

the



# Record

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

October 9, 1973  
Vol. XXV, No. 21

NATIONAL INSTITUTES OF HEALTH

## Blood Collection Groups Asked to Offer Plans For Nat'l Donor Systems

An HEW-sponsored conference, held at NIH on Sept. 24, to implement a national all voluntary, non-commercial blood donor system concluded with a request for major blood collection groups to present within 2 weeks an interim plan to govern their activities until a permanent system could be agreed upon in January.

These groups included: the American Blood Resources Association, the American Association of Blood Banks, and the American National Red Cross.

In his opening remarks, HEW Secretary Caspar W. Weinberger assured the conferees of the Government's full participation to safeguard this "very precious resource."

Expressing faith in the private sector, he called for "creative implementation" of the National Blood Policy.

### Government Is Catalyst

Secretary Weinberger stressed that, while the Government should be the primary catalyst to improve the collection and distribution of blood, it would be "best not to be run by the Federal Government."

HEW Assistant Secretary for Health Dr. Charles C. Edwards, who presided at the all-day Conference on Implementation of the National Blood Policy, also emphasized that it was not a Fed-

(See DONOR SYSTEMS, Page 6)

### Dr. M. Mead Will Deliver NIH Lecture on October 17

Dr. Margaret Mead will deliver an NIH lecture, entitled *The Changing Significance of Territoriality in Human Societies*, on Wednesday, Oct. 17, at 8:15 p.m., in the Clinical Center Jack Masur Auditorium.

Dr. Mead is associated with the American Museum of Natural History in New York City and is a Fogarty Scholar-in-Residence.

Attendance will be limited to NIH staff and families.

## New Synthetic Antigen Modifies Growth Of Tumor Cells by Mimicking Antigens

Using highly sophisticated laboratory techniques, Dr. W. T. Shier—an NIH-supported scientist at the Salk Institute in California—has manufactured a chemical substance, an antigen, which mimics antigens found on the surface of some tumor cells.

The synthetic antigen used as an immunizing agent protected rats against a transplanted tumor and was of some benefit to mice with a different kind of cancer, Dr. Shier indicated.

Many disease-causing agents escape detection by the body's immune system because the chemical structures (antigens) on their surfaces are not "foreign" enough to elicit an adequate immune response.

Scientists theorize that if a weak antigen can be attached to a carrier which the body can recognize, a protective immune response will be elicited when the animal is exposed to the carrier-antigen complex.

### Offers Some Hope

This has been called the "chemical vaccine" approach, and it is believed to offer some hope for the control of some cancers.

Dr. Shier reports that he first determined that the antigen found on some tumor cells belongs to a class of chemicals known as glycoproteins. From the blood of an Antarctic fish, he extracted appropriate glycoproteins and converted them into a form suitable for testing as a synthetic tumor-specific antigen.

This synthetic antigen, called FA, was then treated with methylated bovine serum albumin (MBSA) and the complex FA(MBSA) was formed.

The effectiveness of the carrier-antigen complex as an immunizing agent, or vaccine, was evaluated in a series of experiments in which rats were given solutions of varying amounts of FA(MBSA) or MBSA alone.

Each animal received an initial injection, then a booster 2 weeks later. Three weeks after the booster injection, cells of a chemically-induced rat breast tumor were transplanted in the animals.

Protection against the transplanted tumor was observed with

(See SYNTHETIC, Page 8)

## Bridgman and Mitchell Appointments at NLM To Expand Audiovisuals



Dr. Mitchell



Dr. Bridgman

Two new appointments at the National Library of Medicine have recently been announced. Dr. Charles F. Bridgman has been named associate director for Educational Resources Development, and Dr. George E. Mitchell was appointed director of the National Medical Audiovisual Center in Atlanta.

Dr. Bridgman, who was formerly director of NMAC, will coordinate and assist in developing NLM's educational resource activities with special concentration on evaluating innovative materials for instruction.

Dr. Mitchell, who has been deputy director of NMAC since July 1972, also served as chief of the Office of Audiovisual Educational Development, Bureau of Health Resources Development.

Dr. Martin M. Cummings, NLM Director, said that these appointments will "expand the Library's capability in audiovisual and other educational resource development. . . ."

### Egeberg to Head New Alcohol, Drugs, Mental Health Agency

Dr. Roger O. Egeberg has been named interim head of HEW's new Alcoholism, Drug Abuse, and Mental Health Administration. (See *the NIH RECORD*, Sept. 25, 1973.)

Dr. Egeberg, who has been serving as special assistant for health policy, was previously HEW Assistant Secretary for Health and Scientific Affairs.

## Policies for Protecting All Human Subjects In Research Announced

HEW Secy. Caspar W. Weinberger today (Tuesday, Oct. 9) announced the proposed regulations for providing additional protection to humans involved in research and development activities supported by the Department.

The proposed regulations, published in today's Federal Register, would amplify the existing requirements that grantee and contractor organizations establish initial and continuing review mechanisms for all HEW-supported activities in which humans are risk factors.

Secretary Weinberger emphasized that neither the existing policy nor the new regulations in any way reduce the Department's own responsibilities for the review of grant and contract proposals.

