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National
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NIMH, NIH Scientists Track New Clues On Biological Basis of Stress, Depression

NIMH and NIH scientists have turned up new biological clues about how a key brain hormone may become hyperreactive in affective (emotional) disorder, precipitating a cascade of abnormal endocrine responses typically seen in depressed patients.

The findings suggest a new model for understanding how severe stresses early in life might lead to a permanent hyperreactivity to stress and mood disorder in vulnerable persons.

Drs. Philip Gold of NIMH and George Chrousos of the National Institute of Child Health and Human Development discussed such possible implications of their experiments with a recently purified neurohormone, CRF (Corticotropin Releasing Factor), at an NIH Science Writers' Seminar on the "Molecular Basis of Stress" recently.

The seminar, moderated by Dr. Frederick Goodwin, Director of the NIMH Intramural Research Program, also featured presentations by Drs. Julius Axelrod and Steven Paul, also of NIMH.

The scientists discussed new findings about how the body's stress response is mediated via the hypothalamic-pituitary-adrenal (HPA) axis.

The availability of synthetic CRF within the past year has spurred a new wave of studies on this HPA axis. Drs. Gold and Chrousos reported at the seminar on the first experiments using the hormone as a challenge drug in primates and humans.

When injected with the neurohormone CRF, depressed patients showed a lower response in their blood ACTH levels than did controls. Depressed patients commonly have abnormally elevated levels of cortisol in their blood.

When normal subjects received a continuous infusion of CRF, their blood cortisol levels showed a modest rise that mimicked the cortisol levels of many depressed patients. Growth hormone levels of depressed patients injected with CRF resembled those of similarly simulated stressed primates. Both were elevated.

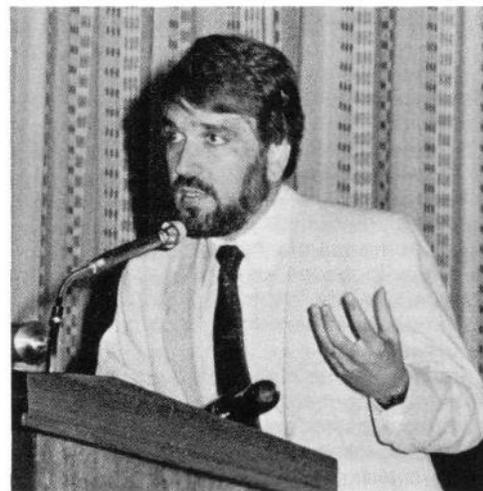
These findings suggest that depression involves an excess of CRF secretion, according to Drs. Gold and Chrousos.

A Theory of Depression

Dr. Gold offered what he cautioned was "simply a model" that early prolonged stressed might sensitize genetically vulnerable individuals to chronically oversecrete CRF and to hyperreact to stress and develop mood disorder later in life. As supporting evi-



Dr. Gold



Dr. Chrousos

dence, he pointed to a well-documented tendency among depressed patients to have a history of early stresses (particular separations from parents and other loved ones) associated with intense anxiety, and to relieve these feelings repeatedly during stressful times.

In addition, Gold cited animal studies that found permanent rises in the reactivity of HPA axis hormones in response to stresses administered during early critical periods.

Gold suggested that since HPA activation and depressive symptomatology are not unique to primary depression, excessive CRF

(See STRESS, Page 6)

Second Cell Defect Found in AIDS Cases

A team of scientists, headed by Dr. Anthony S. Fauci, of the National Institute of Allergy and Infectious Diseases (NIAID), has found that patients with Acquired Immune Deficiency Syndrome (AIDS) have functional defects in both major classes of lymphocytes—T cells and B cells—that usually protect the body against disease.

Until now, investigators believed that the immune abnormalities in AIDS patients involved only the T cells, specifically a decrease in the helper/inducer subset of T cells. Among other functions, the helper/inducer cells normally work with the suppressor subset of T cells to regulate antibody production by B cells.

Dr. Fauci and his colleagues studied 12 homosexual men with AIDS, 5 healthy homosexual men, and 12 heterosexual controls.

As expected, the AIDS patients were deficient in helper/inducer T cells and had decreased helper-to-suppressor T-cell ratios.

In addition, when the subsets of T cells were studied separately in the laboratory, the scientists found the suppressor cells functioned normally, but the helper cells did not.

Further studies showed marked abnormalities in B-cell activation and regulation in the patients. Their B cells did not react to substances that ordinarily stimulate antibody production. Also, the patients had abnormally high numbers of B cells spontaneously secreting different kinds of antibodies (polyclonal activation).

This increase in activated B cells is similar to what occurs during certain viral infections, such as mononucleosis. In that case, the Epstein-Barr virus infects the B cell, which becomes transformed and begins spontaneously to secrete antibody. Infections with cytomegalovirus cause similar reactions.

Generally, after such infections, T-cell regulators step in to restore normal balance to the immune system. In the case of the AIDS patient, the defective helper/inducer T cells may fail to stimulate the suppressor cells to slow the abnormal B-cell activity.

Healthy homosexual men in this study also showed alterations in immune function when compared to the heterosexual control group.

Although, there were wide variations in the immune responses of the healthy homosexuals, the results generally fell between those of the AIDS patients and the heterosexual controls. What causes these alterations and how they relate to AIDS are still unknown.

(See AIDS, Page 11)

The NIH Record

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Training Tips

The following courses, sponsored by the Division of Personnel Management, are given in Bldg. 31.

| Office Skills | Course | Starts | Deadline |
|---------------------------------------|--------|--------|----------|
| Keyboarding for Professionals | | 10/3 | 9/13 |
| Effective English Workshop | | 10/17 | 9/26 |
| Time and Attendance | | 10/3 | 9/22 |
| Communication Skills | | | |
| Basic Employee Relations | | 10/18 | 10/4 |
| Executive, Management And Supervisory | | | |
| Planning for Prevention and Results | | 10/26 | 10/10 |
| DELPRO | | 10/24 | 10/11 |
| *(Delegated Procurement) | | | |
| *For new DELPRO users only | | | |

To learn about these and other courses, contact the Development and Training Operations Branch, DPM, 496-6371.

Biomedical Engineering in DRS Subject of Sept. 20 Lecture

The NIH Library, Division of Research Services, will present the fourth in a series of lectures on current topics in biomedical sciences for medical librarians and information specialists.

The fourth lecture, Biomedical Engineering in DRS, will be given by Dr. Henry Eden, Biomedical Engineering & Instrumentation Branch, DRS at 2 p.m. Sept. 20, in the Medical Board Room, Bldg. 10, Rm. 1-C-116 (ACRF).

Call Sarah Log, 496-2398 or Kathie Vashaw, 496-1156 to arrange to attend. □

Women: Non-Pill Users/Joggers Needed for NICHD Study

The National Institute of Child Health and Human Development is recruiting participants for a study on bone strength in women who stop menstruating as a result of frequent, strenuous exercise.

Some women who exercise frequently stop menstruating, a condition known as amenorrhea. It is known that bone loss is accelerated in women who have stopped menstruating which is why many postmenopausal women develop osteoporosis. It is also known, however, that exercise increases bone strength.

The NICHD researchers want to determine which effect predominates in women with exercise-induced amenorrhea: the bone-weakening effect associated with amenorrhea or the bone-strengthening effect of exercise.

The researchers are looking for women aged 18-45 who do not use oral contraceptives and who exercise frequently, preferably joggers who run at least 30-40 miles per week. Both amenorrheic and menstruating women are needed.

Participants will complete a questionnaire, visit NIH for a medical history and examination, including a pelvic exam; and a CAT scan of the back. (The CAT scan involves minimal radiation, less than is received from dental x-rays). Compensation for taking part in the study is \$66.50.

For more information, write to Dr. Robert Collins, NIH, Bldg. 10, Rm. 10B09, Bethesda, MD 20205. □

Hypertriglyceridemia Conference To Be Held at NIH, Sept. 27-29

An NIH Consensus Development Conference on the Treatment of Hypertriglyceridemia, sponsored by the National Heart, Lung, and Blood Institute and the NIH Office of Medical Applications of Research, will be presented Sept. 27-29 in the ACRF Amphitheater of the Clinical Center.

