

**ISICR OFFICERS**  
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March 1998  
Volume 5, No.1

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## 1998 Meeting

Oct. 25-30, 1998

Jerusalem

Joint ISICR/ICS

<http://www.kenes.com/Cyto98/>

**ISICR WWW SITE**

[www.bioinformatics.](http://www.bioinformatics.weizmann.ac.il/ISICR/)

[weizmann.ac.il/ISICR/](http://www.bioinformatics.weizmann.ac.il/ISICR/)

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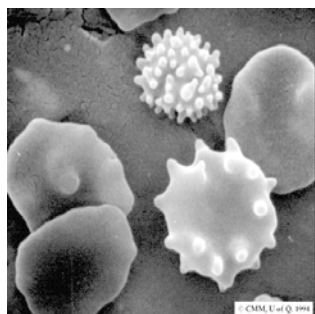
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Picture courtesy of the Centre for Microscopy and Microanalysis, Univ. of Queensland



## A Message from the ISICR President



It is with great pleasure and humility that I take up the reigns of the Presidency of the ISICR. Bob Friedman is a hard act to follow but did an excellent job of keeping me informed and involved during my tenure as President-Elect. I will do likewise for President-Elect Kathy Zoon to ensure our Society remains on a steady course and serves its members well. We have a few challenges ahead, the first of which is to prepare for the joint meeting with the ICS in Israel in October. In my case this task is considerably eased by having Jan Vilcek as President of the ICS. Jan has been a member of ISICR since its inception and understands very well the inner workings of both Societies. We are determined to do all we can to make this joint meeting a success and urge members to support the meeting by their attendance and participation. Ray Kaempfer is making tireless

efforts on our behalf and I am sure we are in for a great meeting both scientifically and socially.

The next three meetings of the ISICR will occur outside the USA (the base of the majority of our members) and while these sites attest to the international status of our society, it also means we have to pay extra attention to retaining present members and recruiting new ones. The Society has a lot to offer members, including this excellent, informative newsletter, generous travel awards (with a funding rate for applications that must be the envy of any other organization) reduced registration rates at the annual meeting, and a reduced subscription rate for the Journal of Interferon and Cytokine and Research. I will be working closely with Delores Francis in our FASEB office and our FASEB advisor George Galasso along with Sid Pestka and Eleanor Kells in our Rutgers secretariat to stabilize and increase our membership base. I have also appointed new members to the Membership Committee who represent the next wave of interferon and cytokine biologists to help us with our recruitments. In fact new members have been added to all the committees and an updated list can be found in this

issue of the newsletter.  
I especially welcome these new members and know we can count on them to be active participants on their respective committees.

Our Society benefits from the active participation from many fine women scientists. Therefore it is with pleasure that I announce the establishment of a new award to recognize and promote young women scientists. The Christina Fleischman Young Investigator Award has been established by Bob Fleischman in memory of Christina, an active participant in our society for many years until her recent untimely death. It is Bob's hope that the establishment of this award will lead others to consider donating awards to the Society. On another sad note, Dr. Yasuiti Nagano a pioneer in interferon research died on February 9, 1998. He was 91 years old. Dr Nagano independently discovered interferon that he called virus inhibiting factor. He was a major contributor over many years in areas of the induction of interferon by endotoxin and other agents. He was head of the Nagano Laboratory of Hayashibara Biochemical Labs in Okayama, Japan and an Honorary Member of our Society. With the passing of pioneers such as Dr. Nagano we lose touch with our history but hopefully the new Archives Committee established by Bob Friedman and chaired by Norman Finter will ensure an historical record of all our endeavors is preserved for posterity.

It is an exciting time for interferon and cytokine researchers. We have been at the forefront of new discoveries in signal transduction and the translation of this work into the clinical arena is just getting underway. New ways of using interferons in the clinic and new indications for interferons and other cytokines are being investigated. An important task for the Society will be to ensure the standards we have set for assaying these biological response modifiers are adhered to and that new standards introduced are met with general acceptance. Our Standards Committee under Sid Grossberg's chairmanship is performing an invaluable task in this regard and this area will remain an important responsibility of the Society. Finally, ensuring the success of our annual meetings depends on ongoing participation between the Meetings Committee chaired by Chris Czarniecki and the local organizers. We also depend on your input and support. I am always pleased to exchange ideas about the ways we are doing things and can be most easily contacted by email at [williab@cesmtp.ccf.org](mailto:williab@cesmtp.ccf.org)

I look forward to hearing from you and serving you as President for 1998, 1999.

**Bryan Williams**

**FAMOUS QUOTE**  
**What you will do matters. All you need is to do it.**  
Judy Grahn

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Ross, (1996-1998)

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#### 1998 ISICR Awards

The ISICR Awards Committee  
invites nominations for 1998  
Milstein Awards, the Christine  
Fleischman Award and Honorary  
Membership. The deadline for  
the nominations is May 1, 1998.

##### The Milstein Award (\$20,000)

Individuals who have made  
exceptional contributions to  
research related to interferons  
and cytokines either in a basic or  
clinical field. Milstein awards are  
made possible by the generous  
gift of Mr. and Mrs Seymour  
Milstein through the Milstein  
Foundation. This award  
represents a pinnacle of scientific  
achievement in our field and an  
important landmark of the  
society. The 1997 winners were  
Dr. James Darnell and Dr.  
George Stark, sharing with Dr.  
Ian Kerr.