"The welfare of subjects is as much a matter of concern to DHEW as it is to the research organization," said the Secretary,

(Continued on Page 7)

## Richard L. Hopkins Named to NICHD Post

Richard L. Hopkins was recently appointed associate director for Program Services, National Institute of Child Health and Human Development.



Mr. Hopkins

Prior to this appointment, he served as deputy associate director and later as acting associate director for Program Services.

Mr. Hopkins joined NICHD in 1964 as chief of the Grants and Contracts Management Branch. In 1969 he received HEW's Superior Service Award for his "skills in developing and implementing new and broader concepts of grants and contracts management" in NICHD.

Mr. Hopkins began his career here as an NIH management trainee in 1952 and worked in the Office of the Director and other Institutes until he joined NICHD.

**the**  **Record**

Published biweekly at Bethesda, Md., by the Publications and Reports Branch, Office of Information, for the information of employees of the National Institutes of Health, Department of Health, Education, and Welfare, and circulated by request to interested writers and to investigators in the field of biomedical and related research. The content is reprintable without permission. Pictures are available on request. The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper and the Department of Health, Education, and Welfare.

**NIH Record Office** ..... Bldg. 31, Rm. 2B-03. Phone 49-62125

**Editor** ..... **Frances W. Davis**  
**Assistant Editor** ..... **Fay Leviero**  
**Staff Writer** ..... **Ed Driscoll**

**Staff Correspondents**

ADA, Melissa Howard; CC, Thalia Roland; DCRT, Joan Chase; DRG, Sue Meadows; DRR, Jerry Gordon; DRS, Cora M. Sult; FIC, Lois P. Meng; NCI, Carolann Hooton; NEI, Bonnie Friedman; NHLI, Bill Sanders; NIAID, Krin Larson; NIAMDD, Pat Gorman; NICHD, Kathy Kowalezyk; NIDR, Sue Hannon; NIEHS, Elizabeth Y. James; NIGMS, Wanda Warddell; NIMH, Ed Long; NINDS, Carolyn Holstein; NLM, Ruth E. Armstrong.

**Specialists to Conduct Course for Consumer**

A consumer education course, conducted by the University of Maryland Extension Service, will be offered to NIH employees.

**First Session, Oct. 17**

The course, sponsored by the Employee Relations and Recognition Branch, OPM, will consist of five one-hour sessions. The first session is scheduled for Wednesday, Oct. 17, from 9 to 10 a.m.

Subjects to be covered during the course include savings at the market, credit versus cash, purchasing and maintaining an automobile, and developing your own spending plan.

Employees who wish to attend the sessions may request permission from their supervisors. For further information call ERRB, Ext. 64973.



**John F. Belin (r), acting chief, Nursing Students Loan and Scholarship Section, DN, receives the Distinguished Toastmasters Certificate—the Toastmasters highest honor—from NCI's Dr. Padman S. Sarma, club president. Mr. Belin received the award—only the 143rd given in the history of Toastmasters—for serving as a district officer, sponsoring a new club, conducting speechcraft and leadership courses, and recruiting 5 members.**

**CC Employees Honored for Special Achievements**



**At the ceremony, Dr. Chalmers receives a scroll signed by CC employees from Acting Director Dr. Roger L. Black (c) assisted by L. Earl Laurence, executive officer. Dr. Chalmers lauded the award winners and termed NIH a "spectacular place."**

Nearly 300 Clinical Center employees received awards for special achievements at the CC Annual Honor Awards Ceremony on Sept. 25.

Dr. Thomas C. Chalmers, in his final official appearance as CC Director, presented the awards at the ceremony in the Masur Auditorium.

PHS commendation medals were presented to Dr. Jean R. Herdt, deputy chief, Diagnostic Radiology Department, and Gloria S. Burich, chief, Medical Record Department.

**Awardees Named**

The medals were also given to Marion N. Keagle, assistant chief, Helen M. Mangan, clinical nurse expert, Beatrice Marino, chief training officer, and Barbara A. Rolling, clinical nurse expert; they are all in the Nursing Department, and Thomas H. Hodges, assistant chief, Pharmacy Department.

ment.

Coleman B. Chandler, Nutrition Department cook, received an EEO award for his efforts to organize and promote the EEO program. Over 100 employees received individual or group superior performance awards.

**Naoma Huckaby Cited**

A special achievement award was presented to Naoma T. Huckaby, Employee Health Service assistant chief occupational health nurse, for organizing the EHS alcoholism program.

Arthur L. Howard, baker in the Nutrition Department, also received that award for volunteering his services to assist during a critical personnel shortage.

Awards were presented to employees who had achieved 10, 20, or 30 years of Federal service. Those who received suggestion awards or quality increases during the year were also recognized during the assembly.

**3-Hour After-School Program Sponsored by Day Care Center**

The Child Development Committee is sponsoring an after-school program for children—ages 6 through 13—of NIH employees.

The after-school activities are in Bldg. 35, next to the Child Development Center. The hours are from 3 to 6 p.m., Monday through Friday, but part-time enrollment is also available for this supervised recreation program.

The curriculum is based on the interests of the children; the fee is 75 cents an hour.

Registration forms are available and questions about the program will be answered in Bldg. 31, Room 2B-51.

**EEO Discussion Planned For Thursday, Oct. 18.**

A discussion on EEO in the Federal Government will take place at noon on Thursday, Oct. 18, in the Masur Auditorium.