The questions of whether hypertriglyceridemia is an independent risk factor for heart disease and whether treatment of hypertriglyceridemia is beneficial remain unanswered.

Consensus participants will not attempt to determine the merit of lowering triglyceride levels, but instead will examine current medical practice and consider recommendations from physicians currently treating patients with hypertriglyceridemia in an attempt to answer a number of key questions: Who should be treated for hypertriglyceridemia? What are the objectives of therapy? What can be achieved with dietary therapy? What are the guidelines for drug therapy? What are suggested directions for future research?

A consensus development panel of experts will weigh scientific evidence presented by speakers, listen to audience discussion and will develop a consensus statement relevant to the key questions. The statement will be presented on the morning of Sept. 29, and comments and discussion will be invited.

For further information contact Larry Blaser in the NHLBI Information Office, 496-4236, or Michael Bernstein in OMAR, 496-1143. □

Visiting Scientist Program Participants

Sponsored by Fogarty International Center

7/10 Dr. David W. Blank, Canada. Sponsor: Dr. Mark H. Zweig, Clinical Pathology Department, CC, Bg. 10, Rm. 4N321.

7/10 Dr. Vijay Chandra, India. Sponsor: Dr. Bruce Schoenberg, Neuroepidemiology Section, NINCDS, Federal Bg., Rm. 804.

7/10 Mrs. Rina Chen, Israel. Sponsor: Mr. Roger Connelly, Field Studies and Statistics Program, Biometry Branch, NCI, Landow Bg., Rm. 5C19.

7/10 Dr. Okihide Hikosaka, Japan. Sponsor: Dr. Robert H. Wurtz, Lab. of Sensorimotor Research, NEI, Bg. 10, Rm. 6C420.

7/10 Dr. Milan A. Jamrich, Czechoslovakia. Sponsor: Dr. Igor B. Dawid, Lab. of Molecular Genetics, NICHD, Bg. 6, Rm. 408.

7/10 Dr. Zdzislaw Krawczyk, Poland. Sponsor: Dr. Maxine Singer, Lab. of Biochemistry, NCI, Bg. 37, Rm. 4E28.

7/10 Dr. Rudolf A. Ludz, Switzerland. Sponsor: Dr. David Rodbard, Endocrinology and Reproduction Research Branch, NICHD, Bg. 10, Rm. 8C312.

7/10 Dr. Raul N. Mandler, Argentina. Sponsor: Dr. Dale McFarlin, Neuroimmunology Branch, NINCDS, Bg. 36, Rm. 5D12.

7/10 Dr. Paul N. Maton, United Kingdom. Sponsor: Dr. Jerry D. Gardner, NIADDK, Bg. 10, Rm. 9C103.

7/10 Dr. Monica Peacocke, Canada. Sponsor: Dr. Thomas A. Waldmann, Metabolism Branch, NCI, Bg. 10, Rm. 4N117.

7/10 Dr. Thomas Staunton, Canada. Sponsor: Dr. Paul Kornblith, Surgical Neurology Branch, NINCDS, Bg. 10A, Rm. 3E68.

7/10 Dr. Reuven Zimlichman, Israel. Sponsor: Dr. Harry Keiser, Hypertension-Endocrine Branch, NHLBI, Bg. 10, Rm. 8C103.

7/13 Dr. Walter Fratta, Italy. Sponsor: Dr. E. Costa, Laboratory of Preclinical Pharmacology, NIMH, WAW Bg., St. Elizabeths Hospital.

7/13 Dr. Eric Long, Switzerland. Sponsor: Dr. Thomas Kindt, Laboratory of Immunogenetics, NIAID, Bg. 8, Rm. 100.

7/14 Dr. Hugh Savage, United Kingdom. Sponsor: David D. Davies, Laboratory of Molecular Biology, NIADDK, Bg. 2, Rm. 316.

7/18 Dr. Albert M. Bobst, U.S. Sponsor: Dr. Paul Torrence, Laboratory of Chemistry, NIADDK, Bg. 4, Rm. 126.

7/18 Dr. Silverstro Formisano, Italy. Sponsor: Dr. Jacob Robbins, Clinical Endocrinology Branch, NIADDK, Bg. 10, Rm. 8N315.

7/18 Dr. Louis Mercier, France. Sponsor: Dr. David Johnson, Laboratory of Chemistry, NIADDK, Bg. 4, Rm. 141.

7/18 Dr. Bogomir B. Mrsulja, Yugoslavia. Sponsor: Dr. W. David Lust, Laboratory of Neurochemistry, NINCDS, Bg. 36, Rm. 4D06B.

7/18 Dr. Masataka Shiraki, Japan. Sponsor: Dr. George Roth, Clinical Physiology Branch, NIA, GRC, Baltimore.

7/19 Dr. Grace Loh-Chi Shen, Hong Kong. Sponsor: Dr. Michael Potter, Laboratory of Genetics, NCI, Bg. 37, Rm. 2B21.

7/20 Dr. Yitzhak Ittah, Israel. Sponsor: Dr. C. P. J. Glaudemans, Laboratory of Chemistry, NIADDK, Bg. 4, Rm. 205.

7/24 Dr. David Ben-Ezra, Israel. Sponsor: Dr. Robert B. Nussenblatt, Clinical Branch, NEI, Bg. 10, Rm. 10D19.

7/24 Marianne Gex-Fabry, Switzerland. Sponsor: Dr. Charles DeLisi, Laboratory of Mathematical Biology, NCI, Bg. 10, Rm. 4B43.

7/25 Dr. Tommy Sundqvist, Sweden. Sponsor: Dr. Stanley Rapoport, NIA, GRC, Baltimore.

7/26 Dr. Shlomo Havlin, Israel. Sponsor: Dr. Ralph Nossal, Physical Sciences Laboratory, DCRT, Bg. 12A, Rm. 2009.

FIC To Sponsor Conference On International Cooperation

The Fogarty International Center is sponsoring a conference on "The Role and Significance of International Cooperation in the Biomedical Sciences," Sept. 21-23, 1983. The conference will be held in Masur Auditorium beginning at 8:50 a.m.

The meeting will bring together leading scientists, directors of biomedical research organizations, and representatives of national and international organizations concerned with science policy and the support of research.

The principal goal of this conference is to review—through the knowledge and experience of outstanding scientists—how the flow of ideas and resulting progress in biology and medicine have been influenced by direct interactions between scientists from different nations.

The conference will provide a framework for evaluating the effectiveness and efficiency of current international collaborative efforts, and will assess present levels of exchanges between countries.

Topics and speakers include:

- U.S. Support of International Cooperation in Biomedical Research: (James Wyngaarden)
- Evolution of the Biomedical Sciences: (John Edsall * Ephraim Katchalski-Katzir)
- The Central Role of Major Research Institutes: (Christian Anfinsen * Julius Axelrod * Lennart Philipson)
- Role of International Collaboration in the Development of Biochemistry, Biophysics, Genetics and Molecular Biology: (Georges Cohen * David Phillips * Joan Steitz * Donald Brown * Peter Starlinger)
- International Cooperation in Immunology and Molecular Endocrinology—Chaired by Elvin Kabat and Joseph Rall: (Rodney Porter * Gustav Nossal * Baruj Benacerraf * Jamshed Tata * Elwood Jensen * Jesse Roth)
- Current Policies and Research Organizations Relating to International Scientific Collaboration—Chaired by David Evered and Ruth Kirschstein: (Henry Danielsson * Fuminori Sakai * John Tooze * Charles Kidd)
- General Discussion by the Representatives of Scientific and Research Organizations: Representatives of: National Academies, International Research Institutes, and National Research Organizations and Agencies
- Role of International Cooperation in Clinical Investigation—Chaired by Donald Seldin: (Gerhardt Giebisch * John Stanbury * Roger Unger * Albert Renold * Kurt Issebacher)
- Conclusions and Recommendations. □

Clinical Center Blood Bank To Hold Appreciation Party

The Blood Bank will hold its 4th Annual Donor Appreciation party Wednesday, Sept. 14, from 1 to 3 p.m. in the 14th Floor Assembly Hall in Bldg. 10. The party is to thank the volunteers who unselfishly provide the CC with blood needed for patient care.