##### Honorary Membership

Individuals who have dedicated  
much of their career to the  
interferon/cytokine field and  
have made substantive  
contributions. Honorary members  
are the treasure of the society  
who provide us with a historical  
perspective and valued research

tradition. The 1997 recipients of Honorary Membership were Dr. Ion Gresser and Dr. Gerhard Bodo.

We invite your nominations for eligible candidates for prestigious symbols of recognition by our society for outstanding achievements. A brief exposition of the reason for your nomination and other supportive documents (such as CV, if available) should be sent to the 1998 ISICR President, Dr. Bryan Williams, Dept Cancer Biology-NN1-06, Cleveland Clinic Fndn, 9500 Euclid Ave, Cleveland, OH 44195, TEL: (216) 445-9652, FAX : (216) 445-6269, e-mail: williab@cesmtp.ccf.org

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

#### **Young Investigator Awards (\$ 1,000)**

Eligibility : ISICR members and are less than four years after receiving a Ph.D or M.D degree Every year up to five Young Investigator Awards are presented to ISICR members who have made notable contributions to either basic or clinical research within four years after receiving their Ph.D or M.D.. This award is provided by the generous gift of the

Milstein Foundation. We urge every eligible individual to apply for the awards. Don't miss the opportunity, since there are only four years in your career in which you are able to receive this award! We also ask more senior laboratory advisers to encourage their associates to apply. Send your 1998 Meeting abstract and CV to Dr. Keiko Ozato, Chair, ISICR awards Committee, Bldg 6 Rm 2A01, National Inst. of Health, LMGR/NICHD, Bethesda, MD 20892, TEL: 301-496-9184, FAX: 301-480-9354, Email: ozato@dir6.nichd.nih.gov We plan on having a check-off box in the abstract form for easy identification of the eligible candidates. A brief note describing your accomplishment, as well as a letter of recommendation from your adviser, are strongly encouraged. The deadline is the same as that of the Meeting abstract for the 1998 ISICR Annual Meeting. The 1997 Young Investigator Awards were presented to Dr. Michael Gale, Jr., Dr. Suzanne Kadereit and Dr. Gero Waschutza

#### **The Christina Fleischmann Memorial Award to Young Women Investigators (\$ 1,000)**

The rules for this new ISICR award are the same as for the Milstein Young Investigator Award (see above) except for gender.

#### **Travel Awards**

ISICR members who intend to attend the 1998 ISICR/ICS joint meeting in Jerusalem are eligible for Travel Awards. They are

provided primarily through the membership fees, based on the scientific merit of the abstract and financial necessity. However, this award does not exempt payment of the registration fee. Please note that there are no age restrictions to this award. Send your meeting abstract and a note explaining the need for Travel Award to the Dr. Keiko Ozato, Chair ISICR Awards Committee (the deadline is the same as that of the Meeting abstract). The ISICR anticipates making approximately fifty awards this year.

**WWW**

#### **COPE: Cytokines Online Pathfinder Encyclopaedia**

<http://www2.lmb.uni-muenchen.de/cgi-bin/cope.pl>

Horst Ibelgauf's Hypertext Information Universe of Cytokines Version 2.0 is now available.

H IBELGAUFTS GENZENTRUM UNI MUENCHEN

Ultra posse nemo obligatur  
Remove last two ff from ibelgauff to obtain a functional email address.

#### **Amino Acid and Peptide Nomenclature** <http://www.qmw.ac.uk/~ugca000/iupac.html>

A WWW version of the IUPAC-IUBMB recommendations on Amino Acid and Peptide Nomenclature published in *Eur. J. Biochem.* 138: 9-37 (1984) has now been prepared for the Internet. This version incorporates all published corrections, and others detected

during the preparation of the Web version. These corrections are all clearly marked so that readers can correct their hard copy versions. In addition to the original document there are four addenda published in the Newsletter of the Joint Biochemical Nomenclature Committees. Appropriate links to the addenda are added in the main text.

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#### **DRAGON Version 4.17.6**

<http://www.nimr.mrc.ac.uk/~mathbio/a-aszodi/dragon.html>

DRAGON is a protein modelling tool using Distance Geometry. It was developed at the Division of Mathematical Biology of the National Institute for Medical Research in London between 1993 and 1996. DRAGON attempts to predict the tertiary structure of a small soluble protein, given its sequence, the secondary structure and possibly a set of interresidue distance restraints. If the structures of some of the sequences in the multiple alignment is known, then you can attempt comparative modelling. DRAGON communicates with you through a simple command-line interface that is used to specify parameter values and input filenames. Further information and references can be found at:

<http://www.nimr.mrc.ac.uk/~mathbio/a-szodi/dragon.html#moinfo>

<http://www.nimr.mrc.ac.uk/~mathbio/r-munro/dragon.html>  
Andras Aszodi

#### **Advanced BLAST2 Search Service <http://www.bork.embl-heidelberg.de:8080/Blast2/>**

This BLAST2 search service is based on the Washington University BLAST 2.0a6 Version (BLAST2). BLAST2 differs from BLAST1 in providing gapped alignments for your query sequences. In addition, we have incorporated a parser that allows an overview of the HSP hits aligned against your query sequence. When using this server service, you'll receive your result in HTML so that you can easily scroll around the BLAST output. As the BLAST2 version supports the use of multiprocessors and this BLAST2 server has been set up on a multiprocessor system, your search request will usually be completed quickly. The Washington University BLAST 2.0 version [Vers. 2.0a6] has been kindly provided by Warren Gish via the St. Louis server (<http://blast.wustl.edu/>). In BLAST2, gapped alignments are integral to the database search itself, yielding significantly increased sensitivity. The input form to this server is designed according to the advanced blast version provided by NCBI (<http://www.ncbi.nlm.nih.gov/cgi-bin/BLAST/nph-blast?Jform=1>). The idea for the output format is adapted from the BEAUTY BLAST-postprocessing server at the Baylor College of Medicine (Houston,

<http://dot.imgen.bcm.tmc.edu:9331/seq-search/protein-search.html>).