Robert G. Vaughn, presently a law professor at the American University Law School, will be the speaker at this special meeting.

Prof. Vaughn, while with Ralph Nader's Public Interest Research Group, wrote *The Spoiled System* and directed the study *Behind the Promises—EEO in the Federal Government*.

The meeting is sponsored by SHER, the Self Help for Equal Rights organization.

**General Schedule of New Annual Salary Rates**

Per annum rates

Grade	1	2	3	4	5	6	7	8	9	10
GS-1..	\$5,017	\$5,184	\$5,351	\$5,518	\$5,685	\$5,852	\$6,019	\$6,186	\$6,353	\$6,520
GS-2..	5,382	5,671	6,069	6,249	6,438	6,627	6,816	7,005	7,194	7,383
GS-3..	6,463	6,822	7,281	7,500	7,719	7,938	8,157	8,376	8,595	8,814
GS-4..	7,193	7,438	7,683	7,928	8,173	8,418	8,663	8,908	9,153	9,398
GS-5..	8,055	8,323	8,591	8,859	9,127	9,395	9,663	9,931	10,199	10,467
GS-6..	8,977	9,276	9,575	9,874	10,173	10,472	10,771	11,070	11,369	11,668
GS-7..	9,969	10,301	10,633	10,965	11,297	11,629	11,961	12,293	12,625	12,957
GS-8..	11,029	11,397	11,765	12,133	12,501	12,869	13,237	13,605	13,973	14,341
GS-9..	12,167	12,573	12,979	13,385	13,791	14,197	14,603	15,009	15,415	15,821
GS-10..	13,379	13,825	14,271	14,717	15,163	15,609	16,055	16,501	16,947	17,393
GS-11..	14,671	15,160	15,649	16,138	16,627	17,116	17,605	18,094	18,583	19,072
GS-12..	17,497	18,080	18,663	19,246	19,829	20,412	20,995	21,578	22,161	22,744
GS-13..	20,677	21,386	22,095	22,744	23,433	24,122	24,811	25,500	26,189	26,878
GS-14..	24,247	25,055	25,863	26,671	27,479	28,287	29,095	29,903	30,711	31,519
GS-15..	28,263	29,205	30,147	31,050	32,031	32,973	33,915	34,857	35,799	36,741
GS-16..	32,806	33,839	34,892	36,085	37,178	38,271	39,364	40,457	41,550	.....
GS-17..	37,376*	39,242*	40,508*	41,774*	43,040*	.....	.....	.....	.....	.....
GS-18..	43,926*	.....	.....	.....	.....	.....	.....	.....	.....	.....

\*Pay levels limited to \$36,000 by Title 5 of the United States Code. For Civil Service employees at NIH, the new 4.77 pay increase—effective for the pay period beginning Oct. 14—will be reflected in checks issued Nov. 6.

## Safety Training Course To Be Offered Dec. 11-13; Register Before Nov. 9

The NCI Office of Biohazard and Environmental Control, in cooperation with the NIH Biohazard Committee, will sponsor a laboratory safety training course, Principles of Biohazard and Injury Control for the Biomedical Laboratory, in Wilson Hall, Bldg. 1, Dec. 11 through 13.

The course, conducted by the U. of Minnesota School of Public Health, will instruct professional laboratory research personnel in basic principles of laboratory safety and contamination control.

Lectures include the history of



laboratory-acquired infections, a current assessment of biohazards in biomedical research, the proper use of biological safety equipment, animal containment methods, disinfection and sterilization procedures, and control methods for physical, chemical, and radiological hazards.

To register for the course, send name, position, laboratory, building and room number to the Office of Biohazard and Environmental Control, Bldg. 41, Room A-114, or call Ext. 66981.

Registration deadline is Nov. 9.

## Marsha Jessup, NIH Medical Illustrator, Does More than Make Pretty Pictures

By Nancy Breslau

Agriculture Secretary Earl L. Butz appointed a number of new members to the general administration board of the Department of Agriculture's Graduate School last spring.

The graduate school board meets 3-5 times a year and determines the course offerings and policies of the evening school.

### Youngest Member on Board

Marsha Jessup, one of NIH's medical illustrators, was one of those chosen. She's the youngest member of the board, one of two women, and in most distinguished company.

But Marsha's a member of a pretty select group herself. There are fewer than 300 medical illustrators in this country.

### Lauds TV Graphics

Marsha's been associated with the graduate school since 1971. She teaches a visual communications course, and is especially excited about new innovations in multimedia techniques: "I can't think of a better way to break down esoteric scientific research for the layman than TV graphics."

Currently, Marsha is taking an educational technology course at Catholic University and working with slides, film, and video tape.

Besides teaching courses, taking courses, and working at NIH, she is also vice-president of the Guild of Natural Science Illustrators.

### Sums Up Attitude

Marsha Jessup summed up her own down-to-earth attitude about her profession in just a few words:

"If it doesn't teach, it's not worth making any pretty pictures."



Ms. Jessup majored in zoology at Howard University and received her master of science degree in medical and biological illustration from the University of Michigan.

## Mental Health Booklets Designed for Teachers

Three booklets designed to assist teachers have been published by the National Institute of Mental Health.

*Teachers Talk About Their Feelings* consists of excerpts from tape recordings of 16 new teachers who express their feelings freely. They talk about students, administrators, other teachers, the system, and themselves.