The NIH R&W Association is donating the following door prizes: R&W gift certificate, See's Candy, movie tickets, discount books worth \$150 at fast food chains in the area,

Dr. Irwin Kopin, Metabolism Expert, Named Intramural Research Director at NINCDS

Dr. Irwin J. Kopin, an authority on catecholamine metabolism and neurotransmitters, has been named director of the Intramural Research Program at the National Institute of Neurological and Communicative Disorders and Stroke. His appointment was effective Aug. 1.

A medical director in the Public Health Service, Dr. Kopin had served with the National Institute of Mental Health since 1957, most recently as associate director of clinical research.

While there he was known for his studies of catecholamines and their metabolism in brain disease. His research over the past 25 years also included basic studies on the regulation of neurotransmitter release and metabolism.

In 1980, Dr. Kopin received the PHS Distinguished Service Medal in recognition of his achievements in brain research.

Dr. Kopin also led the NIMH research team that earlier this year reported development of the first monkey model for Parkinson's disease—a discovery resulting from studies of young drug abusers with severe drug-induced Parkinson's disease symptoms.

Dr. Kopin was born in New York City. He received undergraduate and M.D. degrees from McGill University in Montreal, and completed an internship and residencies at Boston City Hospital and Columbia-Presbyterian Medical Center. He is Board certified in internal medicine.

Current Contents lists Dr. Kopin, author of more than 400 scientific publications, as among the most-cited scientists for the period 1965 to 1978. He serves on the editorial



Dr. Kopin

board of eight scientific journals and holds faculty appointments at Georgetown University in the Departments of Medicine, and Physiology and Biophysics.

In 1982 he acted as consultant on studies of catecholamine metabolism as the first Edgar Rouse visiting scientist at the Baker Medical Research Institute in Melbourne, Australia. Early in 1983 he was a William N. Creasy visiting professor in clinical pharmacology at the University of Arizona.

He was elected to membership in the Association of American Physicians, and is a member of numerous other professional societies, scientific committees, and task forces. □

Dr. Elvin Kabat Honored With Journal Dedication

Dr. Elvin A. Kabat, noted immunochemist and NIH expert, was honored recently in Ronneby, Sweden while attending the International Conference on Glycoconjugates. There, he was surprised with an advance copy of the journal, *Carbohydrate Research*, published in his honor Aug. 16 by Elsevier Science Publishers, B.V.-Netherlands.

Fellow scientists at the conference autographed a tribute to Dr. Kabat in the advance copy—"To Elvin Kabat, in recognition for his outstanding contribution to the study of the role of carbohydrates in life processes."

His illustrious career was reviewed in the journal foreword by Dr. Michael Heidelberger, adjunct professor of pathology (immunology) at New York University School of Medicine. He recounted Dr. Kabat's contributions to science and added that he "also shines as an author" and "has become a superb and often witty lecturer."

Dr. Kabat spent 2 days a week at NIH conducting research on tracking immunoglobulin sequences, and has recently coauthored a text in this field, *Sequences of Proteins of Immunological Interest*, with Drs. T.T. Wu,

concert tickets and tickets to a Bullets game. The Blood Bank will offer other prizes including "Stop—Give Blood" tee shirts, nerf balls, key chains and bumper stickers. □



Dr. Kabat

Howard Bilofsky, Margaret Reid-Miller, and Harold Perry.

Dr. Kabat is also professor of microbiology and human genetics and development at Columbia University College of Physicians and Surgeons, where he began his career. □

Life is like playing a violin in public and learning the instrument as one goes on.—Samuel Butler □

NIH Director's Award Ceremony To Honor 35 Staff

Outstanding accomplishments of various staff members will be recognized by Dr. James B. Wyngaarden, NIH Director, at the 13th NIH Honor Awards Ceremony on Thursday, Sept. 29, at 1:45 p.m., in the Masur Auditorium. All NIH employees are invited to attend the 1-hour ceremony.

The NIH Director's Award will be presented to 32 Civil Service employees and 1 instructor from the University of the District of Columbia conducting classes at NIH. The NIH-EEO Award of the Year and the Harvey J. Bullock,

Jr. Award for Equal Opportunity Achievement will also be presented.

The Director's Award recognizes exceptional performance by employees who have made substantial or exceptional contributions to the benefit of the programs or the people of NIH.

Evelyn Laten, secretary, Physiology and Biomedical Engineering Program, NIGMS, will be presented the NIH-EEO Award of the Year "for continuing leadership, special efforts, exceptional contributions and contin-

ued devotion to the cause of the equal opportunity at the NIH, PHS, and DHHS."

The Harvey J. Bullock, Jr. Award for Equal Opportunity Achievements will be presented to Frances B. Chacos, Equal Opportunity Assistant, NIDR. Her citation reads: "In recognition of demonstrated commitment and outstanding contributions to the NIH Equal Opportunity Program by providing guidance and counseling to NIH handicapped employees, particularly the hearing-impaired."



Ms. Atkinson

Mr. Lindsey

GLADYS ATKINSON

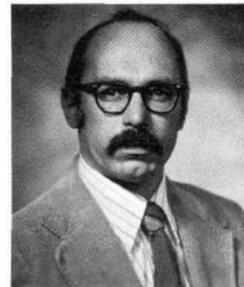
Contract Specialist (Small and Disadvantaged Business Utilization Specialist)
Division of Administrative Services
Office of the Director

"For exceptional contributions and leadership role in advancing the NIH socioeconomic programs."

NATHANIEL LINDSEY

Contract Specialist (Small and Disadvantaged Business Utilization Specialist)
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Office of the Director

"For exceptional performance in the role of NIH Small and Disadvantaged Business Specialist for research and development contract programs."



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Mr. Cassman

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Biomedical Engineering and Instrumentation Branch
Division of Research Services

"For indispensable support of biomedical research at the National Institutes of Health through development of custom electronic instruments and systems meeting unique and highly challenging requirements."

MARVIN CASSMAN, Ph.D.

Health Scientist Administrator and Chief, Molecular Basis of Disease Section
Cellular and Molecular Basis of Disease Program
National Institute of General Medical Sciences

"For sustained leadership of the NIGMS initiative in shared instrumentation grants and for exceptional work as a Section Chief in the Cellular and Molecular Basis of Disease Program."



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Ms. Corning

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Head, Neuro-ophthalmology Section
Clinical Branch
National Eye Institute

"For extraordinary contributions to the field of ophthalmology through his career as a scientist, teacher, physician and scholar."

MARY E. CORNING, D.Sc.

Retired
Formerly Assistant Director for International Programs, OD
National Library of Medicine

"For sustained excellence, dedication, and extraordinary contribution to the international programs of the National Library of Medicine."



Dr. Di Sant'Agnese

Dr. Driscoll

PAUL A. DI SANT'AGNESE, M.D.

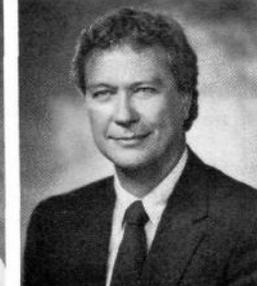
Chief, Pediatric Metabolism Branch
National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases

"For dedicated research and invaluable accomplishments in the field of cystic fibrosis."

JOHN S. DRISCOLL, Ph.D.

Acting Associate Director
Developmental Therapeutics Program
National Cancer Institute

"For exceptional management, highly effective administration, superior scientific direction and inspired leadership of the Preclinical Drug Development Program, Division of Cancer Treatment."



