built for Prince Eugene of Savoy, Austria's greatest military leader. Two magnificent Baroque mansions, designed in the early 18th-century, face each other across a sloping formal garden, with a superb view over central Vienna. One of the two palaces, the Oberes Belvedere, houses one of the most popular art galleries in Vienna. The Unteres Belvedere is a relatively simple garden palace, built for Prince Eugene's personal use, and now has the Barock-Museum installed in its rooms. This has works by all the leading Austrian painters of the late 17th and 18th centuries. Open Tues-Sun, 10am-6pm; closed Mon.

OPERA
Vienna's musical pedigree is second to none. Josef Haydn, Wolfgang Mozart and Ludwig Beethoven spent much of their time here, as did local-born Franz Schubert. Though Vienna hasn't produced any world-class composers for some time, it does still boast one of Europe's top opera houses, the Staatsoper, served by one of its finest orchestras, the Wiener Philharmoniker. 1, Opernring 2 (00 43 1 514 44 2250; www.wiener-staatsoper.at).

WHERE TO EAT

ARTNER
Floragasse 6 (00 43 1 503 5033). Tucked away in a quiet side street, this relaxed but stylish restaurant proves there's more to Austrian cuisine than Weiner schnitzel. It even makes its own wine and cheese. The restrained, attentive service echoes the muted, modish furnishing.

FABIOS
Tuchlauben 6 (00 43 1 532 2222). Swish city-centre restaurant that attracts a smart metropolitan crowd and serves Mediterranean cuisine in an innovative modern style.

KIM KOCHT
Lustkandlgasse 6 (00 43 1 319 0242). Just off the Gurtel, Sohyi Kim's compact Asian restaurant incorporates a shop that sells her delicious sauces and even a cookery school.

RAMIEN
Gumpendorferstrasse 9 (00 43 1 585 4798). Nourishing South-east Asian food served without a fuss in a funky whitewashed restaurant, with cocktails and DJs in the basement bar.

CAFES
A Viennese café isn't just a good place to read a book, it's a great place to write one. The atmosphere is sedate and civilised, and although the service can be spectacularly slow you're free to linger for hours over a single cup of coffee. With a café to suit every taste, it's the work of a lifetime to find your personal favourite.

Top Ten Reasons to Date a Scientist

From:http://www.atmos.ucla.edu/~amyb/science_humor.html

10. They can show you what all the buttons on the calculator do.

9. They can tell you exactly how much to tip in a restaurant.

8. No matter how ugly your attire is they'll still think it's "hip".

7. They can perform a concerto in C++ on their keyboard for you.

6. They know all about heat, friction, and gravitational attraction.

5. They can kill all the "bugs" for you.

4. They can tell you everything that is scientifically wrong about the Star Wars Movies.

3. You are 100 times more interesting than their last conversation with Bertha/Gilbert, their computer.

2. Two words: they're desperate.

1. They know how to turn on your hard drive.

Open position

Remember: ISICR members can post open positions on the ISICR website for free!!!

University of Texas Southwestern Medical Center Viral control of host defense and interferon actions

Two Postdoctoral research positions are available to study the virus-host interactions and cellular processes by which RNA viruses initiate and regulate the host response to infection. The first project is focused on defining the processes by which hepatitis C virus directs the control of host signaling through the RIG-I pathway. The second project is focused on understanding the molecular mechanisms by which West Nile virus regulates interferon signaling to support to infection. The positions offer outstanding opportunities for training in molecular virology and interferon research within the highly successful environment of UT Southwestern Medical Center.

Send email inquires to Dr. Michael Gale Jr.
UT Southwestern Medical Center, Dallas TX
michael.gale@utsouthwestern.edu

Are You a Real Scientist?

by Lloyd Fricker

OK, so you got a terrible score on a grant application - it happens to everyone. You're probably asking yourself some soul-searching questions, like "Am I a real scientist?", "Can I ever write a successful grant application?", or "Why was the Stooge with no hair named 'Curly'?" Science may never provide an answer to that last question, but you can at least take this simple Real Scientist Quiz to find out if you're cut out for the life of a true scientist.

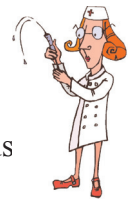
The Real Scientist Quiz

1. At Christmas time, you:
   a. take a couple of days off to spend time with your family.
   b. leave early on Christmas eve so you can pick up a few presents for the family.
   c. only work half a day, spending the rest of the day at home working on your grant application.

2. Your spouse wants to discuss plans for the family vacation with your kids. You:
   a. propose to go camping so you can explain the wonders of nature to your kids
   b. propose to go to another city so you can spend the day in your friend's lab while your spouse takes the kids sightseeing.
   c. ask your spouse, "We have kids?"

3. At a scientific meeting on an island in the South Pacific, no talks are scheduled in the afternoon. During this free time, you:
   a. follow the local custom and sunbathe on the beach in the nude.
   b. sit on the beach fully clothed, unaware of the nude sunbathers, and discuss science with your colleagues.
   c. sit in your hotel room with the drapes closed, and work on your manuscript.

4. The nurse at school calls to tell you that your second-grade child has chicken pox. You:
   a. immediately drop what you're doing and rush to school to pick up your sick kid.
   b. immediately drop what you're doing and begin trying to find a cure for chicken pox.
   c. ask the nurse for directions to the school, and the names of your kids

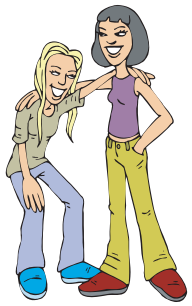


5. Beings from outer space visit Earth, and you are the first human they meet. To show their friendship, they present you with a highly advanced device that is capable of prolonging life, ending human suffering, and curing disease. You:
   a. present it to the United Nations.
   b. apply for a patent.
   c. break it open to see how it works.

6. What is the longest amount of time that you have worked without a vacation (excluding scientific meetings)?
   a. Six months.
   b. Two years.
   c. You took a weekend off about 10 years ago.

7. What are your hobbies?
   a. Sports, music, and dance, because they allow the analytical parts of your brain to relax.
   b. Cooking, because it's quite a lot like science.
   c. Reading back issues of scientific journals cover to cover.

8. Your best friend is:
   a. a member of your college fraternity.
   b. a member of your immediate family.
   c. a member of a gene family.



Score:

Give yourself one point for every question you answered with an "a," 5 points for every "b," and 50 points for every "c." If you took the test three times and averaged your score, give yourself 100 extra points. If you calculated the standard error of the mean, give yourself 500 points. If you scored less than 10, you are normal. Scores of 11-50 indicate an obsessed scientist. If you scored more than 50, you are in need of help and should consider joining Scientists Anonymous; if you scored greater than 500, you should forget Scientists Anonymous and get back to work since you are beyond help, and may actually succeed as a scientist.

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