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1998 Meeting



Oct. 25-30, 1998
Jerusalem
Joint ISICR/ICS

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

ISICR WWW SITE

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

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**1998
ISICR Award
Winners**

**MILSTEIN
AWARD**

Otto Haller

**HONORARY
MEMBERSHIP**

**Samuel Baron
Ernest Knight**

**Christina Fleischman
Award**

Xioxia Li

**Young Investigator
Awards**

**Yitzhak Ben-Assouli
Rongtuan Lin
Christian Park**

**Viragen Award
for Excellence in
Interferon Research**

Jinjiao Guo

**SEE PAGE 7
for the
Preliminary
Meeting
Program**

Travel Awards

**Taruna Arora
Glen Barber
Manfred W. Beilharz
Yitzhak Ben-Asouli
Eliette Bonnefoy
Jeffrey R. Cook
Raj Deonaran
Joan Durbin
Sven Erickson
Michael Gale, Jr.
Ana Gamero
John Gerecitano
Adam R. Goodman
Dan Grander
Jinjiao Guo
Edward R. Hoffman
Reiko Horai
Michael G. Katze**

Travel Awards, ctd.

Merike Kelve
Christopher D. Krause
Peter Kontsek
Malte Lewerenz
Xiao Xi Li
Rongtuan Lin
Pedro Lopez-Saura
William Lowther
Hannah Nguyen
Christopher Park
Leondias Plataniias
Regina Raz
Luiz F.L. Reis
Joan Riley
Laura Saunders
Ganes C. Sen
Vijay Shankaran
Heidi M. Skrenta
Yoh-ichi Tagawa
Kader Thiam
Milen Vassilev
Deborah Vestal

ISICR Election Results

Newly elected to
the ISICR Board of Directors

Otto Haller
Ara Hovanessian
Huub Schellekens

NEW ISICR MEMBERS

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

Ammar Aboul-Saoud -
Evanston, IL
Mohammed Altaf Saleem -
Chicago, IL
Clara Ambrus - Buffalo, NY
Julian L. Ambrus-Buffalo, NY

Emmalene J. Bartlett -
Nedlands WA, AUSTRALIA
Yitzhak Ben-Asouli -
Jerusalem, ISRAEL
Erika Bosio - Nedlands WA,
AUSTRALIA
Ramana Y. Chilakamarti -
Cleveland, OH
Alicia Collado-Bloomington, IN
Yan Ge - Piscataway, NJ
Heinz Gisslinger - Vienna,
AUSTRIA
Adam R. Goodman - New
York, NY
Jinjiao Guo - Cleveland, OH
Gavan A. Harrison -
Kingswood NSW, Australia
Wen He - Piscataway, NJ
Jasmine Kia Muey Heng -
Nedlands WA, AUSTRALIA
Reiko Horai - Tokyo, JAPAN
Robert Johnson - Burlingame,
CA
Cassandra M. Lawson -
Nedlands WA, AUSTRALIA
Punam Narang - Chicago, IL
Paul B. Rothman - New York,
NY
Marek Rozynek - Chicago, IL
Laura Saunders - Atlanta, GA
Kader Thiam - Lille, FRANCE
Mark Wayne Watson -
Nedlands WA, AUSTRALIA

The WEB

SEALS

A System for Easy Analysis
of Lots of Sequences Version 0.822
<http://www.ncbi.nlm.nih.gov/Walker/SEALS/index.html>

New in this release:
o Greatly improved installation
process. There are new, more

robust install scripts, and newly re-organized and re-written instructions which include details on how to get started quickly without installing the entire package.
o New configuration options which allow you to minimize the disruption of your shell environment by SEALS.
o Major upgrade to 'feature2fasta' which allows the script to piece together features in GenBank flatfiles which are joined across multiple records. In addition, segmented features can be split on the output, and /coded_by qualifiers can be read to render the nucleotide CDS for an amino-acid sequence.
Roland Walker

ALL THE VIROLOGY ON THE WWW UPDATE

<http://www.tulane.edu/~dmsander/garryfavweb.html>

All the Virology on the WWW (ATV) is pleased to announce several new developments of interest to our users:
ATV has had some very high profile reviews recently - including a review in AAAS's premier Science Magazine.
- The Virology Bookshop continues to offer our users significant discounts on your favorite books.
- A new look for ATV is under development - tell us what you think!