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Mr. Fulton

SYLVIA EDELSTEIN

Senior Systems Analyst
Section on Computer Applications
National Institute of Neurological and Communicative Disorders and Stroke

"For creative computer programming and systems analysis support of the NINCDS research effort, which has resulted in highly efficient and error free data management of the Institute's research projects."

BENJAMIN E. FULTON

Deputy Executive Officer
Office of the Director
National Institute of Child Health and Human Development

"For continuing excellence in management of NICHD programs for the conduct and support of research in maternal and child health and the population sciences."



Dr. Furberg

Dr. Gay

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Chief, Clinical Trials Branch
Division of Heart and Vascular Diseases
National Heart, Lung, and Blood Institute

"For scientific and administrative leadership in demonstrating the effectiveness of propranolol in secondary prevention, one of the most important recent advances in cardiology."

WILLIAM I. GAY, D.V.M.

Chief, Animal Resources Program Branch
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"For demonstrating superior performance in handling animal welfare issues and establishing the Trans-NIH Coordinating Committee for Animal Resources."

Members on September 29



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Office of the Director

"For extraordinary achievement in enabling the National Institutes of Health to deal effectively and equitably with instances of real or apparent misconduct in science."

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National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases

"For dedicated and superior management of the Division of Intramural Research, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases."



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Dr. Onodera

LILLIE E. O'HARO

Management Technician
Office of Administration
Office of the Director

"For dedicated service, exceptional work performance, and maintenance of an efficient records management system which significantly contributes to the smooth operation of the OD central files."

TAKASHI ONODERA, Ph.D.

Expert
Laboratory of Oral Medicine
National Institute of Dental Research

"For innovative studies on the role of viruses in autoimmunity."



Dr. Parrillo

Ms. Pifer

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Chief, Critical Care Medicine Department
Clinical Center

"For creating a superior Critical Care Medicine Department which has permitted NIH Institutes to conduct research involving very sick patients."

WANDA J. PIFER

Supervisory Visiting Program Specialist
Foreign Scientists Assistance Branch
John E. Fogarty International Center for Advanced Study in the Health Sciences

"For sustained leadership in developing, guiding, and coordinating the administrative aspects of the Visiting Program, National Institutes of Health."



Dr. Goldberg

Dr. Haseman

MICHAEL I. GOLDBERG, Ph.D.

Associate Director for Program Planning and Evaluation
Office of the Director

"For the invaluable role he has played in handling sensitive legislative affairs and in developing a highly effective system of planning and evaluation for the National Institutes of Health."

JOSEPH K. HASEMAN, Ph.D.

Research Mathematical Statistician
Statistics and Biomathematics Branch
National Institute of Environmental Health Science

"For expert advice and dedicated service to the application of statistical methods for the National Toxicology Program, NIEHS."

ZAVEN S. KHACHATURIAN, Ph.D.

Chief, Physiology of Aging Branch
National Institute on Aging

"In recognition of sustained and successful effort in developing the Neuroscience of Aging Program, and for leadership in NIA's initiative on Alzheimer's disease."

BRIAN W. KIMES, Ph.D.

Chief, Cancer Biology Branch
Division of Cancer Biology and Diagnosis
National Cancer Institute

"For sustained superior contribution toward efficient scientific and fiscal administration of extramural research in support of the National Cancer Institute mission."



Mr. Kochevar

Dr. LaMontagne

MARK F. KOICHEVAR

Administrative Officer
Clinical Oncology Program
National Cancer Institute

"For extraordinary administrative services to the Clinical Oncology Program, Division of Cancer Treatment, National Cancer Institute, exemplifying the finest attributes of administrative skills and professional integrity."

JOHN R. LaMONTAGNE, Ph.D.

Influenza Program Officer
Development and Applications Branch
National Institute of Allergy and Infectious Diseases

"For leadership in coordinating research programs for the control of influenza and related diseases through experimental vaccines and antiviral agents."



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Dr. Jacoby

ASHER HYATT, Ph.D.

Assistant Chief, Scientific Review Branch
Chief, Biomedical Sciences Review Section
Division of Research Grants

"For exhibiting excellent leadership and mediation skills in the interagency effort to revise the format of the PHS-398, Grant Application Form."

ITZHAK JACOBY, Ph.D.

Deputy Director
Office of Medical Applications of Research
Office of the Director

"For skillful and innovative management of programs in the areas of technology assessment and transfer."



Ms. Miers

Ms. Newsom

STRESS

(Continued from Page 1)

secretion also may figure in other psychiatric illnesses, such as anorexia nervosa and obsessive-compulsive disorder.

While some stress is actually essential to health and normal adaptation, depressed patients often seem as if they are in the throes of a hyperstressful situation, explained Dr. Goodwin. There is now evidence that antidepressant drugs may, in effect, serve as "stress substitutes" for vulnerable individuals, perturbing the brain and strengthening its ability to adapt. Studies are showing that, like chronic stress, antidepressants increase the capacity of the brain's catecholamine (noradrenaline/norepinephrine) system to respond.

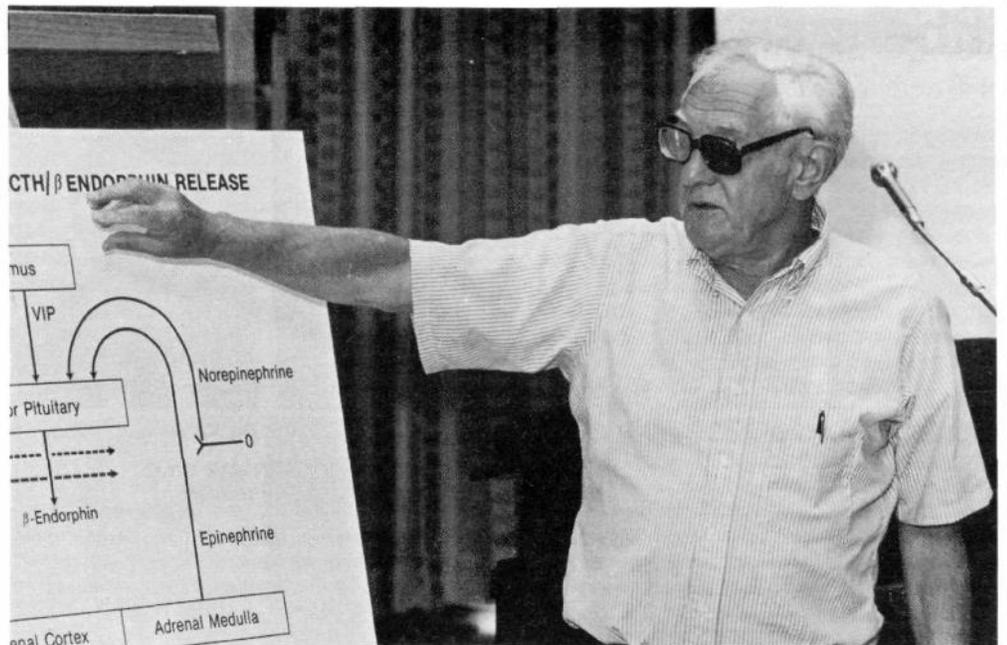
A Sophisticated System

In studies designed to understand how this key system interacts with the other hormones of the HPA axis, Dr. Julius Axelrod discovered that the regulation of the stress response is more complex than had been thought.

He found that, like CRF, catecholamines from the cortex and adrenals stimulate the pituitary to release ACTH.

By binding to beta-2-adrenergic receptors on the pituitary cell membranes, catecholamines stimulate a "second messenger" substance within the cell called cyclic AMP, which in turn signals the cell to synthesize and release its hormones.

Dr. Axelrod also discovered that another brain substance called VIP (Vasoactive Intestinal Peptide) acts similarly on the pituitary to stimulate release of ACTH. Yet another, somatostatin, has just the opposite effect, shutting off cyclic AMP and blocking ACTH secretion. Levels of ACTH were found to decrease when the pituitary was chronically stimulated



At the NIH Science Writers' Seminar on Stress, Dr. Julius Axelrod explains his findings on the relationship among the stress hormones—catecholamines, ACTH, and glucocorticoids.

suggesting sensitization or "down-regulation" of the system under chronic stress.