*Promoting Mental Health in the Classroom* describes methods and materials teachers can use to develop an atmosphere conducive to mutual learning experiences by encouraging healthy interactions.

This book can be used by elementary and secondary teachers.

*Multi-Ethnic Literature in the High School* is a new resource tool for high school teachers who wish to foster mental health by helping students gain a better self-image as well as an improved understanding of peoples from diverse cultural and ethnic backgrounds.

Copies may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

*Teachers Talk About Their Feelings*, DHEW Pub. No. (HSM) 73-9082, costs 50 cents a copy; *Promoting Mental Health in the Classroom*, DHEW Pub. No. (HSM) 73-9083, \$1.25, and *Multi-Ethnic Literature in the High School*, DHEW Pub. No. (HSM) 73-9079, 75 cents.

## Immunization Campaign Starts

The Center for Disease Control, PHS, has initiated a vaccination drive for October.

Targets are polio, rubella, measles, diphtheria, whooping cough, and tetanus.

CDC officials hope to reach 90 percent of the 5 million pre-school children aged 1 to 4 years.

## Drug for Skin Cancer To Be Manufactured, Marketed by Miles Lab.

A drug proven by research to be often helpful in treating a frequently fatal form of skin cancer will be manufactured and marketed by Miles Laboratories, Inc., through an agreement with the National Cancer Institute.

The drug, called DTIC (dacarbazine or imidazole carboxamide) is useful in advanced stages of malignant melanoma—when this rare form of skin cancer is no longer curable by surgery.

In NCI-sponsored studies, approximately 20 percent of more than 700 patients with advanced melanoma responded to DTIC with disappearance or lessening of disease for at least 4 weeks.

Several other drugs have given comparable response rates in some studies, but the results with DTIC have been more consistent in NCI tests.

Under the NCI-Miles Laboratories agreement, a new drug application will be submitted to the Food and Drug Administration. The application must be approved by FDA before DTIC can be marketed.

### NCI to Provide Data

NCI will provide scientific data for the application based on drug evaluations in patients treated by NCI's cooperative clinical study groups and its Division of Cancer Treatment.

Upon FDA approval, the Miles' Dome Laboratories Division will produce and distribute the drug with recommendations that it be used only for those patients with advanced, or metastatic, malignant melanoma.

In the U.S. there are about 12,900 malignant melanoma patients—an estimated 7,500 are in advanced disease stages.

DTIC was first synthesized in 1960 at Southern Research Institute in Birmingham, Ala., under an NCI research contract. The drug's chemical formula is 5-(3,3-dimethyl-1-triazeno)-imidazole-4-carboxamide.



Five dental assistants—the staff of NIDR's Dental Services Branch—received a cash award for exceptional competence in carrying out their tasks. Dr. Samuel Kakehashi, former chief of the branch, cited them for "... the performance of their duties while assisting in investigative programs and patient care..." Standing l to r: Frances Davis, Elizabeth Lautenberger, Marjorie Meehan, Rose Staley, and Marie Papanicolas.



What happened? (See page 7.)



NIH keymen and coordinators board the bus leaving for the CFC Fair held on the Roof Terrace of the Kennedy Center.



HEW Secretary Weinberger urges keymen from all Government agencies to look at the exhibits of those who benefit from the campaign.

# Clowns, Balloons, Dance Music Float Thru

*Photos by Tom Joy*



Hazel Sands, NLM, receives literature from one of the nonprofit health agencies.

Some 90 NIH keymen and coordinators joined with Government employees from other departments and agencies at the combined Federal Campaign Fair held on the Kennedy Center Roof Terrace, Sept. 19.

Clowns vied for attention with the balloons, streamers, and dance music that floated through three rooms of exhibits from 50 CFC agencies. The agencies displayed pictures, films, colorful posters and crafts to demonstrate the services their organizations performed.

The highlight of the Fair was the keynote address by HEW Secy. Caspar Weinberger, chairman of the 1974 Combined Federal Campaign for the Washington area.

He stated, "The Department cannot solve all the country's problems. We must rely on individuals for help. This is what the Combined Federal Campaign does. Personal commitment, the kind that is evident here this morning, is what we need."



Kent Smith, CFC coordinator for NIH (third from left), watches as his assistant Jerome Kerkhof demonstrates the use of the Prince Georges County Mental Health Hotline. Diane Cabot, head of Hotline, gives brochures to Patti Ruben of NLM.



Carl J. Green, DRS, admires crafts made by children who took part in programs of the City Wide Learning Child Development and Youth Centers—one of the agencies sponsored by the United Black Fund which is taking part in CFC for the first time.

# The Music Float Through 3 Rooms of Exhibits From 50 CFC Agencies



Hazel Sands, NLM, receives literature from the American Cancer Society—one of the nonprofit health agencies participating in CFC.



Costumed members of the Educational Organization for United Latin Americans represent their countries.

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Terrace, Sept. 19.

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The Secretary then urged keymen to walk around the exhibit areas and see the beneficiaries of the campaign.

Among the outstanding displays, the Christ Child Settlement House had photographs of children and adults participating in a variety of programs for pre-schoolers, school children, teens, and senior citizens.