The Big Picture Book of Viruses

http://www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html

As many of you know, The Big Picture Book of Viruses continues to prosper with many images being added every week. If you have a virology image you would like to share with the public, or a Web site with viral images please contact us. In addition, ATV has partnered with the American Society for Microbiology in sponsoring an electronic collection of peer-reviewed materials for teaching and learning about the microbial world. The Collection (C3) is intended to provide a

venue for teaching faculty to publish pertinent work in education, and to provide a resource for improving teaching and learning in the microbiological sciences. Please visit the following web address if you need details or a submission form:
<http://www.asmtusa.org/edusrc/educ3.htm>

This is an NSF funded project, and a wonderful opportunity to showcase your work. We need your materials (video, animation, photos, graphics)! The collection will be peer reviewed so this will be a great (and relatively easy) opportunity for you to have your material published on the web (helpful for P&T, merit pay, makes your CV more attractive!) If you have any specific questions not answered on the web site, feel free to contact Kim R. Finer (ikassem@asmtusa.org) for more information. The ASM C3 collection needs your submissions now!

Visual Molecular Dynamics

1.2 Release Announcement

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

The Theoretical Biophysics group at the University of Illinois and the Beckman Institute For Advanced Science and Technology is happy to announce the availability of version 1.2 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 IBM, HP, Linux, Sun, and SGI Unix systems. The documentation 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.

Changes to VMD 1.2 since VMD 1.1:

- o Many updates to VMD documentation
- o VMD now supports OSF1/Digital Unix 4.x on DEC Alpha with OpenGL or Mesa

- o Dihedral angles are now reported in the proper range
- o Various small bug fixes, and portability enhancements
- 1.2 beta 4
- o Improved display of 3-D axis labels "X", "Y", "Z".
- o Fixed POV, POV3, Art, Raster3D, and Rayshade renderer export codes.
- o Fixed the "write" function found in the "edit animation" dialog.
- o VMD runs in the Cave simulator now.

Basic information about VMD

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:

- o No limits on the number of molecules, atoms, residues or number of animation frames, excepting available memory.
- o Many molecular rendering and coloring methods.
- o Stereo display capability.
- o Extensive atom selection syntax for choosing subsets of atoms for display (includes boolean operators, regular expressions, and more).
- o 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.
- o 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.

- o Extensive graphical and text-based user interfaces, which use the Tcl package to provide full scripting capabilities.
- o Extensions to the Tcl language which enable researchers to write their own routines for molecular analysis
- o Modular, extensible source code using an object-oriented design in C++, with a programmer's guide describing the source code
- o 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 an MD simulation using NAMD. The two programs, along with the intermediary communications package (called MDComm) constitute the 'MDScope' interactive environment.

Availability: The software is available for downloading from
<http://www.ks.uiuc.edu/Research/vmd/>

Please email any questions to 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)

John Stone

DID YOU KNOW?

Each king in a deck of playing cards represents a great king from history. Spades - King David; Clubs - Alexander the Great; Hearts - Charlemagne; and Diamonds - Julius Caesar

ToolSpace

<http://mulder.mathcs.emory.edu/toolspace>

One of the first applications of the ToolSpace project at Emory University is a collaborative molecule viewer. This allows any number of people to work together on a shared three-dimensional model. They can be in the same room, across campus, or across the world (as long as they're on the internet). Applications range from interactive learning to research collaboration.

It's easy to use:

1. Visit

<http://mulder.mathcs.emory.edu/toolspace> and create a space for you and your collaborators using the ToolSpace construction set.

2. Inform your collaborators that the collaboration session has begun (perhaps by phone or email) and they can join from their respective web browsers with the construction set "List" link. Once everyone has joined, molecules can be imported from anywhere on the web (as long as they're in .pdb format, such as from <http://www.pdb.bnl.gov>). The structures can then be measured, positioned, and annotated in various ways. We suggest creating spaces that include:
Vector-measurable Molecule Importer
Plane Dragger
Vector Measurer
Van der Waals Radii
tools for manipulating molecules and
Space Chat
Hilite Box
Text Annotation tools for general collaboration capabilities. For an initial test session, we suggest simply using the Hilite Box or Molecule Importer with no other tools.

