



# ISICR NEWS

VOL. 2 NO. 3  
JULY 1995



### The World Health Organization International Collaborative Study for Interferon Alpha

Due to uncertainties in potency assignments arising from the use of Standards for the interferon alpha (IFN $\alpha$ ) type, the WHO, at one of its recent Expert Committee meetings, considered there was an urgent need to reappraise all aspects of IFN $\alpha$  standardization. The WHO has therefore recommended the setting-up of a new International collaborative study to evaluate a number of existing and new IFN $\alpha$  reference preparations. We are now undertaking the responsibility of coordinating, on behalf of the WHO, this International collaborative study which we hope to have underway in the coming year.

Knowing of your experience and expertise in the IFN field, we would like to invite you, if you have available assay systems that measure IFN $\alpha$ , regardless of their basis (bioassays, immunoassays, receptor binding etc.), to take part in the study.

It will be necessary to assay different ampouled preparations of IFN $\alpha$  and to provide the raw data of assay responses. There are to be some fifteen preparations entered into the study, although, should you be unable to handle that quantity, we can supply you with a lower number.

If you are interested in taking part in this important study - which leads to a publication in an International journal - please fill in and return the accompanying form.

A R Mire-Sluis PhD      A Meager PhD  
Division of Immunobiology, N.I.B.S.C.

NAME

ADDRESS

TEL NO:

FAX NO:

WHAT TYPE OF ASSAY SYSTEM DO YOU USE?

Antiviral bioassay (cell type, virus)

Antiproliferative assay (cell type)

Immunoassay

Other

PLEASE ATTACH A REFERENCE TO THE PUBLISHED METHOD (OR BRIEF DETAILS)

In accordance with the procedures of the Expert Committee on Biological Standardization of the WHO, under whose auspices this Institute prepares International Standards, please note that laboratories participating in a collaborative study do so on the understanding that they agree not to publish or circulate information on the materials included in the study. Once the final report has been agreed to by participants and the preparation formally established by WHO, this reservation no longer applies.

SIGNATURE

DATE

RETURN TO: Dr A R Mire-Sluis  
Division of Immunobiology, N.I.B.S.C.  
Blanche Lane  
South Mimms, Potters Bar  
Herts., EN6 3QG, UK

**CURRENT LISTING OF  
WHO-NIAID  
INTERNATIONAL  
INTERFERON  
STANDARDS AND  
REFERENCE REAGENTS**

**INTERFERONS                      CATALOG #**

HuIFN alpha (Ly)	Ga23-901-532
HuIFN alpha 2a(r)	Gxa01-901-535
HuIFN alpha (Le)	Ga23-902-530
HuIFN gamma	Gg23-901-530
HuIFN gamma(r)	Gxg01-902-535
HuIFN beta	Gb23-902-531
HuIFN beta ser 17	Gxb02-901-535
MuIFN alpha	Ga02-901-511
MuIFN alpha/beta	Gu02-901-511
MuIFN beta	Gb02-902-511
MuIFN gamma	Gg02-901-533
Rabbit Interferon	G019-902-528A

**ANTISERA**

Anti-HLI	G026-501-568
Anti-HLI	G026-502-568
	NOT IN STOCK
Anti-HLI-ctrl	G027-501-568
Anti-HuIFN alpha	G030-501-553
Hu-Anti-HuIFN alpha	G037-501-572
Anti-HuIFN alpha-ctrl	G031-501-553
Anti-HuIFN beta	G028-501-568
Hu-Anti-HuIFN beta	G038-501-572
Anti-HuIFN beta-ctrl	G029-501-568
Anti-HuIFN gamma	G034-501-565
Anti-HuIFN gamma-ctrl	G035-502-565
	NOT IN STOCK
Anti-MuIFN gamma	G032-501-565
Anti-MuIFN gamma-ctrl	G033-501-565
Anti MUIFNL*	G024-501-568
Anti MuIFNL-ctrl	G025-501-568

The interferon reference standards have only been calibrated in International Units of biological activity based on bioassays. No current IFN standard is suitable for use in calibrating immunoassays, such as the Enzyme Linked Immunoabsorbent Assay (ELISA). Researchers who wish to use reagents for comparative testing in the ELISA procedure should be forewarned that quantitative antigenic information is not available for these reagents.