This server will be continuously updated so that the formats and links to other searchable databases and sequence retrieval inf systems might slightly change in the future. Thanks!

Yan P. Yuan, Jianmei Lai, and Peer Bork. Bork Group - Biocomputing Unit - EMBL  
<http://www.bork.embl-heidelberg.de/>  
at DKFZ - M. Vingron's Bioinformatics group:  
<http://www.dkfz-heidelberg.de/tbi/>

#### **CENSOR <http://charon.lpi.org/~server/censor.html>**

The CENSOR e-mail server allows users to send in query sequences and have them aligned against a reference collection of human or rodent repeats (Jurka, et al., 1992; Jurka, 1995b). The homologous portions are then "censored". Censoring means replacing the aligned portions with x's in the query sequences. The server automatically classifies all known repeats and adds the classification to the report. To access this service, e-mail your sequence(s) to the following address: [censor@charon.lpi.org](mailto:censor@charon.lpi.org). The server currently accepts and censors human and rodent sequences. To choose which reference collection your sequence should be run against, include the keyword "HUM" for the human collection or "ROD" for rodent (without quotes) as the first line of your e-mail message. The sequence description should

follow. For backward compatibility, if no keyword is given, the human collection is the used by default.

For instructions on using the CENSOR e-mail server put the word **HELP** on a single line in the body of the mail message and send the message to the CENSOR e-mail server address: [tensor@charon.lpi.org](mailto:tensor@charon.lpi.org)

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DON'T PANIC!

#### **GeneCards**

<http://bioinfo.weizmann.ac.il/cards/>

Although it will take some years until the human genome is totally sequenced, and still a much longer time to learn about the functions of the products of those genes, the complex organization and the vast amount of biomedical information already accessible often cause certain problems that are somehow connected to the phenomenon of "information overflow" and the often very time-consuming process of information retrieval or mining. Thus, many scientists feel that new approaches to organize scientific information are urgently needed.

GeneCards is a database that intends to address some of these problems by integrating biomedical information taken from several sources (GDB, MGD, OMIM, SWISS-PROT, HGMD, Doctor's Guide to the

Internet), and by presenting them in a way facilitating a quick overview of the cellular functions, the loci, important homologous genes and certain medical aspects of human genes. Most of the associated work is done automatically by a script written in PERL that connects to these databases, requests data, processes them, and selects defined items that are subsequently prepared for being included in the GeneCards database. Because there are always a few cases left where the script cannot judge the information received, ambiguous cases recognized by the script are presented to the editor of the database. After this check, which usually takes several hours for about 1000 new GeneCards, the new entries are added to the GeneCards database for public usage. The resulting GeneCards not only contain extracts of the data found in other databases, but also provide direct links to the respective entries in them, and the possibility to search one of the biggest search engines on the web (namely HotBot) for the home pages of researchers and any other kind of information related to the gene and its products, or to the diseases that are associated with mutations in the concerned gene, by a single mouseclick. Thus, we hope that this service will help biomedical researchers and other people interested in detailed biomedical data to find the information they want as fast as possible. In addition, we would like to offer our assistance to people interested in building similar

databases for other types of information.

#### **Integrins**

<http://www.geocities.com/CapeCanaveral/9629>

The site features:

- > general information about these interesting transmembrane glycoproteins.
- > Antibody data and references (74 are already present)
- > Easy access to genbank sequences from the subunits
- > and much more

#### **Medmark**

<http://medmark.org>.

Medical Bookmarks provides links to a variety of clinically relevant areas, including Immunology, Immunology Associations, Publications, etc.

#### **TRANSFAC**

<http://transfac.gbf.de/>

The TRANSFAC server now has made accessible the new release 3.3 of the TRANSFAC database (Heinemeyer et al., 1998, Nucleic Acids Res. 26:364-370):

TRANSFAC is a database on eukaryotic transcription factors and their binding sites. As new features, it visualizes the items of the feature list (FACTOR table) as well as element positions within regulatory regions (GENE table). Moreover, the data volume has increased comprising now 2285 FACTOR and 4602 SITE entries.

A new extended search option is available. The SRS 5.1.0 version

on the TRANSFAC server also offers access to the databases TRRD (Transcription Regulatory Region Database, Institute of Cytology and Genetics [ICG], Novosibirsk, Russia; N. A. Kolchanov/A. Kel et al.) and to COMPEL, a database on composite elements (joint effort by ICG and GBF). Available at: <http://transfac.gbf.de/srs5/>

As many users know, the sequence information contained in the SITE table is used by PatSearch 1.1 to interactively scan DNA sequences for potential TF binding sites. This program is accessible at: <http://transfac.gbf.de/cgi-bin/patSearch/patsearch.pl>

An updated library of matrices for transcription factor binding sites is provided which can be used for sequence analysis with MatInspector release 2.1 (Quandt et al., 1995, Nucleic Acids Res. 23:4878-4884). This tool is available at <http://transfac.gbf.de/cgi-bin/matSearch/matsearch.pl> or at [http://www.gsf.de/BIODV/matin\\_spector.html](http://www.gsf.de/BIODV/matin_spector.html) (Thomas Werner and coworkers).