To use ToolSpace, you need:

1. Netscape (version for IE in development)
2. a java-accessible VRML browser such as CosmoPlayer or WorldView (It is possible to satisfy both of these requirements under MacOS 7.6, Win95/NT, and IRIX.)

This is an ongoing research project, so we're very interested in your feedback, in terms of bug reports, feature requests, and general comments.

Ted Goddard

goddard@mathcs.emory.edu

Collaborative Computing Frameworks
Emory University, Atlanta, Georgia
<http://ccf.mathcs.emory.edu>

Biology Perl Module

<ftp://cyrah.med.harvard.edu/pub/Software/Bioperl>

<http://cyrah.med.harvard.edu/~jong/bioperl.html>

Bio.pl and Bio.pm are a perl5 module for Biological sequence analysis.

It has many useful relatively independent subroutines which can be used in your own perl programs.

This is a DWYLI (Do Whatever You Like with It) software.

jong@salt2.med.harvard.edu

DID YOU KNOW?

The longest recorded flight of a chicken is thirteen seconds.

National Institute of Aging AGING CELL REPOSITORY

WWW CATALOG

<http://locus.umdj.edu/nia>

To ensure that investigators have access to the most up-to-date information and complete listings of cell cultures, a World Wide Web version of the NIA Aging Cell Repository catalog is now available. The Repository has human cell cultures from individuals with aging-related conditions. These include disorders of accelerated aging (e.g., progeria, Werner syndrome, Cockayne syndrome, Rothmund-Thomson syndrome, and Down syndrome) and cell cultures from familial Alzheimer disease extended pedigrees. The collection also includes specially characterized normal human diploid fibroblast cultures (IMR90 and IMR91) and over 500 skin fibroblast cultures

from subjects participating in the NIA-sponsored Gerontology Research Center Baltimore Longitudinal Study of Aging. In addition, the Aging Cell Repository has human and animal differentiated cell cultures (epithelial, endothelial, and smooth muscle), human mammary epithelial and keratinocyte cell cultures, and fibroblast cultures from animals with different life spans. Menus are provided to allow users to search for cell cultures in a variety of ways including Repository number, MIM number, disease description, as well as sample type and animal species.

Questions and comments about the catalog should be directed to:

Coriell Cell Repositories

401 Haddon Avenue

Camden, New Jersey 08103

Tel: 800-752-3805 in the United States;

609-757-4848 from other countries

Fax: 609-757-9737

e-mail: ccr@arginine.umdj.edu

Jeanne C. Beck, Ph.D.

Deputy Director

Coriell Cell Repositories

NIGMS HUMAN GENETIC MUTANT CELL REPOSITORY WWW CATALOG

<http://locus.umdj.edu/nigms>

To ensure that investigators have access to the most up-to-date information and complete listings of cell cultures and DNA samples, the NIGMS Human Genetic Mutant Cell Repository has a World Wide Web catalog. The Repository has human cell cultures available in the following categories: inherited metabolic disorders, biochemically mutant cell cultures with characterized mutations, well-characterized chromosomally aberrant cell cultures, CEPH Reference Families, a human diversity collection, and human/rodent somatic cell hybrid mapping panels. Menus are provided to allow users to search for cell cultures or DNA samples in a variety of ways including Repository number, MIM

number, gene name, disease description, as well as chromosome abnormality and number. Chromosome ideograms are provided for human/rodent somatic cell hybrids.

Questions and comments about the catalog should be directed to:
Coriell Cell Repositories
401 Haddon Avenue
Camden, New Jersey 08103
Tel: 800-752-3805 in the United States;
609-757-4848 from other countries
Fax: 609-757-9737
e-mail: ccr@arginine.umdj.edu

Jeanne C. Beck, Ph.D.
Deputy Director
Coriell Cell Repositories

SWISS-PROT:

Protein sequence database.
Release 36.0

<http://www.expasy.ch/sprot/>
<http://www.ebi.ac.uk/sprot/>

Statistics: 74 019 fully annotated sequences, 26 840 295 amino acids, 59 911 references.