HLI= human leukocyte interferon  
Ly= lymphoblastoid    Le = Leukocyte

\* L = mouse L-cells    r= recombinant  
beta ser 17 = recombinant B-IFN

Questions regarding requests for reagents or catalogs may be directed to Mr. Danny Ringer or Mr. David Zemo at: Braton Biotech  
NIAID Repository  
One Taft Court, Suite 101  
Rockville, MD 20850  
TEL # (301) 208-1777.

Sniglet #6-TERMINALPHORESIS: the act of dropping a gel in the sink while rinsing.

**CLINICAL  
TRIALS**

NCI-MB-357, NCI-95-C-0073  
Phase II Randomized pilot study of EPOCH II (VP-16/DOX/VCR/PRED alternating with CTX) alone vs. EPOCH II with IL-2 and PBSC in relapsed lymphomas.  
Contact: Wyndham Hopkins Wilson, Medicine Branch, National Cancer Inst. Bldg. 10, Bethesda, MD 20892  
Tel: 301496-6404

CLB-9237: Phase I study of VP-16/CBDCA with GM-CSF-IL6 in patients with advanced lung cancer.  
Contact: Sharon Davis Luikart, Veterans Administration Medical Center- Minneapolis, One Veterans Drive, Minneapolis, MN 55417  
Tel: 612-725-2000 ext 4135

NBSG-9411, NCI-V94-0574: Phase II study of BCNU/DTIC/CDDP/IFN-A/IL-2/TMX followed by IFN-A or IL-2 for advanced melanoma.  
Contact: Richard S. Schulof, Presbyterian-St. Luke's Medical Center, 1719 E. 19th Ave., Denver, CO 80218  
Tel: 303-869-2001

NCI-95-C-0068: Phase I study of immunization with recombinant vaccinia

virus encoding the MART-1 or gp100 melanoma antigen with or without concomitant IL-2 in patients with metastatic melanoma.

Contact: Steven A. Rosenberg, Surgery Branch, National Cancer Inst., bldg. 10, Bethesda, MD 20892  
Tel: 301-496-4164

NCI-CPB-349, NCI-T94-0162N, NCI-95-C-0055: Phase II study of CTX/TAX/CDDP with G-CSF in newly diagnosed stage IIC/III/IV ovarian epithelial cancer.

Contact: Elise C. Kohn, Clinical Pharmacology Branch, National Cancer Inst., Bldg. 10, Bethesda, MD 20892  
Tel: 301-402-1357

POG-9323: Interferon-alpha-2B plus hydroxyurea and cytarabine for chronic phase ACML (adult-type chronic myelogenous leukemia) in children.

Contact: Susan Giovanazzi-Bannon, Chicago, IL  
Tel: 312-482-9944, ext. 228

SWOG-9413: Phase II treatment with etoposide, leucovorin, fluorouracil, and interferon-alpha-2B (ELFI) plus G-CSF for locally advanced or recurrent pancreatic adenocarcinoma.

Contact: Marj Godfrey, San Antonio, TX  
Tel: 210-677-8808

93-C-02: Phase III prospective randomized trial of autolymphocyte therapy versus interferon-alpha in the treatment of metastatic renal carcinoma.

Contact: Leslie-Faye-Worris, MPH, Manager, Clinical Research, Cellcor, Newton, MA  
Tel: 1-800441-7901

## **SPONSOR NEWS**

**Information provided by  
ISICR sponsoring companies**

**Update on Status of Biogen's  
Interferon Beta-1a**

Biogen announced in May that it has filed for U.S. and European market

approval of its recombinant interferon beta product (IFN- $\beta$ -1a) for treatment of multiple sclerosis. Phase III human clinical trials with the product, conducted in collaboration with the National Institutes of Health, were completed in 1994. The results were reported last fall at major neurology meetings in San Francisco and Amsterdam by Lawrence D. Jacobs, M.D., the principal investigator. According to the study, interferon beta-1a appears to slow disease progression in MS patients and reduce the number of exacerbations, or flareups, of the disease.

## **BIOTECH BRIEFS**

Several FDA Biological Response Modifiers Committee members have recommended that the labeling of Roche's Roferon™ product: (interferon-alpha-2a) be changed to include risks and benefits for treatment of Philadelphia chromosome positive chronic myelogenous leukemia. This is based on clinical results.....  
.....Schering has received a patent for expression of interteron-beta in chinese hamster ovary cells.....Sales of Betaseron™ for treatment of multiple sclerosis are increasing rapidly, yielding great financial benefit to both Schering and Chiron Corp..... Chiron Corp. has positive results using Proleukin™ (interleukin-2) for ovarian cancer. The data are phase II results, with a phase III trial scheduled for the future.....The European parliament vetoed European Union legislation to grant legal protection to patents for life forms after 7 years of debate....The June 3rd issue of Lancet reported that the UK Research Council had shown a beneficial effect with Wellferon with CML. Median survival rate was increased and the death rate was decreased.