The Boys Clubs of Greater Washington exhibited paintings, models, etchings, African sculpture and woodcrafts made by the youngsters.

In a health-related exhibit, the Center for Sickle Cell Anemia at Howard University and Freedmen's Hospital showed medical staff working in diagnosis, genetic counseling, research, and treatment of patients, and distributed information on sickle cell anemia at the booth.

The overall CFC goal is \$9.2 million with the NIH goal \$264,000.

Last year, the 104 CFC agencies served over one million people in the Washington Metropolitan area.



Clowns and campaigners pose in front of the Campfire Girls' full-sized American Indian tepee at the CFC Fair.



Children who took part in programs at and Youth Centers—one of the agencies which is taking part in CFC for

*Contribute  
to  
CFC*



CFC keymen and coordinators wait to depart for NIH after a morning of speeches, prizes, balloons, clowns, movies, and exhibits.

## Latest Therapy Techniques and Skin Bank Help Sherry White Recover From Burns

An 8-year-old girl with burns over 92 percent of her body will live because of the latest techniques in burn therapy and the new Dallas Skin Bank which provided human skin for grafting, according to Dr. Charles Baxter, whose burn research is funded by the National Heart and Lung Institute.

Dr. Baxter is professor of surgery at the University of Texas Southwestern Medical School.

In discussing the case of Sherry White—the girl who was burned last May in an accident in her home—Dr. Baxter said it was “as large a burn injury as a human being has ever survived.”

Most patients who have received burns over 50 percent of the body have died.

Sherry was injured when gasoline that was being used to clean tar from her feet ignited.

### New Methods Used

She received second and third degree burns on her entire body except the sole of her right foot and the back of her head where hair grew.

Dr. Baxter said that a combination of techniques including new concepts in nutrition, new ways of administering antibiotics, isolation, monitoring of tissue for bacteria, use of human skin as protection, and early surgical removal of burn tissue contributed to the medical victory of this little girl.

One of the main reasons for Sherry's survival was use of human skin from the 6-month-old Dallas Skin Bank. The bank is both a repository for human skin kept viable by freezing and a research center for developing some of the new techniques.

### Human Skin Grafted

Human skin may be used for grafting immediately or frozen for later use if it is removed from the donor less than 24 hours after death.

Because Sherry's mother was the only live donor, skin from the bank, matched by blood and tissue typing techniques, was also used. The graft which the doctors used to cover Sherry's exposed wounds will keep infection from spreading and help regenerate the growth of her skin.

She will eventually reject the foreign skin, but this will happen gradually.

### Nutrition Is Important

Another new technique used on Sherry was early massive excision of the burned tissue. The cutting away of the burns has traditionally been done at a later time.

Nutrition plays an important role in the survival of a burn patient since so many calories are lost when the body loses its protective covering and energy escapes.



Company is important—especially Charley—the dog that Dr. Baxter gave to Sherry. On his occasional visits, Charley is freshly bathed and wrapped in a baby blanket. Sherry is at Parkland Hospital Pediatric Burn Unit, but will soon be transferred to another hospital for plastic surgery.

The doctors gave Sherry special nutrients with intravenous drip, nose tube, and oral feeding.

Later, when Sherry was able to help feed herself—she required 3,700 calories a day, two and a half to three times the normal intake of calories—her mother brought favorite foods including tacos, spaghetti, and pizza.

### Danger of Infection

Infection in an open wound could result in death for a burn patient. Dr. Baxter and Dr. William Curreri, assistant professor of surgery, developed a new biopsy technique to monitor the level of infection in the wound.

They take tissue from the wound and do cultures which enable them to be aware of dangers much sooner than has previously been possible. They can start antibiotic treatment immediately at any warning sign.

Dr. Baxter said another life-saving technique developed at the Dallas medical school is sub-escharolysis, the administration of antibiotics between live tissue and dead burn tissue.

When a new infection starts, the application of antibiotics to the explicit area is added to more traditional methods.

## NIH Visiting Scientists Program Participants

8/27—Dr. Gerald Chase, U.S., Biometry Branch. Sponsor: Dr. David G. Hoel, NIEHS, Research Triangle Park, N.C.

8/31—Dr. Emad El-Bassiouni, Egypt, Pharmacokinetics Section. Sponsor: Dr. Larry G. Hart, NIEHS, Research Triangle Park, N.C.

8/31—Dr. Robert J. French, Australia, Laboratory of Biophysics. Sponsor: Dr. William J. Adelman, NINDS, Bldg. 36, Rm. 2A29.

8/31—Dr. Yu-Lin Tai, Taiwan, Developmental Immunology Branch. Sponsor: Dr. John B. Robbins, NICHD, Bldg. 10, Rm. 12N-240.

8/31—Dr. Victorio T. Wee, Taiwan, Laboratory of Physiology. Sponsor: Dr. Peter Riesz, NCI, Bldg. 10, Rm. B1B50.

9/4—Dr. Kun Chae, Korea, Animal Science & Toxicology Branch. Sponsor: Dr. James McKinney, NIEHS, Research Triangle Park, N.C.

9/4—Dr. Graciela Duran-Troise, Argentina, Tumor Virus Section. Sponsor: Dr. Peter J. Fischinger, NCI, Bldg. 41, Rm. A117.