Citation: Bairoch A., Apweiler R.;
Nucleic Acids Res. 26:38-42(1998).

Availability:
<ftp://ftp.expasy.ch/databases/swiss-prot>
<ftp://ftp.ebi.ac.uk/pub/databases/swissprot/release>

PROSITE

Protein domains and families database
Release 15.0

<http://www.expasy.ch/sprot/prosite.html>

Statistics: 1014 documentation entries; 1352 patterns, rules and profiles/matrices.

Citation: Bairoch A., Bucher P., Hofmann K.;
Nucleic Acids Res. 4:217-221(1997).

Availability:
<ftp://ftp.expasy.ch/databases/prosite>
<ftp://ftp.ebi.ac.uk/pub/databases/prosite>

ENZYME

Enzymes nomenclature database.
Release: 22.0

<http://www.expasy.ch/sprot/enzyme.html>

Statistics: 3 704 enzymes described.

Citation: Bairoch A.; *Nucleic Acids Res.* 24:221-222(1996).

Availability:
<ftp://ftp.expasy.ch/databases/enzyme>
<ftp://ftp.ebi.ac.uk/pub/databases/enzyme>

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WWW home:
www.expasy.ch/www/amos.html
WWW servers: www.expasy.ch and
www.isb-sib.ch

Reviews of Interest

Dinarello, C.A. et al. 1998.
Overview of interleukin-18: more than an interferon-gamma inducing factor. *J. Leukoc. Biol.* 63:658-664.

Heinrich, P.C. et al. 1998.
Interleukin-6-type cytokine signaling through the gp 130/JAK/STAT pathway 1. *Biochem. J.* 334:297-314.

Ihle, J.N. et al. 1998. The roles of JAKs and STATs in cytokine signaling. *Cancer J. Sci. AM.* 4 (Suppl 1): S84-S91

Jans, D.A., and G. Hassen. 1998. Nuclear Targeting by growth factors, cytokines, and their receptors: a role in signaling. *Bioessays.* 20:400-411.

Jelkmann, W. 1998.
Proinflammatory cytokines lowering erythropoietin production. *J. Interferon & Cytokine Res.* 18:555-560.

Karin, M. 1998. The NF-kappa B activation pathway: its regulation and role in inflammation and cell survival. *Cancer J. Sci. Am.* 4 (Suppl 1):S92-S99.

Kirman, I. et al. 1998.
Interleukin-15 and its role in chronic inflammatory diseases. *Inflamm. Res.* 47:285-289.

Letterio, J.J., and A.B. Roberts. 1998. Regulation of immune responses by TGF-beta. *Ann. Rev. Immunol.* 16:137-161

Padgett, R.W. et al. 1998. TGF-beta signaling, Smads, and tumor suppressors. *Bioessays.* 20:382-390.

Pfeffer, L.M. et al. 1998.
Biological properties of recombinant alpha-interferons: 40th anniversary of the discovery of interferons. *Cancer Res.* 58:2489-2499.

Williams, B.R., and R.H. Silverman. 1998. Progress in interferon and cytokine research. *Cytokine Growth Factor Rev.* 9:85-87.

CLINICAL TRIALS

Protocol IDs: HSC-MS-95-139, NINDS NS 35619 Phase II Study of ingested **IFN-alpha** in relapsing-remitting Multiple Sclerosis. Contact: Staley A. Brod, PI. University of Texas Health Science Center Houston Ph: 713 500-7046, email sbrod@neuro.med.uth.tmc.edu

Protocol ID: HSC-MS-96-032. Phase I study of ingested **IFN-alpha** in the prolongation or permanence of the "honeymoon" phase in newly diagnosed insulin dependent diabetes mellitus. Contact: Staley A. Brod, PI. University of Texas Health Science Center Houston Ph: 713 500-7046, email sbrod@neuro.med.uth.tmc.edu.