"These findings reveal a sophisticated system by which the organism at once maintains a vital homeostasis while coping with the challenging environment," observed Axelrod.

Dr. Steven Paul reviewed experiments that pinpoint the mediation of a major form of stress—*anxiety*—to the benzodiazepine (Valium) receptor complex. Not only does the benzodiazepine receptor respond to drugs that reduce anxiety, it also can recognize drugs which produce anxiety in monkeys and humans.

In what Dr. Paul described as a "rather sur-

prising" series of experiments, he found that a beta-carboline substance (B-CCE) triggered behavioral and physiological effects closely resembling anxiety in rhesus monkeys. After B-CCE injections, the animals became aroused and agitated and showed elevated heart rate, blood pressure, and catecholamine, ACTH, and cortisol levels. All of these effects of B-CCE were blocked by pretreatment with benzodiazepines, confirming that they were mediated via the benzodiazepine receptor. The NIMH psychiatrist is now initiating studies to determine whether patients with anxiety disorders have any abnormalities in the benzodiazepine receptor complex.—**Jules Asher, NIMH** □



Marian L. Dawson, personnel officer of the Division of Computer Research and Technology, recently received an NIH Merit Award for her skill and leadership in administering the DCRT personnel program. In addition to her regular duties at DCRT, Ms. Dawson has served on the staff of the NIH Senior Scientific Service bonus review group, and was instrumental in implementing the Factor Evaluation System standard for the computer specialist series. The award was presented by L. Lee Manuel, DCRT executive officer.

Women's Advisory Committee Holds First in Career Workshop Series

In celebration of American Business Women's Day on Sept. 22, the NIH Women's Advisory Committee is planning the first of a three-part series of career workshops for NIH employees.

The theme of the workshops, sponsored by the NIH Federal Women's Program, is "Stairway to Career Success." The September workshop will be held from 11:30 a.m. to 1 p.m. in the Clinical Center's 14th floor auditorium.

Alexander Methven, a world renowned career planning consultant with experience in both the public and private sector, will be the featured speaker. He is a regular presenter at the Federally Employed Women's Annual Training Conferences.

Mr. Methven received his formal training at Cambridge and London Universities and has been praised for his creative approach to career planning. He will discuss some of the fundamentals of career development, including motivation.

This workshop is for both those who have never had career counseling and those who want a refresher course. Sign language interpretation will be provided. □

CORRECTION

In *The NIH Record*, Aug. 30, page 11, there was an error in the copy on Dr. Thaddeus Domanski concerning the NCI Cooperative Minority Biomedical Program. The copy should have stated the following:

"Dr. Domanski received a citation from the director of the NCI Division of Extramural Activities in August for his contribution to the development of the NCI Cooperative Minority Biomedical Program. This program was developed and operated in the Division of Research Resources and Centers (currently the Division of Extra Mural Activities). In 1975, Dr. Domanski loaned space and staff to the Division to support the program. From 1975 to 1983 he served on the Cancer Minority Program Advisory Committee." □

Normal Volunteers Needed

Healthy volunteers between 40 and 60 years of age are needed for a 3-day study on the effect of a common ulcer treatment on stomach acid. Volunteers are paid for their time. Contact Drs. McArthur or Jensen at 496-4201 between 9 a.m. and 4 p.m. □

Former CC Employee John Scott Dies

John H. Scott passed away August 11 at the Washington Hospital Center.

Mr. Scott, better known as "Scotty" to his many friends at NIH, was a government employee for 25 years, most of them spent at the Clinical Center. He was a source of comfort to many pediatric patients and their parents during his years with the nursing staff in the outpatient department.

After several years with the outpatient nursing staff Mr. Scott transferred to the Medical Records Department and worked there until his retirement in 1969.

He is remembered not only for his kindness and concern for his patients and friends, but also for the many parties and picnics he catered for the different offices on the campus.

Mr. Scott leaves his wife, Etta, daughters Phyllis White and Carolyn Finley and four grandchildren.

Two Scholars-in-Residence Arrived at NIH in August

Dr. Keith Porter, professor at the University of Colorado, returned to the NIH recently for his third term as a Fogarty scholar-in-residence.

Dr. Porter has had a long career in cell biology. He was at the Rockefeller Institute from 1939 to 1961, and then at Harvard University—where he was professor of biology and chairman of the department—from 1961 to 1967. In 1968, he moved to the University of Colorado, where he was chairman and professor in the department of molecular, cellular and developmental biology.

Dr. Porter has played a major role in the development of electron microscopy, the revival of cytology and the growth of modern cell biology. His recent publications have dealt with the intracellular matrix and its role in cellular activity.

During his present term as a scholar, he will preside over a conference on the Cytoplasmic Matrix and the Integration of Cellular Function, which will take place Oct. 17-20, at the Holiday Inn, Bethesda, Md. Persons wishing to attend should contact Nancy Shapiro, Fogarty International Center, International Studies Branch, Bldg. 16A, Rm. 201, Bethesda, MD. 20205.

Professor Jerrold Meinwald also arrived recently to begin his Fogarty scholarship-in-residence. Professor Meinwald is well known for his pioneering work in chemical communication and chemical ecology and is considered a world leader in these areas.

A principal concern of his laboratory has been the study of the chemical defense and communication mechanisms of insects and other arthropods. This work is important for understanding insect repellents, pheromones and other agents that play a role in pest control and the study of insect vectors of disease.

Professor Meinwald will be associated with the Laboratory of Chemistry, NHLBI.

Both Dr. Porter and Professor Meinwald will have offices in Stone House, where they can be reached at 496-1213. □

Physicians at NIADDK Branch Awarded International Prize for Lupus Research

Physicians in the Arthritis and Rheumatism Branch, NIADDK, have been honored for their collective research efforts in studying systemic lupus erythematosus (SLE), and especially the nephritis that is a complication of that disease. The Branch was awarded the IVth Alessandro Robecchi International Prize at the Xth Congress of the European League against Rheumatism in Moscow in late June.

The branch has been studying SLE since 1968. The therapy of lupus nephritis is a topic of intense clinical interest, but also one of longstanding controversy. Cytotoxic drugs like cyclophosphamide and azathioprine were shown to contribute to the long-term preservation of kidney function in patients with lupus nephritis if functional deterioration has not already occurred. But this therapeutic advantage is gained at the expense of appreciable, often severe drug toxicity. This work was discussed in *Controlled Studies of Oral Immunosuppressive Drugs in Lupus Nephritis: A Long-Term Follow-Up*, *Annals of Internal Medicine*, Vol. 99; No. 1 July 1983.

In a related study, *Prognostic Factors in Lupus Nephritis: Contributions of Renal Histology*, histologic (microanatomical) features of lupus nephritis were examined in order to derive additional prognostic information from renal morphology.

Individual types of histologic lesions as well as composite scores specified by Activity and Chronicity Indices were examined by computer-derived life tables using end-stage renal failure as the measure of outcome.

When certain of these underutilized morphological features of renal biopsy are added to conventional classification systems, they help predict those patients with lupus nephritis who are at increased risk of renal failure regardless of the type of therapy.

These two studies were the basis for awarding the prize. Contributing authors included branch scientists Drs. John H. Klippel, Howard A. Austin, Paul H. Plotz, Alfred D. Steinberg, James E. Balow, Margarita E. Kullick, Simon Carette (currently at Centre Hospitalier De L'University Laval, Quebec, Canada), and former branch chief, John L. Decker. Also contributing were Kathleen M. Joyce and Dr. Tatiana A. Antonovych.

A member of the ARB was also recognized for individual achievement during June. Dr. Howard R. Smith received the J.D. Lane Junior Investigator Award at the 18th Annual Meeting of the U.S. Public Health Service Professional Association.

The award is given to an investigator for work done no more than four years after completion of clinical research training.