9/4—Dr. Peter H. Graepel, West Germany, Office of the Director. Sponsor: Dr. Arnold W. Pratt, DCRT, Bldg. 12A, Rm. 3033.

9/7—Dr. Yoshio Takeuchi, Japan, Section on Biochemical Mechanisms. Sponsor: Dr. Louis A. Cohen, NIAMDD, Bldg. 4, Rm. 328.

9/13—Dr. Alberto Protzel, Peru, Laboratory of Physical Biology. Sponsor: Dr. Leo Levenbook, NIAMDD, Bldg. 6, Rm. 137.

9/13—Dr. Hasmuth C. Shah, India, Pathologic Physiology Branch. Sponsor: Dr. Robert L. Dixon, NIEHS, Research Triangle Park, N.C.

9/16—Dr. Jagdish Gulati, India, Laboratory of Physical Biology. Sponsor: Dr. Richard J. Podolsky, NIAMDD, Bldg. 6, Rm. 110.



Everlyne Murdock, librarian in DRG's Administrative Branch, receives a Beneficial Suggestion Award from Errett Straley, branch chief. Mrs. Murdock suggested that employees be assisted in filling out job applications. This function has been assigned to the Guidance and Counseling Branch, OPM.

## DONOR SYSTEMS

(Continued from Page 1)

eral Government responsibility to run the blood banks.

He cited the need for the groups to communicate because certain parts of the system should be interrelated, and said that he expects some evidence that will demonstrate the groups are working together.

The deadline for a plan, at least in draft stages, to coordinate the blood program has been set for Jan. 31, 1974.

Following Dr. Edwards' discussion of ultimate expectations for a national blood collection and delivery system, Dr. Ernest Simon, director of the Division of Blood Diseases and Resources, National Heart and Lung Institute, described research and educational activities related to the National Blood Policy.

Dr. Alexander M. Schmidt, Commissioner of the Food and Drug Administration, and Dr. Harry M. Meyer, Jr., Director of the Bureau of Biologics, FDA, spoke about the Federal role in the regulation of blood banking.

### Participants Noted

Those invited to participate included: experts in blood banking and processing, representatives of major blood banking organizations, and members of the medical professions responsible for utilization of blood and blood products.

Also, members of the disciplines concerned with hospital administration, members of the public who donate and receive blood, and representatives of Federal agencies with responsibilities relating to blood services and products.

The National Blood Policy was formulated by a task force appointed by the former HEW Assistant Secretary for Health Dr. Merlin K. DuVal.

The task force concluded that if the private sector participants are not able to make satisfactory progress in drawing up a specific implementation plan, a legislative and regulatory approach would have to be considered.

As part of the National Blood Policy, the Government has set four goals:

- A supply of blood and blood products adequate to meet all of the treatment and diagnostic needs of the population of this country.

- Attainment of the highest standards of blood transfusion therapy through full application of available scientific knowledge.

- Access to the national supply of blood and blood products by everyone in need, regardless of economic status.

- Efficient collection, processing, storage, and utilization of the national supply of blood and blood products.

## POLICIES PROTECT HUMAN RESEARCH SUBJECTS

(Continued from Page 1)

"and no grant or contract involving human subjects will be made unless the proposal has been reviewed and approved by an appropriate professional committee within the Department.

"Furthermore, no research protocol involving human subjects will be implemented in any installation of the Department without first undergoing review similar to that required by grantees and contractors, modified only to the extent that administrative differences require."

Today's action is the first of several steps leading to the development of a uniform Federal policy. A later policy to be issued will confirm already established parallel requirements for conducting research in HEW's own laboratories, clinics and other facilities.

### Seek to Control Risks

The proposed regulations represent the latest of a series of Federal efforts to safeguard the welfare of subjects exposed to risk in research activities.

Similar controls were introduced regarding NIH grants in 1966, and on PHS contracts in 1967.

The controls, which were revised in 1969, were incorporated into an HEW policy issued in 1971. Over 650 research organizations have formally complied with this policy and should have little difficulty in meeting the new requirements.

The changes from the existing policy will restrict professional membership on review committees; they may include lawyers, ministers and other groups. Each proposed research project in terms of local laws, standards of professional conduct and practice, and community attitudes will be considered.

Each organization must agree to notify HEW immediately of any problem, including adverse reaction to drugs.

In addition, the use of exculpatory or "waiver of rights" language in consent documents is specifically prohibited.

Sponsoring institutions will be required to determine the nature of any risk to which human subjects may be exposed, and if the risks are outweighed by potential benefits.

The rights and welfare of the patient must be safeguarded throughout each project, and the patient's informed consent obtained by adequate and appropriate methods.

Information to be given the subject before asking his consent, as spelled out in the regulations, must include:

- A fair explanation of the procedures to be followed, and their purposes, including identification of any procedures which are experimental;
  - A description of the attendant discomforts and risks reasonably to be expected;
  - A description of any benefits reasonably to be expected;
  - A disclosure of any appropriate alternative procedures that might be advantageous to the subject;
  - An offer to answer any inquiries concerning the procedures, and
  - An instruction that the subject is free to withdraw his consent and to discontinue participation in the project or activity at any time.
- Inquiries on data, views, and arguments relating to the proposed regulations may be presented in writing, in triplicate, to the Chief, Institutional Relations Branch, Division of Research Grants, NIH, 9000 Rockville Pike, Bethesda, Md. 20014.
- Comments must be forwarded within 30 days from the date of publication of the proposed regulations in the Federal Register.