Sniglet #7: DETAILED DESCRIPTASE: an enzyme used for turning your basic outline into a detailed report.

## Reviews of Interest

The following reviews are suggested for those ISICR members who may have missed them.

Ben-Baruch, A., Michiel, D.F. and J.J. Oppenheim. Signals and receptors involved in recruitment of inflammatory cells. *J. Biol. Chem.* 270:11703, 1995.

Karp, J.E. and S. Broder. Molecular foundations of cancer: New targets for intervention. *Nature Medicine* 1:309, 1995.

Nishizuka, Y. Protein kinase C and lipid signaling for sustained cellular responses. *The FASEB Journal* 9:484, 1995.

Orkin, S.H. Transcription factors and hematopoietic development. *J. Biol. Chem.* 270:4955, 1995.

Schmidt-Wolf, G. and I.G.H. Schmidt-Wolf. Cytokines and clinical gene therapy. *Eur. J. Immunol.* 25:1137, 1995.

## ACCESS TO THE SUPERCOMPUTING FACILITY AT THE U.S. NATIONAL CANCER INSTITUTE

In April 1986, the National Cancer Institute's supercomputing facility, known as the Frederick Biomedical Supercomputing Center (FBSC), became operational. The FBSC supports biomedical research exclusively -- a fact that makes the center unique among high performance computing facilities. The FBSC affords the research scientist a two-fold opportunity: one, to apply existing computational tools in a faster and more effective way; and two, to apply modern computational chemistry theory-based approaches, such as quantum and physical chemistry, and molecular and

statistical mechanics to complex biochemical problems of relevance to understanding the causes and discovering the cures for human diseases. To date, the center supports over 1400 researchers scattered throughout the U.S. and such distant locations as Australia, Japan, Russia and Switzerland. In less than 10 years, the FBSC has gone from the concept of a supercomputing facility devoted to biomedical research to a productive high-performance scientific research center offering a diverse collection of scientists a wide range of computational options: a vector, multiprocessor supercomputer, a high performance, scalar Vaxcluster; a vector-scalar minisupercomputer; a massively parallel supercomputer; specialized workstations; "rendering engines" for scientific visualization; and a high speed networking infrastructure.

Applications for system access and resources can be submitted at any time. Applications for general access are processed on a weekly basis, whereas applications for supercomputer time exceeding 40 hours per year are only reviewed once every calendar quarter. Quarterly application deadlines are February 15, May 15, August 15, and November 15. All applications require a Principal Investigator to sponsor the group or project. A "project" may represent an entire laboratory or organization, or it may represent a specific project within an organization.

There are several ways that one can obtain an application form:

1. By anonymous ftp to: `convx.ncicrf.gov`, file: `/pub/BSC.application`
2. Through the use of the GCG Fetch program:
  - \$ analysis
  - \$ gcg
  - \$ fetch bsc.application
3. Use the VMS Copy command:
  - \$ Copy documents:
  - bsc.application [ ]/log
4. Or, call us at (301) 846-5763 and request that we send you an application via FAX, email or US Mail.

Wayne A. Main  
Frederick Biomedical Supercomputing  
Center, NCI-FCRDC  
P.O. Box B, Bldg. 430  
Frederick, MD 21702 -1201  
TEL: (301) 846-5777  
FAX: (301) 846-5762  
main@fcrfv1.ncifcrf.gov

**Sniglet #8: BLOT BLIGHT: Southern,  
Northern or Western blots that turn the  
film entirely black or have lots of spots.**

## **Images from the History of Medicine & OnLine Images**

Images from the History of Medicine (IHM), the National Library of Medicine's database of approximately 59,000 historical images. documents social and historical aspects of medicine from the Renaissance to the present. Pictures in the database come from NLM's collection of caricatures, photographs, fine prints, ephemera, and portraits; and from illustrations drawn from books and journals held by NLM. IHM covers a large range of medically related topics past and present, from medieval astrology to nineteenth century slum conditions, from the international fight against drug abuse to AIDS. The strength of the collection lies in the earlier periods, although it does contain twentieth century images, most dating from before World War II.