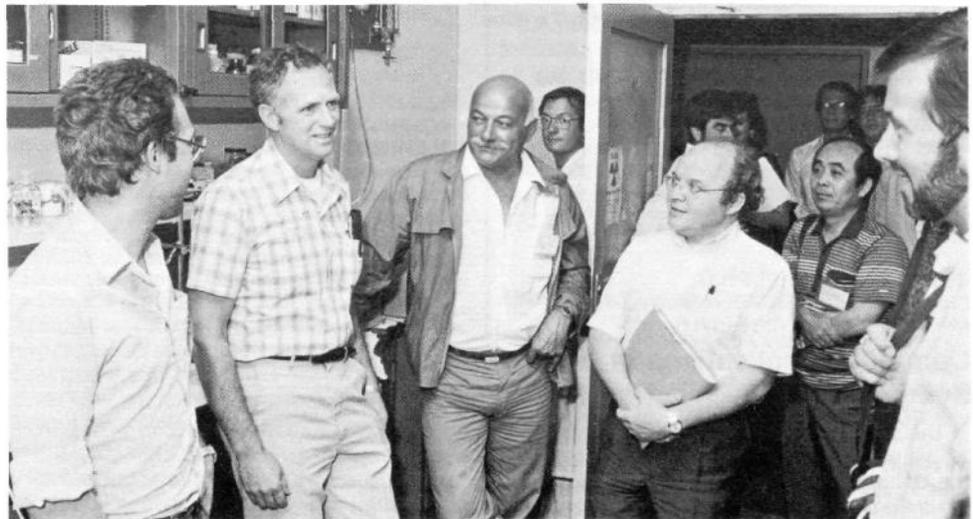
Dr. Smith received his award for basic immunological studies on BXS_B mice, a strain that develops an autoimmune syndrome resembling human SLE. □

Assertiveness Training Course Offered

A course in Assertiveness Training is being offered by Rachele Selzer, Head Mental Health Counselor of the Employee Counseling Service, Occupational Medical Service.

The group of 15 participants will meet for four consecutive Wednesdays, from 12:30 p.m. to 1:30 p.m., starting Wednesday, Sept. 21. The sessions will be held in Bldg. 31, Rm. B2C07.

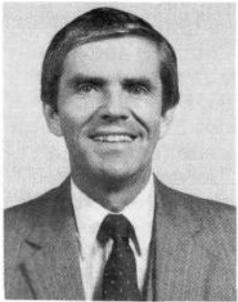
Call Ms. Selzer at 496-3164, for a brief, pre-group interview. The class will be limited to 15. □



Delegates to the II World Conference on Clinical Pharmacology and Therapeutics, held in Washington in early August, visited NIH to learn about pharmacological research in progress. The event was sponsored by the NIGMS Pharmacological Sciences Program, and featured tours led by current and former Pharmacology Research Associates (PRAT Fellows) to the laboratories of current PRAT preceptors. Above, Dr. Walter Lovenberg (second from l), chief of the NHLBI Hypertension-Endocrine Branch, describes his laboratory's work on neurochemistry and basic enzyme regulatory mechanisms. Meeting participants were welcomed by Dr. Thomas E. Malone, and ended their visit to NIH with a stop at the National Library of Medicine.

NIH AWARDS CEREMONY TO HONOR 35

(Continued from Page 5)



Mr. Powers



Dr. Schoolman



Dr. Shalowitz



Mr. Shannon

RICHARD J. POWERS

Chief, Financial Advisory Services Branch
Division of Contracts and Grants
Office of the Director

"For extraordinary ability to deal forcefully but tactfully with problems that arise in the financial management of NIH research and development contracts programs."

HAROLD M. SCHOOLMAN, M.D.

Deputy Director for Research and Education
National Library of Medicine

"For his effective role in the planning, coordination, development, and evaluation of the National Library of Medicine research and education programs."

ELEAINE L. SHALOWITZ, Ph.D.

Assistant Professor of English and Reading
Specialist

University of the District of Columbia
(Development and Training Operations Branch
Division of Personnel Management, OD)

"For the extraordinary and invaluable teaching role she has played toward enhancement of the intellectual capabilities of an extensive cross-segment of NIH employees."

DENNIS H. SHANNON

Copier Duplicator Equipment Operator
Division of Extramural Affairs

National Heart, Lung, and Blood Institute

"For leadership, dedication, resourcefulness and consistent superior work performance in carrying out his assignment for the National Institutes of Health."



Ms. Storm



Dr. Termine



Mr. Vincent

CAROLYN E. STORM

Supervisory Personnel Staffing Specialist and
Selective Placement Coordinator, NIH
Division of Personnel Management
Office of the Director

"In recognition of her highly successful recruitment, effective placement, and outstanding services to the handicapped and disabled workers at the National Institutes of Health."

JOHN D. TERMINE, Ph.D.

Chief, Skeletal Matrix Biochemistry Section
Mineralized Tissue Research Branch

National Institute of Dental Research

"For major advances in isolating and characterizing the extracellular matrix proteins of enamel, dentin and bone."

WILLIAM DOUGLAS VINCENT

Computer Systems Analyst
Data Management Branch
Division of Computer Research and Technology

"For superior leadership and professional competence in implementing the Clinical Information Utility at the Clinical Center, National Institutes of Health." □

Computer Applications in Medical Care Symposium Scheduled for October 23-26

The 7th Annual Symposium on Computer Applications in Medical Care will be held at the Baltimore Convention Center, Oct. 23-26.

NIH is one of more than 90 sponsoring and cooperating organizations participating in the development of the program, which will include various types of presentations of interest to NIH researchers and grantees.

Activities include 24 tutorials, 20 demonstrations a medical software exchange forum, discussions, 8 poster presentations, 50 commercial exhibits, a job exchange, and a re-

ception on Tuesday, Oct. 25, at 6:30 p.m.

NIH employees qualify for the special "member" rate. Advanced registration—prior to Oct. 17—is \$195 for employees from sponsoring organizations.

Announcements and further information may be obtained from Dr. Coralie Farlee, Fogarty International Center, 496-1415, or from the symposium registrar, George Washington University Medical Center, (202) 676-4285. □

Free Pamphlet Explains Rabies

A free pamphlet about rabies is available from the National Institute of Allergy and Infectious Diseases (NIAID). Along with several areas of the United States, the greater Washington, D.C. area is in the throes of a rabies epidemic (primarily among raccoons) that is expected to last a year or two longer.

The 6-page pamphlet explains that rabies is caused by a virus that attacks the central nervous system to cause one of the most terrifying diseases known to man. The virus is present in the saliva of infected animals and is usually transmitted by the bite of a rabid animal.

But according to the pamphlet, there are other ways, although rare, of getting rabies: by contact of virus-laden saliva with broken skin, by airborne spread of the virus in caves inhabited by infected bats, and via corneal transplants from infected humans.

Symptoms Described

The brochure describes the symptoms of rabies in humans and in animals, how diagnosis is made, and what a person should do if bitten by an animal. Two kinds of rabies shots for humans are discussed: those given after a bite and those given to prevent rabies in veterinarians and others at high risk of exposure.

Except for a few island countries such as Japan, Australia, and Great Britain, rabies occurs throughout the world. In an effort to eliminate this global problem, the Public Health Service funds a broad range of rabies research projects.

The pamphlet describes some of the current approaches: finding a way to vaccinate wild-life, developing less expensive human vaccines, and studying the factors that allow some animals paralyzed by rabies to recover.

Anyone interested in receiving a copy of the rabies pamphlet should write to the NIAID Information Office, Bldg. 31, Rm. 7A32, Bethesda, MD 20205, or call (301) 496-5717

Protect Yourself From RABIES



Were it offered to my choice, I should have no objection to a repetition of the same life from its beginning, only asking the advantages authors have in a second edition to correct some faults of the first.—Benjamin Franklin □

Dr. Katherine Bick Named NINCDS Deputy Director



Dr. Bick

Dr. Katherine L. Bick, a neurobiologist with expertise in nervous system pathology, has been named deputy director of the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS). The appointment was effective Sept. 4, 1983.