Protocol IDs: LAC-USC-01951, NCI-G97-1264 Phase I Study of Inhalation of **Interleukin-2** (IL-2) in Patients With Metastatic or Unresectable Cancer .Raymond A. Kempf, Chair, USC/Norris Comprehensive Cancer Center Ph: 213-226-4009

Protocol IDs: MSKCC-94134, NCI-V95-0629 Phase I/II Study of Immunization of Patients with Advanced Prostate Cancer with MHC Class I-Matched Allogeneic Human Prostate Carcinoma Cells Engineered to Secrete **IL-2** and **IFN-gamma**. Contact: Susan Slovin, Chair, Memorial Sloan-Kettering Cancer Center Ph: 212-639-6412

Protocol IDs: FCCC-96047, NCI-B95-0002 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 Contact: Louis M. Weiner, Chair, Fox Chase Cancer Center Ph: 215-728-2480

Protocol IDs: GUMC-97118, NCI-T97-0033 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. Contact: John L. Marshall, Chair, Vincent T. Lombardi Cancer Research Center, Georgetown University Ph: 202-687-2198

Protocol IDs: RPCI-DS-95-10, NCI-V97-1360 Phase II Study of Recombinant Human **Interleukin-4** in Patients with Primary Myelofibrosis . Contact: Meir Wetzler, Chair, Roswell

Park Cancer Institute. Ph: 716-845-8447

Protocol IDs: JWCI-BB-IND-7004, NCI-V97-1281 Phase I/II Study of a Recombinant Chimeric Protein Composed of Genetically Altered **Interleukin-4** and Pseudomonas Exotoxin (IL-4(38-37)-PE38KDEL) for the Treatment of Recurrent Malignant Astrocytoma. Contact: Robert Wheeler Rand, Chair John Wayne Cancer Institute Ph: 888-625-3431

Protocol ID: 94-CH-0134 Dose-Response Relationships for Single Doses of Recombinant Human **interleukin-6** (IL-6) in Normal Volunteers and in Patients with Disorders of the Hypothalamic-Pituitary-Adrenal Axis. Contact: Patient Recruitment and Referral Service, CC. Bethesda, MD. Ph: 1-800-411-1222 E Mail:prrc@cc.nih.gov

Protocol ID: 96-AR-0125 Recombinant Human **interleukin-10** (IL-10) for Psoriatic Arthritis: Safety, Tolerance, Immunologic Effects and Clinical Activity Contact: **Patient Recruitment and Referral Service, CC.** Bethesda, MD. Ph: 1-800-411-1222 EMail:prrc@cc.nih.gov

Protocol ID: 98-I-0059 Phase I Trial of Recombinant Human **interleukin-10** (SCH 52000) in Patients with Wegener's Granulomatosis. Contact: **Patient Recruitment and Referral Service, CC.** Bethesda, MD. Ph: 1-800-411-1222 EMail:prrc@cc.nih.gov

Protocol IDs: BIH-L97-0252, NCI-T98-0002 Phase I Study of Post Transplant **Interleukin-12** Following High Dose Cyclophosphamide, Thiotepa, and Carboplatin in Women with Metastatic Breast Carcinoma. Contact: David Avigan, Chair, Beth Israel Deaconess Medical Center Ph: 617-667-2977

Protocol IDs: OSU-T98-0020, NCI-T98-0020 Phase I Study of **Interleukin-12** Followed by **Interferon Alfa** in Patients with Advanced Malignant Melanoma or Other Advanced Malignancies . Contact: William Edgar Carson, III, Chair, Ohio

State Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Research Institute Ph: 614-293-8729

Protocol ID: 98-I-0071 A Randomized, Placebo-Controlled Study of the Safety and Immunologic Activity of a Single Dose of Recombinant Human **interleukin-12** (rhIL-12) Administered Concurrently with Cat Allergen in Patients Allergic to Cats. Contact: **Patient Recruitment and Referral Service, CC.** Bethesda, MD. Ph: 1-800-411-1222 EMail:prrc@cc.nih.gov

1998 Meeting Secretariat

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DID YOU KNOW?

A duck's quack doesn't echo, and no one knows why.