Several subgroups within the database are interesting as separate entities. For example, the core of the portrait collection is a group of 6,000 etchings, engravings, and woodcuts purchased for the Library by John Shaw Billings in 1879. Landmark medical treatises are included, with illustrations from such books as Vesalius' *De humani corporis fabrica* and William Harvey's *De motu cordis*. Great artists such as Rembrandt and Daumier are represented, the latter by his famous satirical illustrations for Antoine Fabre's

*Neinesis medicale illustre'*. There are patent medicine advertisements from the late nineteenth century and a large number of posters on such contemporary issues as AIDS, smoking, and illegal drugs.

Accessing IHM via OnLine Images (OLI)  
OnLine Images (OLI) is a system for delivering cataloged image archives via the World-Wide Web (WWW), a network-distributed multimedia technology that is usable from virtually any Internet-connected computer. OLI is the current delivery vehicle for Images from the History of Medicine.

Although any World-Wide Web browser is capable of connecting to OLI/IHM (allowing perusal of the associated documentation and catalog data), retrieving images from the collection requires the use of a limited number of browsers known to support the requisite WWW forms features (a list appears as part of the information that is displayed when a user initially connects to the service, using any WWW browser). One popular Web browser is NCSA Mosaic, which is available for the Macintosh, MicroSoft Windows (for IBM PCs), and X Windows (commonly employed on UNIX computers).

A user connects to a World-Wide Web server by specifying a form of electronic address known as a Uniform Resource Locator (URL). To connect to OLI/IHM specify the URL for the principal NLM World-Wide Web server, Hyper-DOC:  
<http://www.nlm.nih.gov/>

and then use the mouse or appropriate keyboard keys to select the item entitled "Online Information Services." Next, select the item "OnLine Images from the History of Medicine." It is advisable to read the documentation provided by the system prior to performing searches.

### The Search Page

Images may be retrieved by three means: by unique identifier, in random sets of ten images, and in response to user-specified text expressions. Requesting a search by text expressions leads to the display of an

interactive form, containing spaces for the entry of text that is to be matched against the bibliographic descriptions of the images. Text may be matched against any field, or, for quick searching, against fields containing only names, or titles and abstracts, or dates. The form also contains selection lists for specifying geographical location.

Text expressions can contain: the Boolean operators AND and OR; quote-enclosed multi-word phrases; and, can with an asterisk which serves as a truncation (wild-card) character. Within it's single text window, space separated words not in phrases are implicitly joined by Boolean ORs; the contents of adjacent text windows are joined by a Boolean AND.

#### The Search Report

Upon completion of a search, a summary document is displayed, containing the search pattern and the number of images with catalog entries matching the pattern. A form allows the user to specify the number of images to return for browsing, to perform another search, or return to the OnLine Images home page.

#### Browsing Retrieved Images and Catalog Data

Images are sent in batches containing 1 to 40 images, as specified by the user. The browsing documents contain thumbnail versions of the images accompanied by a brief description drawn from the corresponding catalog entry. Clicking on a thumbnail image causes a larger version of the image to be displayed (multiple images may be displayed simultaneously). Clicking on the brief description displays the complete catalog entry for the image. Clicking on a small checkbox at the upper left-hand corner of the thumbnail marks the image for later retrieval into a special subset of images. Buttons at the bottom of each browsing page allow the user to display the next set of browsing images (if there is one), perform a new search, or return to the OnLine Image home page. Any of the displayed materials may be saved to disk or printed locally.

**Technical Limitations and Future Plans**  
The following improvements to the OLI/IHM system are being considered: creation of high resolution scans from film copies of the original materials (the currently available images were extracted from a laser videodisc), completion of the catalog information; and, addition of an interactive online order form for requesting photographic and machine-readable copies of specific images. The OLI system could benefit from: more sophisticated search methods; and, interaction with UMLS (TM) based searching aids.