Dr. Bick will assist the Director in overseeing the Institute's programs of basic and clinical research on disorders of the brain and nervous system, including stroke, trauma, epilepsy, Alzheimer's disease and disorders of speech, language and hearing.

Dr. Bick has been acting deputy director of NINCDS since February 1981. She joined the Institute in 1976 as a science administrator with the Neurological Disorders Program,

and later served as that program's deputy director.

Earlier this year, Dr. Bick received a Public Health Service Special Achievement Award for Sustained Superior Work Performance while serving as Institute acting deputy director.

She was commended for her accomplishments as NINCDS representative to the NIH Committee on Disease Prevention and Health Promotion; for the introduction of improved management methods in the Institute implementation planning procedure; and for directing a comprehensive review with the NINCDS Program and Management Information System, resulting in establishment of a system to provide Institute managers with more accurate and accessible data.

Her other honors include the NIH Director's Award in 1977.

Dr. Bick is a native of Canada. She received her Ph.D. degree from Brown University, and has held academic positions at Georgetown University and San Fernando Valley State College, and research positions at the UCLA School of Medicine and the University of Western Ontario.

She is an editor of *Alzheimer's Disease: Senile Dementias and Related Disorders*, considered one of the seminal publications in this field of research, of *Neurosecretion and Brain Peptides*, and is author of scientific papers.

Dr. Bick holds membership in major professional neurological and neuroscience societies. She is frequently sought as a speaker on various neurological and communicative disorders before scientific and lay groups. □

Down's Syndrome and Alzheimer's Disease Show Common Traits in Older Patients

A National Institute on Aging (NIA) study suggests that brain glucose utilization is elevated by 30-40 percent in young adults with Down's syndrome. These results indicate that glucose is used excessively by brains of young adult Down's patients and that the mental retardation of Down's syndrome may be associated with a metabolic alteration in the brain.

The study also found evidence that brain activity declines as Down's patients age, which is consistent with other recent evidence that many brains from older Down's patients exhibit the nerve cell degeneration and reduced enzymes activity that characterize Alzheimer's disease.

Down's syndrome is the most common form of mental retardation with a known cause. Body and brain cells of patients with Down's have an extra 21st chromosome.

Dr. Stanley Rapoport, chief of the NIA Laboratory of Neurosciences, led the research team which measured brain metabolism in four Down's patients younger than 35 years of age, one 51-year-old patient, and healthy age-matched volunteers. Measurements were performed under resting conditions by means of positron emission tomography (PET), a technique used to study brain function in healthy and diseased people.

PET uses a chemical analogue similar in structure to glucose to monitor metabolic ac-

tivity in different regions of the brain. A radioactive positron-emitting label on the chemical allows specific areas of the brain to be visualized by computerized image-processing.

The current study measured glucose metabolism in the cerebral hemispheres, the upper portion of the brain which is responsible for thought processes, organized motor behavior, sensation, speech and hearing.

The study revealed a higher level of glucose metabolism in the brains of the four younger Down's patients (age 19 to 27) than in healthy subjects of the same age.

The investigators also looked at a 51-year-old Down's patient and found that glucose utilization was lower than in the younger Down's patients. Another study by Dr. Michael Duara and colleagues at NIA's Laboratory of Neurosciences (in press, *Brain*) shows no age-related decline in brain metabolism in healthy individuals.

These findings suggest, as noted, that brain activity declines as Down's patients age and that many brains from older Down's patients exhibit nerve cell degeneration and mental symptoms of Alzheimer's disease.

Although NIA scientists are cautious about drawing conclusions from their results, their findings clearly indicate that PET can be employed to examine brain function in Down's syndrome and other diseases. □

NIH Management Intern Program Recruits for Training Positions

The NIH Management Intern Program is accepting applications through Oct. 7 for five positions at the GS-5, 7 and 9 levels. The program consists of four different on-the-job administrative training assignments over a 1-year period.

Interns will also enroll in formal course work and attend seminars.

Since 1956, the MI Program has provided the opportunity for outstanding individuals to begin careers leading to responsible management positions at the National Institutes of Health. The program seeks talented people from within the Federal Government and provides them with a specially designed program of training and career development.

Graduates of the MI program have been and continue to be a primary source for filling future senior management and administrative positions at NIH.

Eligibility Requirements

Recruitment is limited this year to DHHS employees. Eligible candidates must have a career or career-conditional appointment, have worked at HHS for one year immediately prior to Oct. 7, and be willing to work full-time.

To meet eligibility requirements at the GS-5 level, employees must also have:

- Successfully completed a 4-year course leading to a bachelor's degree at an accredited college or university; or
- Three years of experience in administrative, professional, technical, investigative, or other responsible work that has provided a general background for the position; or
- Any time-equivalent combination of such education and experience.

At the GS-8/9 level, employees must meet requirements for GS-5; and have additional education or experience for the GS-7 or GS-9.

Information Sessions

Candidates are urged to attend one of the following information sessions to ensure that all questions are answered: **Sept. 14**, Bldg. 10, Masur Auditorium, 10 a.m. or **Sept. 21**, Bldg. 31, Conf. Rm. 4, 2 p.m.

Application forms may be obtained from Cindy Howell, Development and Training Operations Branch, Bldg. 31, Rm. B2C31, 496-6371. □

NIH Yoga Group To Offer Classes

The NIH Integral Yoga Group is offering basic and intermediate yoga classes this fall. Classes will include practical instruction in yoga stretching, breathing, relaxation, meditation and psychology.

The 6-week classes will be held in Bldg. 31 from 5:30 to 7 p.m. starting Tuesday, Sept. 20 (basic) and Thursday, Sept. 22 (intermediate). Registration and further information are available through the R&W Activities Desk, Bldg. 31, Rm. B1W30, 496-4600.

In addition, half-hour yoga deep relaxation sessions will be held Wednesdays at noon in the Clinical Center if enough people express interest. Those interested should contact the R&W Activities Desk. □

STEP Forum Series Opens on September 28 With Legislative Issues Lecture by NIH Director

"Current Legislative Issues and Their Impact on NIH" is the subject of the first 1983-1984 STEP (Staff Training in Extramural Programs) Forum Series lecture to be presented by Dr. James B. Wyngaarden, NIH Director, on Wednesday, Sept. 28 from 2 to 4 p.m. in Wilson Hall, Shannon Bldg. The forum is open to all NIH staff.

Through the voluntary services of its members and efforts of many NIH staff who donate time as faculty members, the STEP Program has provided continuing education and enrichment to NIH extramural personnel for more than 20 years. Over 80 modules (1-2 day minicourses) and numerous forum series lectures have been offered.

Dr. William F. Raub, NIH Deputy Director for Extramural Research and Training, directs the program which is coordinated by a committee of 22 regular and 3 ex officio members who plan and conduct the training sessions.

Dr. Harold Waters, chief, Special Review Section, Division of Research Grants, was made new chairman of the STEP committee this year, a position he will hold for the next year. "This year's STEP Program is very reflective of the concerns, issues, and challenges facing NIH. We have a new theme of NIH relationships that runs throughout the STEP modules," said Dr. Waters.

This year's modules and forum will focus on the quality of the research supported by NIH, and the quality of NIH's relationships with many communities. The 1983-1984 STEP Program offers opportunities for education, job enrichment, examination of similar jobs, and sharing expertise and experiences with staff in different BIDs or job categories.

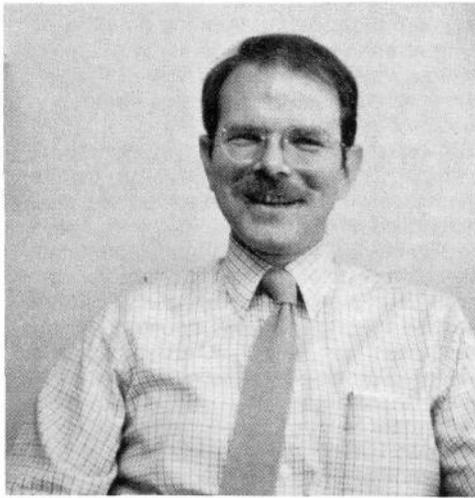
The first module, *Introduction to the Extramural Programs*, will be offered Nov. 14-15. This module, offered every year, will explain the organization and operations of NIH extramural programs.