On behalf of the TRANSFAC team:  
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Thomas Heinemeyer  
Ges. f. Biotechn. Forsch. mbH  
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**TREMBL**  
<http://www.ebi.ac.uk>

TREMBL is a protein sequence database supplementing the SWISS-PROT Protein Sequence Data Bank. 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 5.0 OF TREMBL

This TREMBL release is created from the EMBL Nucleotide Sequence Database release 53 and contains 166,361 sequence entries, comprising 45,671,684 amino acids. TREMBL is split in two main sections; SP-TREMBL and REM-TREMBL: SP-TREMBL (SWISS-PROT TREMBL) contains the entries (140,555) 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:

fun.dat (Fungi): 4694 entries  
hum.dat (Human): 6101 entries  
inv.dat (Invertebrates): 18423 entries  
mam.dat (Other Mammals): 2444 entries  
mhc.dat (MHC proteins): 3336 entries  
org.dat (Organelles): 10561 entries  
phg.dat (Bacteriophages): 1111 entries  
pln.dat (Plants): 9871 entries  
pro.dat (Prokaryotes): 34832 entries  
rod.dat (Rodents): 5976 entries  
unc.dat (Unclassified): 109 entries  
vrl.dat (Viruses): 39943 entries  
vrt.dat (Other Vertebrates): 3154 entries

REM-TREMBL (REMAining TREMBL) contains the entries (25,806) that we do not want to include in SWISS-PROT. Weekly cumulative updates of TREMBL are available by anonymous FTP and from the EBI SRS server. We also produce every week a complete non-redundant protein sequence collection by providing three compressed files (these are in the directory/pub/databases/sp\_tr\_nr\_db on the EBI FTP server): `sprot.dat.Z`, `trembl.dat.Z` and `trembl_new.dat.Z`.

ACCESS/DATA DISTRIBUTION  
FTP server:

<ftp.ebi.ac.uk/pub/databases/trembl>  
SRS server: <http://srs.ebi.ac.uk:5000/>

TREMBL is also available on the SWISS-PROT CD-ROM. SWISS-PROT + TREMBL is searchable on the FASTA3, BLAST2 and Bic\_sw servers of the EBI.

TREMBL has been prepared by:  
Rolf Apweiler, Sergio Contrino, Wolfgang Fleischmann, Henning Hermjakob, Vivien Junker, Stephanie Kappus, Fiona Lang, Michele Magrane, Maria Jesus Martin, Steffen Moeller, Nicoletta Mitritonna and Claire O'Donovan at The EMBL Outstation - European Bioinformatics Institute (EBI) in Hinxton, UK; Amos Bairoch and Alain Gateau at the Medical Biochemistry Department of the University of Geneva, Switzerland.

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### Two-Hybrid Help

<http://www.fccc.edu/research/labs/golemis>

We are posting the second, updated version of our survey of which false positives or "trash" are most frequently obtained in library screening using the Interaction Trap (IT) yeast two-hybrid system. This information can be better seen with browsers such as Netscape 1.1 or later versions. If you are unable to access this information and you would like a copy of the results emailed or faxed directly to you, please let us know. The data presented on the WWW page will be updated occasionally as new information comes in. If you had not completed your IT at the time of the initial survey, and if now you have information from a screen, we would greatly appreciate it if you contacted us; a copy of our questionnaire is also posted at our page (alternatively, it can be sent to you if necessary). Thank you, again, for your feedback!

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### VMD

#### Version 1.2b1

<http://www.ks.uiuc.edu/Research/vmd/>

The Theoretical Biophysics group at the University of Illinois and the Beckman Institute would like to announce the availability version 1.2b1 of the program VMD, a package for the visualization and analysis of biomolecular systems. This software is being made available to the structural biology research community free of charge, and includes the source code for VMD, documentation, and precompiled binaries for SGIs,

HPs, and Linux. The postscript documentation (still being updated) includes an installation guide, a users guide, and a programmers guide for interested researchers. VMD also provides on-line help through the use of an external HTML viewer.

#### New in this version

- > This biggest improvement in version 1.2b1 support for platforms other than GL-based SGIs. In addition to the full source and SGI binary distributions, VMD is now available for HP-UX (tested under 9 and 10) and Linux. Ports to other platforms, most notably AIX, will be available soon.
- > Greatly enhanced Tcl scripting commands for performing molecular analysis, writing scripts, developing tutorials, etc.
- > New rendering styles, a fast (and cheap) solvent accessible surface and C-alpha and P trace method, and improvements to the existing styles.
- > New output renderer formats: Postscript, VRML and STL (a stereo-lithography format)
- > Support for Amber structure and animation file formats

VMD is designed for the visualization and analysis of biological systems such as proteins, nucleic acids, lipid bilayer assemblies, etc. It may be used to view more general molecules, as VMD can read standard Protein Data Bank (PDB) files and display the contained structure. VMD provides a wide variety of methods for rendering and coloring a molecule: simple

points and lines, CPK spheres and cylinders, licorice bonds, backbone tubes and ribbons, cartoon drawings, and others. VMD can be used to animate and analyze the trajectory of a molecular dynamics (MD) simulation. In particular, VMD can act as a graphical front end for an external MD program by displaying and animating a molecule undergoing simulation on a remote computer. The program has many features, which include:

- > No limits on the number of molecules, atoms, residues or number of animation frames, excepting available memory.
- > Many molecular rendering and coloring methods.
- > Stereo display capability.
- > Extensive atom selection syntax for choosing subsets of atoms for display (includes boolean operators, regular expressions, and more).
- > Integration with the program 'Babel' which allows VMD to read many molecular data file formats. Even without the use of Babel, VMD can read PDB files, as well as CHARMM- and X-PLOR compatible binary DCD files and X-PLOR compatible PSF files.
- > Ability to write the current image to a file which may be processed by a number of popular raytracing and image rendering packages, including POV-Ray, Rayshade, Raster3D, and Radiance.
- > Extensive graphical and text-based user interfaces, which use the Tcl package to provide full scripting capabilities.
- > Extensions to the Tcl language



which enable researchers to write their own routines for molecular analysis

>Modular, extensible source code using an object-oriented design in C++, with a programmers guide describing the source code

>Integration with the program NAMD, a fast, parallel, and scalable molecular dynamics program developed in conjunction with VMD in the Theoretical Biophysics Group at the University of Illinois.

See the NAMD WWW home page for more info:  
<http://www.ks.uiuc.edu/Research/namd>

VMD can be used to set up and concurrently display a MD simulation using NAMD. The two programs, along with the intermediary communications package (called MDComm) constitute the 'MDScope' environment. The software is available via anonymous ftp in the directory:

<ftp://ftp.ks.uiuc.edu/pub/mdscope/vmd/>  
The filenames of the different distributions are:

The complete source:

<vmd-1.2b1.all.tar.gz>

Precompiled binaries for different platforms:

<vmd-1.2b1.bin.IRIX5.tar.gz>

Works for IRIX 5.x and 6.x using GL:

<vmd-1.2b1.bin.HPUX9.tar.gz>

Works for HP-UX 9 and HP-UX 10 using Mesa emulated

OpenGL:

<vmd-1.2b1.bin.LINUX.tar.gz>

Tested under RedHat with 1.2.13 and 2.0.27 kernels, uses Mesa

Please email any questions to Andrew Dalke, email: [vmd@ks.uiuc.edu](mailto:vmd@ks.uiuc.edu).

VMD, NAMD, and the entire MDScope environment are part of an ongoing project within the Theoretical Biophysics group to help provide free, effective tools for molecular dynamics studies in structural biology. For more information, see

<http://www.ks.uiuc.edu/Research/MDScope/>  
This project is funded by the National Institutes of Health (grant number PHS 5 P41 RR05969-04) and the National Science Foundation (grant number BIR-9318159).

## Reviews of Interest

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### **Book Review**

**A Commotion in the Blood: life, death, and the immune system** by Stephen S. Hall, (Henry Holt and Company, New York, 1997, 457 pages, list price \$30 but available from [www.amazon.com](http://www.amazon.com) for \$21 + S/H).

Reviewed by Patricia Fitzgerald-Bocarsly.

In "A Commotion in the Blood", Hall elegantly relates the century-long history of immunotherapy, beginning with Coley's turn of the century cancer vaccine ("Coley's toxins") and ending with the still unfolding story of IL-12. The book is replete with metaphor to describe the science of the immune system, making it very readable, yet is remarkably balanced and scientifically accurate in its descriptions. For example, in describing how a cancer cell is viewed by the immune system, Hall writes: "Rather than seeing a dangerous stranger, as it does when it encounters a flu virus, the immune system sees a wayward uncle - behaving a bit odd, perhaps, but nonetheless a blood relative... Thus, just as a family tends to indulge the erratic behaviour of kins, the the immune system is said to be "tolerant" of the slight differences in cancer cells". Rarely have I seen a writer be so able to capture the essence of

scientific fact in such readable prose.

The 40 year history of interferon is positioned prominently in this book, ranging from in depth descriptions of the history of its discovery by Isaacs and Lindenmann to the race to clone it and get it into the clinic. Although I personally have been in the interferon field for approaching 20 years, I learned much about the personalities behind the science from this book, about the chronology of the discoveries and even about the science itself. For example, how did the obscure Sendai virus come to be the prototypical inducer of leukocyte inteferon? Answer: it happened to be in Kari Cantell's freezer when he set out to test various viruses for interferonogenesis.

Although this very readable book is intended for the educated layman, I highly recommend it for graduate students and post-docs as well as principal investigators. An understanding of the history of science is critical for our understanding of how we know what we know - something that is all too often missed by the youngest generation of scientists for whom a literature search will frequently not go beyond the 1993 - present selection offered on Medline. Moreover, the personal aspects of science - including the inspirations, frustrations, egos, rivalries, failures and triumphs are almost never recounted in the primary literature. In this regard, Hall has provided us with fascinating (and sometimes not too flattering) glimpses into the

personalities behind the science obtained by countless hours of interviews as he traveled the globe to interview his sources. He also tells the stories of individual patients and their courageous (and sometimes overly naive trusting) roles in the development of immune therapies.