#### Availability of OLI Software

Developed at the Lister Hill National Center for Biomedical Communications (LHNCBC), the OnLine Images system can be applied to *any* cataloged image collection. OLI is freely available; the LHNCBC is attempting to create an informal consortium of groups that are using it, and collaborating in its further development. Direct inquires to the address listed below,

Related Fact Sheets  
NLM HyperDOC(TM), World-Wide Web,  
& NCSA Mosaic  
Unified Medical Language System (UMLS)

For additional information about the IHM collection, contact:  
Philip M. Teigen, Ph.D.  
History of Medicine Division  
National Library of Medicine  
9600 Rockville Pike  
Bethesda, MD 20994  
(301)496-5405  
Phil\_Teigen@occhost.nlm.nih.gov

For additional information about the OLI image archive delivery system, contact:  
R. P. Channing Rodgers, M.D.,  
Lister Hill National Center for Biomedical Communications, NLM  
8600 Rockville Pike  
Bethesda MD 20894  
(301)496-9300  
rodgers@nlm.nih.gov

## ISICR CROSSWORD PUZZLE

In most publications that contain a crossword puzzle, the next issue contains the correct answers. However, since this editor never fills in enough spaces to care about the answers, I have opted to not show the completed puzzle. Anyone dying to find out the missing pieces needs to submit something for inclusion in the newsletter in order to get the answers. I am however open to bribes, particularly in the form of chocolate.

## PUBLIC AFFAIRS



### THE SCIENCE BUDGET CRISIS

The science budgets proposed by both the U.S. House and Senate will prove disastrous for U.S. science if passed. Both budgets propose an immediate cut of 5-10% with a flat budget for the next 5 years. This will result in an NIH budget which would be 27-38% below a budget which just keeps pace with inflation by the year 2000. However, the Senate, by a vote of 85-14 voted to restore \$7 billion in NIH funding. The Senators who voted against the amendment included Ashcroft (Mo), Byrd & Rockefeller (WVa), Coats (Ind), Cochran & Lott (Miss), Craig & Kempthorne (Idaho), Gorton (Wash), Johnston (La), Kyl & McCain (Ariz), Smith (NH) and Thompson (Tenn). Crucial decisions will now be made in the House-Senate conference committees. All ISICR members, regardless of their funding

source, are urged to call or fax the dissenting Senators and members of the U.S. House urging them to support the Senate version of NIH funding. Your voices must be heard loud and clear on this issue.

**Sniglet #9: SURFACE ANXIETY: nervous condition resulting from trying to deposit a 1 ul sample in a siliconized tube.**



"My God! It is Professor Dickle! ... Weinberg, see if you can make out what the devil he was working on, and the rest of you get back to your stations."

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## ADVERTISEMENTS NOW ACCEPTED

Proceeds from advertisements in the ISICR News would be used solely to cover the

costs of copying and distributing the newsletter. The newsletter editorial board would have the option of rejecting ads deemed not suitable. So get out there and pass a copy of this issue to your local sales reps. If we get enough ads (and as you can see, we're starting from a low baseline with a zero background), we might even get fancier paper. Inquiries regarding costs should be directed to the ISICR headquarters office.

## HELP US

We will always need input from members and we still haven't been overwhelmed yet. The deadlines for the next issue is **Sept. 15** so start thinking about info for what clearly has probably become the best society newsletter, if we do say so ourselves (of course our opinion is completely impartial).

Send correspondence to:

**Howard Young**  
Lab. of Experimental Immunology  
NCI-FCRDC, 560/31-23  
Frederick, MD 21702-1201  
FAX# 301-846-1673  
Address e-mail to:  
youngh@ncifcrf.gov

**Gerald Sonnenfeld**  
Div. of Research Immunology  
Carolinas Medical Center  
PO. Box 32861  
Charlotte, NC 28232-2862  
FAX# 704-355-7203  
Address e-mail to:  
sonnenfe@med.unc.edu

**Bratko Filipic**  
Institute for Microbiology  
Medical Faculty  
61105 Ljubljana  
Slovenia  
FAX# 38661302-895

## LOAN THIS ISSUE TO A COLLEAGUE!

Pass this issue along to a colleague and convince them to join the ISICR. If each member recruits just 1 member, the society will grow rapidly. Membership gets you the ISICR directory, this terrific newsletter, discount registration at the national meeting and eligibility for ISICR awards. Remember, a three year membership is just \$95 and you don't have to worry about renewing each year. A membership form is attached to this newsletter.

**SNIGLET #10: QUERZLING-** the act of blowing bubbles out from the bottom of a vertical slab gel and in the process depositing more and blowing them out, etc.

**SEE YOU  
IN  
BALTIMORE  
NOV.6-11**

**REMEMBER  
HOTEL  
RESERVATIONS  
DUE  
SEPT. 30**