Study teams from NIH and other Federal agencies meet to discuss development of Manpower Utilization Systems.

## HEW Manpower Seminars Held at Stone House

A 5-day training session for manpower utilization project leaders, sponsored by HEW, was recently held at Stone House.

Study teams from the National Cancer Institute, Food and Drug Administration, Office of Education, and Health Services Administration met to discuss the design, development, and implementation of Manpower Utilization Systems.

The manpower utilization program was established to measure the internal manpower productivity of an organization and to assist in making managerial decisions regarding workloads and manpower.

Senior analysts and program representatives translate the or-

ganization's goals into numbers of people necessary to do the work.

Last year, the National Institute of Allergy and Infectious Diseases became the first institute at NIH to adopt this work-measure system.

The NIAID prototype has been expanded this year; the National Cancer Institute and the National Institute for Dental Research will apply the MUS to their own grants programs.

Dr. Marvin E. Mundel, an HEW consultant, led the MUS seminar.

NCI participants included: Dr. Robert Engle, supervisory chemist; Dr. Allen Heim, research microbiologist; Dr. Ihor Masnyk, scientist administrator; Larry Tidmore, contract specialist, and William Quinlan, management analyst.

Lou Evangelista and Paul Schaffer, OMP management analysts, also attended.

## Med. Study Aids Use Multimedia Methods

Nine multimedia study aid packages have been produced by the National Library of Medicine's National Medical Audiovisual Center in Atlanta and are now available for sale by GSA's National Audiovisual Center.

The units are designed primarily for medical students and generally include study guides and slide/tape presentations.

In addition, there may be motion picture clips, mannequins, and optional materials for review, practice, and self-evaluation.

Available packages include *Glaucoma Screening—Tonometry* (part 1 of a series on ophthalmology), *Ophthalmoscopy* (part 2 of the ophthalmology series), *Introduction to the Neurovascular Examination*, and *Perinatal Circulation* (part 1 of a series titled *Introduction to Congenital Heart Disease*).

Other units which may be purchased from the National Audiovisual Center include *General Background* (part 2 of the congenital heart disease series), *Introduction to Mammography*, *Mammography Techniques*, *Breast Diseases: Their Importance to Your Daily Practice*, and *The Femoral Triangle*.

For further information, write the National Audiovisual Center, Government Services Administration, Attn: Sales Branch, Washington, D.C. 20409.

## Collection Inefficiencies Identified by Blood Banking Task Force

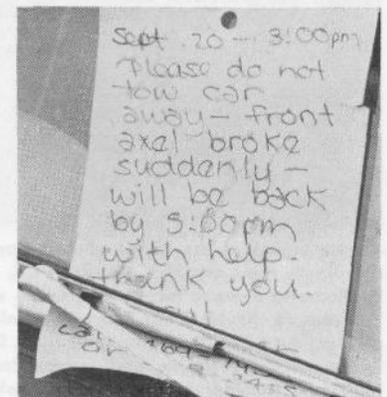
An HEW Blood Banking Task Force identified gross inefficiencies in collection and processing of blood.

Approximately 25 percent of the 8.8 million units of whole blood collected annually for transfusion are never transfused. The majority of these units are wasted through outdated.

Careful studies strongly suggest there are about 17,000 cases of overt posttransfusion hepatitis per year, about 850 deaths from this disease, and about 5 times as many sub-clinical cases.



On Sept. 26 an assembly was held for all NIH Upward Mobility College students to discuss the future of the program. Speakers were (l to r) Richard Jackson, program manager, NIH Upward Mobility College Program; Dr. Gregory Rigsby, director of the Office of Experimental Programs, Federal City College; John Sangster, director, Office of Personnel Management; Dr. John Sherman, NIH Deputy Director; Neil French, FCC/UMC Student Government Chairman, and James Robinson, deputy director, HEW Office of Upward Mobility.



## SYNTHETIC

(Continued from Page 1)

the lowest levels of FA(MBSA) given, while enhancement of tumor growth was found with higher levels of the immunizing complex.

These results, obtained with the synthetic antigen, are consistent with those observed when tumor-specific antigens themselves have been used as immunizing agents.

Dr. Shier, whose work is supported by a National Institute of Allergy and Infectious Diseases grant and a National Cancer Institute contract, explains that lower levels of a glycoprotein antigen favor the production of a cell-mediated immune response—that part of the total response which is mediated by small lymphocytes (white cells) and is responsible for reactions such as graft rejection.

Higher levels of a glycoprotein antigen favor the production of a humoral response—specific immunity which is mediated by blood proteins known as antibodies. It is not yet known why tumor enhancement, under these circumstances, takes place.

### Mice Used

Similar experiments were also carried out in mice challenged with myeloma cells. Although only minimal protection by FA(MBSA) was observed, further study revealed that protection was specific, that is, directed only against tumor cells and not against normal cells.

This observation lends support to the suggestion that tumor cells do differ from normal cells in the number or distribution of glycoprotein antigens found on their surfaces—an important difference which may, eventually, be exploited in the treatment or prevention of human tumors.

Dr. Shier published a report of his findings in the July 13, 1973 issue of *Nature*.