Hall describes the "manic-depressive" nature of immunotherapy research, as each new "magic bullet" is surrounded by hype (driven both by public hope and drug company propaganda) and the letdown as disappointing results lead to the perhaps premature dismissal of newly touted cancer therapeutic agents. He points out that it has taken nearly 40 years for interferon to find its therapeutic niche and one wonders whether the current political and economic pressures of bringing a drug to market will result in important missed opportunities.

The title of the book is derived from a statement by the British royal physician Sir Hans Sloan who expressed deep foreboding about "raising such a commotion in the blood" through the Royal Experiment of 1721-1722 where variolation was performed first on a group of prisoners, then orphans, then the royal children to protect them from smallpox. Through much of the 20th century, we have thought of immunotherapy in terms of a war - stirring up a commotion, and we have the "war on cancer" and "magic bullets". In the end, however, Hall leaves us at the waning of the 20th century when the molecular and cellular

science of immunology has advanced us to the point where “Perhaps it is time to retire militaristic metaphors, and begin to think in more exalted, uplifting terms... Think of a symphony, our understanding of it still unfinished.”

Editor’s Note: ISICR members who would like to comment on this book or review other books that might be of interest to the membership are encouraged to send their comments/reviews to the editors.

### **TIPS FOR THE FRUGAL**

In an effort to help all ISICR members make the most use of their research \$\$\$\$ , we have started this new column to let members provide tips that have resulted in cost savings. We welcome all input from members.

#### **Saving tubes**

Tired of using microcentrifuge or PCR tubes to dilute samples for analysis on baby gels, even if they were sample packages you scooped up at a meeting? Instead of using tubes, just spot your buffer (e.g. TE) onto Parafilm. The drop stays intact and you can mix your running dye and sample right in the drop. Multiple samples will not run together.

### **CLINICAL TRIALS**

Phase III Randomized Adjuvant Study of **Interferon Alfa-2b** (IFN-A) Alone vs Biochemotherapy Using Cisplatin, Vinblastin, Dacarbazine (DTIC), IFN-A, and

**Interleukin-2** (IL-2) in Melanoma Patients with Regional Lymph Node Metastases  
Protocol IDs: MDA-ID-95196, NCI-G96-1089, MDA-DM-95196  
Agop Y. Bedikian, Principal Investigator, Ph: 713-792-2921  
University of Texas - M.D. Anderson Cancer Center, Houston, Texas

Phase II Study of **Interferon alfa** with or without Tamoxifen Prior to Surgery Followed by Interferon alfa/Carmustine with or without Tamoxifen for Grade III/IV and Recurrent Malignant Gliomas  
Protocol IDs: HOA-5717, NCI-V96-0890, UMC-5717  
Joseph J. Muscato, Principal Investigator, Ph: 573-874-7800  
Boone Hospital Center, Columbia, Missouri

Phase II Study of Active Intralymphatic Immunotherapy with **IFN-A**-Treated Allogeneic Tumor Cells plus **GM-CSF** and CTX for Advanced Pancreatic Adenocarcinoma  
Protocol IDs: SVMC-ONC-222P, NCI-V96-0886  
Charles L. Wiseman, Principal Investigator, Ph: 213-484-7575  
St. Vincent Medical Center  
Los Angeles, California,

Phase II Study of Modified Total-Body Irradiation plus Busulfan/Cyclophosphamide with Allogeneic Peripheral Blood Stem Cell or Marrow Transplantation Followed by **Interferon alfa** in Stage I/II/III Multiple Myeloma  
Protocol IDs: FHCRC-1060.00, NCI-H96-0927

William I. Bensinger, Principal Investigator, Ph: 206-667-4933  
Fred Hutchinson Cancer Research Center, Seattle, WA

Phase II Study of Sequential Therapy for Lymphoproliferation Following Cardiac Transplantation: Modification of Immunosuppression, **IFN-A**, and ProMACE-CytaBOM (CTX/DOX/VP-16/PRED/ARA-C/BLEO/VCR/MTX)  
Protocol IDs: SWOG-9239, E-S9239  
Lode J. Swinnen, Chair, Ph: 708-327-3142  
Southwest Oncology Group

Phase III Randomized Study of Conventional Radiotherapy with vs without **IFN-B** in Patients with Locally Advanced non-Small Cell Lung Cancer  
Protocol IDs: RTOG-9304  
Philip Rubin, Chair, Ph: 716-275-2229  
Radiation Therapy Oncology Group

Phase I/II Study of PBSC Mobilization/Chemotherapy with IDA/ARA-C Followed at Progression by PBSC Transplantation plus CYPSP/**IFN-G** Graft-Versus-Leukemia Induction for Chronic Myelogenous Leukemia in First Chronic Phase  
Protocol IDs: CU-CAMP-10, NCI-V96-0873  
Gwen Lucille Nichols, Principal Investigator, Ph: 212-305-5705  
Herbert Irving Comprehensive Cancer Center, New York, NY

Phase I Pilot Study of High-Dose Chemotherapy and Interleukin-2-Incubated Peripheral Blood Stem Cells Followed by Additional

**Interleukin-2** Therapy for Acute Myelogenous Leukemia  
Protocol IDs: FHCRC-1008.00, NCI-H96-0922  
Leona Holmberg, Principal Investigator, Ph: 206-667-6447 Fred Hutchinson Cancer Research Center, Seattle, WA

Phase II Study of **IL-2/GM-CSF** in Advanced Renal Cell Carcinoma  
Protocol IDs: AECM-1199501003, NCI-V95-0646  
Janice P. Dutcher, Principal Investigator, Ph: 718-920-4674 Albert Einstein Cancer Research Center, Bronx, New York

Phase II Study of Sequential Vaccination with Vaccinia-Carcinoembryonic Antigen (CEA) Vaccine and ALVAC-CEA Vaccine with the Addition of **Interleukin-2** and Sargramostim (**Granulocyte-Macrophage Colony-Stimulating Factor**) in Patients with CEA Expressing Tumors  
Protocol IDs: GUMC-97118, NCI-T97-0033  
John L. Marshall, Chair, Ph: 202-687-2198 Vincent T. Lombardi Cancer Research Center, Georgetown University Medical Center, Washington, DC

Phase IA/IB Pilot Study of Bispecific Monoclonal Antibody 2B1 in Combination with **Granulocyte-Macrophage Colony-Stimulating Factor/Interleukin-2** for Refractory Metastatic Cancers Expressing c-erbB-2  
Protocol IDs: FCCC-96047, NCI-B95-000  
Louis M. Weiner, Principal Investigator, Ph: 215-728-2480 Fox Chase Cancer Center,

Philadelphia, Pennsylvania

Phase II Study of **IL-4** in Advanced Indolent B-Cell non-Hodgkin's Lymphoma and B-Cell Chronic Lymphocytic Leukemia  
Protocol IDs: E-5Y92  
Usha Venkatraj, Chair, Ph: 718-904-2754 Eastern Cooperative Oncology Group

Phase II Study of **Interleukin-4** (IL-4) in Patients With B Lineage Acute Lymphoblastic Leukemia in First or Second Relapse  
Protocol IDs: SWOG-9711  
Laurence Elias, Chair, Ph: 505-272-5837 Southwest Oncology Group

Phase I Study of Recombinant Human **Interleukin-12** (IL-12) after High-Dose Chemotherapy and Autologous Hematopoietic Stem Cell Support in Patients with Hematologic Malignancies and Solid Tumors  
Protocol IDs: IUMC-9708-05, NCI-T97-0027  
Michael J. Robertson, Principal Investigator, Ph: 317-274-0843 Indiana University Cancer Center Indianapolis, Indiana

Phase II Randomized Pilot Study of EPOCH (Etoposide, Prednisone, Vincristine, Cyclophosphamide, and Doxorubicin) with vs without Subsequent **Interleukin-12** in Untreated Patients and of Interleukin-12 in Untreated Patients and of Interleukin-12 Alone in Previously Treated Patients with AIDS-Related non-Hodgkin's Lymphoma  
Protocol IDs: NCI-97-C-0040C,

NCI-T96-0036N  
Wyndham Hopkins Wilson, Principal Investigator, Ph: 301-435-2415 Medicine Branch, National Cancer Institute, Bethesda, MD

Phase II Study of **Interleukin-12** (IL-12) in Patients with Plateau Phase Multiple Myeloma  
Protocol IDs: E-1A96  
Martha Q. Lacy, Chair, Ph: 507-284-8430 Eastern Cooperative Oncology Group

Phase I Study of Bispecific Antibody 520C9xH22 with **G-CSF** for Relapsed/Refractory Metastatic Cancer that Overexpresses HER2/neu  
Protocol IDs: MDX-1B-95-2, NCI-V95-0658, LAC-USC-1B952  
Jeffrey S. Weber, Principal Investigator, Ph: 213-764-3919 USC/Norris Comprehensive Cancer Center, Los Angeles, CA

Phase I Study of Lethally Irradiated Allogeneic Pancreatic Tumor Cells Transfected with **Granulocyte-Macrophage Colony-Stimulating Factor** (GM-CSF) Gene in Patients with Adenocarcinoma of the Pancreas Head  
Protocol IDs: JHOC-9617, NCI-H97-1316  
Elizabeth M. Jaffee, Principal Investigator, Ph: 410-955-2957 Johns Hopkins Oncology Center Baltimore, Maryland

Phase I/II Study of Intralesional Immunotherapy with a Recombinant Vaccinia Virus Encoding the Gene for

**Granulocyte-Macrophage Colony-Stimulating Factor in Metastatic Melanoma**

Protocol IDs: JMC-94-0843, NCI-H96-0965

Michael Joseph Mastrangelo,  
Principal Investigator,  
Ph: 215-955-8875  
Kimmel Cancer Center of  
Thomas Jefferson University,  
Philadelphia, Pennsylvania

**Randomized Phase II Study of Filgrastim and Stem Cell Factor (r-metHuSCF) in Priming of Bone Marrow for Autologous Transplantation in Patients with Relapsed or Refractory Hodgkin's Disease (HD) or Non-Hodgkin's Lymphoma (NHL)**  
Protocol IDs: RPCI-DS-96-24, NCI-G97-1153

Steven H. Bernstein, Principal Investigator, Ph: 716-845-7611  
Roswell Park Cancer Institute  
Buffalo, New York

**RENEW YOUR MEMBERSHIP NOW!  
LAST CHANCE AT THE CURRENT RATE!!**

A decision was made at the ISICR Annual Meeting in San Diego to increase the annual dues for 1999. You are encouraged to take advantage of multiple year membership in the Society.