## Jeanne M. Reid Doubles as Julia Child Of NASA Skylab Project; Plans Meals

Jeanne M. Reid, dietitian director, National Institute of Arthritis, Metabolism, and Digestive Diseases, doubles as the Julia Child of the NASA Skylab space project.

An experienced research dietitian, Miss Reid has been involved for several years in planning the controlled diets consumed by all the Skylab astronauts and back-up pilots prior to, during, and after their 28- and 56-day flights.

Miss Reid's participation in the NASA program began under the direction of Dr. G. Donald Whedon, NIAMDD Director and principal investigator in a Skylab medical study to assess the effect of weightlessness and inactivity on human calcium and nitrogen metabolism.

### Diets Controlled

To assure the validity of the study, the diets of the astronauts and of their back-ups must be meticulously controlled, with careful monitoring and analysis of all intake and output.

This necessitates adherence to very narrow day-by-day variances in the amounts of calories, protein, calcium, phosphorus, sodium, magnesium and potassium consumed by the astronauts, while attempting to make the meals pleasing to the taste—a real challenge to a dietitian.

For the most recent flights, Miss Reid and two NASA dietitian associates planned 17 different sets of daily menus for each man in accordance with his food preferences.

In addition, completely different pre- and post-flight menus were required. With final approval from Miss Reid, meals for 140 days of planned manned missions were launched in Skylab.

The dietitian's responsibilities do not stop there, however.

Should an astronaut consume more or less food than planned during flight, or a menu change be



Following her undergraduate studies, Miss Reid served a "Dietetic Internship" at New York Hospital-Cornell Medical Center.

necessary due to heat damage, Miss Reid and her assistants must calculate the nutrients already ingested and recommend measures to correct any possible imbalance.

The astronauts' fare includes frozen foods, such as beef flet, prime rib, lobster Newburg, vanilla ice cream, plus an array of rehydratable freeze-dried foods.

Adding variety to the daily menu are canned fruits, stewed tomatoes, cookies and hard candies.

### Mom's Cooking It Isn't

Although falling short of Mom's home cooking, the meals are relatively palatable, and the controlled diets are well accepted.

Miss Reid, a frequent commuter between Bethesda and Houston's Johnson Space Center, must wear a face mask and surgical gloves while working in the metabolic kitchen to minimize the risk of food contamination.

Also, each "primary contact" with space flight crews must have a thorough physical every week, including blood work, as well as a limited daily check-up before going on duty.

These precautions illustrate the vital role of the dietitian in the manned space flight program.

An officer in the Public Health Service, Miss Reid came to NIH in 1953 as a senior assistant dietitian in the Clinical Center's Nutrition Department. Prior to that appointment, she held the position of chief therapeutic dietitian at Jackson Memorial Hospital in Miami.

Miss Reid received her B.S. in

## Symposium to Cover New Research Methods And Instrumentation

A symposium on Recent Developments in Research Methods and Instrumentation will be held Oct. 24-25 in the Jack Masur Auditorium.

Dr. A. J. Sheppard of the Food and Drug Administration will preside over the first morning's program.

Among topics to be discussed are High Speed Liquid Chromatographic Systems, Column Performance in High Efficiency Liquid Chromatography, and Signal Enhancement with Digital Electronic Techniques.

Spectroscopy, histochemistry, and recent advances in tissue culture will be discussed in subsequent symposium sessions.

Other session chairmen include Dr. Eric B. Sheinin, FDA; Dr. James D. Jamieson, Yale University School of Medicine, and Dr. Katherine K. Sanford, of the National Cancer Institute's Laboratory of Biology.

The annual symposium is being sponsored by NIH and local sections of seven national scientific societies.

On Oct. 24 sessions will be held at 9 a.m. and 2 p.m. and on Oct. 25 at 9:30 a.m. and 2 p.m.

The symposium meetings are open; there is no registration fee.

For further information, call Judy Summers, OAS, Ext. 62315.

## NMAC Publishes Motion Picture, Videotape List

The National Library of Medicine's National Medical Audiovisual Center has published its 1973 NMAC Motion Picture and Videotape Catalog.

The catalog lists 848 16 mm motion pictures for short-term loan and 227 videotapes available for free duplication from the NMAC in Atlanta, Ga.

Materials listed are only for use by professional health sciences educational purposes.

The publication (GPO Number: HE 20.3608/4:973, Stock Number 1752-00149) may be purchased only from the Superintendent of Documents, U.S. Government Printing Office, at \$1.95 per copy (50 cents additional for foreign mailing).

Remittances payable to the Superintendent of Documents must accompany each order. Send requests to: Manager, Public Documents Distribution Center, 5801 Tabor Avenue, Philadelphia, Pa. 19120.

nutrition from the University of Alabama and an M.S. in food and nutrition from the University of Maryland.



At the urging of the President that Government agencies review, update, and coordinate their graphics, Dr. Robert S. Stone, NIH Director, appointed Arthur F. Moore to arrange for such a review with the Federal Graphics Improvement Program of the National Endowment of the Arts. Mr. Moore (l), chief of the Medical Arts and Photography Branch, DRS; Nancy Hanks, chairman, National Endowment of the Arts, and Jerome Perlmutter, coordinator, Federal Graphics Improvement Program, meet in Ms. Hanks' office.