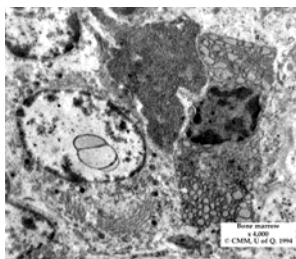
**Member Notes**

ISICR President Bryan Williams was elected an Honorary Fellow of the Royal Society of New Zealand. Honorary Fellowship is reserved for those New Zealand scientists working overseas or for foreign scientists who have contributed significantly and with excellence to New Zealand science. The criteria for Honorary Fellowship are eminence in the field and

association with New Zealand and New Zealand science. The abbreviation for an Honorary Fellow is Hon. FRSNZ.

Congratulations:

Hon. FRSNZ  
Bryan R.G. Williams



What is this?

Photo courtesy of Centre for Microscopy and Microanalysis, Univ. of Queensland

**NEW ISICR MEMBERS**

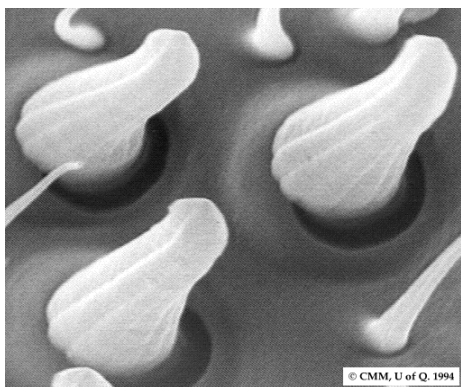
The ISICR wishes to welcome the following new members. Contact the membership office for address and email information.

- Samita Bhattacharya  
Frederick, MD
- Daniel J. Carr  
New Orleans, LA
- Weihong Chang  
Beijing, PR China
- Raj Kumarie Deonarain  
London, UK
- Leon Fischer  
Chicago, IL
- Albert Heim  
Hannover, Germany
- Petros Kirtsis  
Drama, Greece
- Andrzej Konieczny  
Cambridge, MA
- John William Ortegel  
Chicago, IL
- Vinay Anand Raj Palledonda  
Des Plaines, IL
- Aida Sterin Prync  
Buenos Aire, Argentina
- Gregory A. Skorupa  
Chicago, IL
- Yiming Song  
Shanghai, PR China
- Kothandaraman Subramanian  
Madison, WI
- Akio Uemura

Toyota, Japan  
Brian K. Weaver  
Stony Brook, NY  
Digfeng Zhang  
Chongqing, PR China

**RESEARCH ASSOCIATES IN SPACE BIOLOGY  
SPECIAL PROGRAM FOR MINORITY APPLICANTS**

The advances in the Space Shuttle Program and development of the Space Station have allowed the development of Space Biology Science that offers exceptional opportunities for research. NASA is offering Research Associate Awards in a special program for minorities at the postdoctoral level for scientists to conduct Space Biology Research in a university laboratory or nongovernmental research institute of your choice that can provide the necessary facilities and research environment. Projects should be in the gravitational and space biology discipline. The awards are: \$20,000 for the first year and have the possibility of renewal at \$22,000 for a second year. Funding will begin July 1 to October 1, 1998. This is a special program for minority applicants, and U.S. citizens and permanent resident aliens with Ph.D., M.D., D.V.M., D.M.D. or equivalent degrees are eligible to apply. PROPOSALS ARE DUE APRIL 15, 1998. For information and application booklet contact: Dr. Gerald Sonnenfeld, Dept. of General Surgery Research, Carolinas Medical Center, P.O. Box 32861, Charlotte, NC 28232. Tel: (704) 355-2639 Fax: (704) 355-7203



**What is this?**

Photo courtesy of Centre for Microscopy and Microanalysis, Univ. of Queensland

**NIH REDUCES  
INTRAMURAL  
PROGRAM COSTS!  
NEW TRAVEL RULES FOR STAFF  
ARE ISSUED**

From: Travel Office  
Subject: Travel Policy

To: All NIH Travelers

Due to budget constraints, the following policies have been established regarding employees traveling on official business.

**TRANSPORTATION:**

Hitchhiking in lieu of commercial transport is the preferred choice. Luminescent safety vests will be issued to all employees prior to their departure on Government business trips. Bus transportation will be used whenever hitchhiking is not possible. Airline tickets will only be authorized for purchase in extreme circumstances and the lowest fares will be used. If for example, a meeting is scheduled in Seattle, but a lower fare can be obtained by traveling to Detroit, then the ticket will be issued for travel to Detroit.

**LODGING:** All employees are encouraged to stay with relatives, friends or mere acquaintances while on Government business. If weather permits, public areas such as parks, roadside rests and parking lots should be used for temporary lodging sites. Bridges and tunnels may provide shelter in periods of inclement weather.

**MEALS:** Expenditures for meals will be limited to the absolute minimum. It should be noted that certain grocery chains or warehouse clubs provide free samples of promotional items. Entire meals can often be consumed in this manner. Travelers should also become familiar with indigenous roots, berries and other protein sources available at their destination. If restaurants must be utilized, travelers should seek establishments offering all you can eat salad bars. This will be especially cost effective to employees traveling together, as a single plate can be used to feed an entire group. Employees are also encouraged to bring their own food while on Government business. Cans of tuna fish, Spam and Beefaroni can be conveniently consumed at your leisure, without unnecessary bother of heating or other costly preparation.

**ENTERTAINMENT OF GUESTS:** In lieu of extravagant dinners, a picnic bench, preferably located in the rear of a local restaurant, should be identified. A garden hose (standard government issue, no spray nozzle) will be made available so that liquid refreshments can be provided.

**1998 Meeting Secretariat  
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