Module 2, *Computers Their Use in Extramural Programs*, Jan. 17-19, 1984, will introduce the uses of computers in extramural work. This module differs from previous modules in that it will address the broader applications of computer technology within the NIH extramural programs rather than concentrate on specific NIH information systems.

Peer Review Under Pressure, Mar. 20-21, 1984, the third module, will explain the meaning of priority scores, trends in priority score assignment, and interaction within initial review groups assessing applications and assigning priority scores. Impetus for this module is continued tight funding, which increases the importance of high quality review and imposes stresses which can erode the quality of peer review.

Module 4, *Conflict of Interest in Extramural Activities*, Apr. 11-12, 1984, will address the continuing need for all NIH staff to recognize and avoid conflicts of interest in the planning, review, and administration of extramural activities. This module will seek to promote improved awareness, insights, and judgments concerning potential or actual conflicts-of-interest situations deriving from relationships and interactions among NIH extramural staff, advisors, and constituents.

Module 5, *Politics of Health Legislation: Forces and Interactions*, Apr. 26-27, 1984,



Dr. Waters

will examine forces that influence biomedical legislation in the 1980s. These forces include Congressional characteristics and perspectives, the policy-making mechanism in the Executive Branch, and various public influences. The goal is to understand the sources of Congressional attitudes that shape biomedical legislation.

Module 6, *NIH and Business: Partners in Research*, to be held May 8-9, 1984, is designed to enhance the participant's knowledge and insight into the background and impact of recent executive and legislative directives to provide funds for research grants to the for-profit sector.

STEP Forum Series

The 1983-1984 STEP Forum lecture series will provide opportunities to explore topics such as current legislative issues that have an impact on NIH; misconduct and scientific fraud; alternate sources of research support; implications of hybridoma research, and other topics.

The application deadlines for modules 1-4 is Oct. 14. Deadline for modules 6 and 7 is Jan. 12, 1984.

Participation in STEP modules is limited to NIH employees. Although extramural staff are given preference, other interested NIH employees are welcome to apply. Applications may be obtained from BID personnel offices, STEP committee members, or the STEP Program office, Bldg. 31, Rm. 1B63; 496-1493.

"This program is unprecedented in that through voluntary efforts, the STEP committee can put together a custom-designed training program for the NIH community that, if paid for on the outside, would cost a fortune," said Dr. Waters. □

Health's Angels 10-Mile Run To Be Held Sept. 18

The 8th annual NIH Health's Angels anniversary 10-mile run will be held Sunday, Sept. 18 at 9:45 a.m. The race, cosponsored by the D.C. Road Runner's Club, starts and finishes at the Kengar Recreation Center in Rockville. It runs out-and-back on the bike path along Beach Dr. with a short hill on Old Spring Rd. □

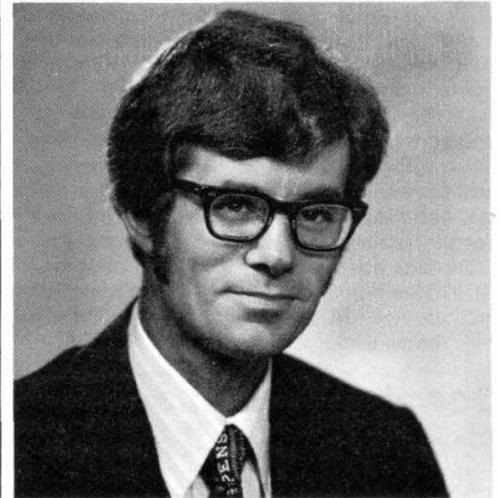
Blood Bank Chief Retires After 20 Years in PHS

Dr. Paul V. Holland, chief of the Clinical Center Blood Bank Department for the past 9 years, is retiring from the U.S. Public Health Service after 20 years of service.

Dr. Holland came to the Blood Bank in 1963 as a staff physician. He left in 1966 when he was appointed assistant resident in medicine at the University of California in San Francisco. He returned to the CC 2 years later as the assistant chief of the Blood Bank and was appointed chief in 1974.

He began his research on hepatitis as a CC staff associate. He and other Blood Bank scientists have worked to reduce the risk of hepatitis by blood transfusions, using a variety of techniques. Due in part to their efforts, blood transfusions are safer today than at any time in the past.

One of the accomplishments of hepatitis research by the Blood Bank was the discovery in 1978 that non-A, non-B hepatitis was a transmissible disease.



Dr. Holland received a PHS Commendation Medal in 1971 for "demonstrating in hospital practice the feasibility of testing blood donors for the hepatitis-associated antigen," and received a PHS Meritorious Service Medal in 1979. For 6 months in 1974 he was a visiting scientist at the National Institute of Hygiene in Warsaw, Poland.

Much progress has been made in the blood banking in the past decade. "The use of the pheresis machines now available has made many procedures safer, more efficient and less time-consuming," he said. "We can now separate out specific portions of the blood by apheresis techniques and replace only those components in patients."

The CC too has changed during Dr. Holland's tenure. "We now have 24-hour-a-day staff coverage. Although the number of beds in the hospital hasn't appreciably increased, the type of patients being admitted is different. Many are acutely ill and require transfusions more often," he said.

Although Dr. Holland is retiring from the PHS, he is not leaving his profession. He has accepted a position in California as the medical director of the Sacramento Medical Foundation Blood Center, a nonprofit community blood bank which serves 45 area hospitals. □

Dr. S. Kety, Renowned Psychiatric Researcher, Returns to NIMH After 16 years at Harvard

Seymour Kety, one of the senior statesmen of biological psychiatry, is returning to NIMH this month after a 16-year hiatus at Harvard. Among his first duties will be a job he first served in 27 years ago.

In 1956, Dr. Kety resigned as director of the NIMH Intramural Research Program (IRP) to become the first chief of its newly created Laboratory of Clinical Science. In mid-September, Dr. Kety again becomes chief of that same lab as well as IRP associate director for basic science.

Dr. Kety's homecoming adds a nostalgic twist to a scientific odyssey that has taken the 68-year-old investigator from pioneering probes of blood flow in the brain to landmark adoption studies of schizophrenia in Denmark.

The holder of 50 professional honors and mentor of a generation of psychiatric researchers, Dr. Kety is "the father of the modern era of biological psychiatry and its integration with the neurosciences," according to Dr. Frederick Goodwin, IRP director.

In 1951, Dr. Kety became the first scientific director of the then fledgling predecessor of the IRP (it was then a joint mental health/neurology program).

Convinced that few scientific discoveries result from attacking a problem "head-on"—particularly in such a new field as mental health—he designed the structure of the program's laboratories according to scientific disciplines (e.g., neurochemistry, psychology) rather than according to problem areas (e.g., schizophrenia, depression).

Good scientists flourish in the climate of freedom and continuity afforded by such "home bases" in their own respective traditions of inquiry, he reasoned.

Investigators could mount targeted, mission-oriented research on a more flexible basis as the field progressed. The legacy of labs established and scientific leaders recruited by Dr. Kety during those formative years lives on in today's IRP.

Some of his major contributions to developing mental health research actually resulted from studies with negative findings. "His emphasis on tight controls and high standards in clinical experimentation kept many young investigators from going off in directions that ultimately proved not to be fruitful," explained Dr. Goodwin.

AIDS

(Continued from Page 1)

Dr. Fauci stresses that the cause of AIDS remains a mystery. This study reveals B-cell abnormalities that are highly suggestive of viral stimulation in the absence of normal regulatory T-cell activity. More research is needed on the B-cell defects as well as on the T-cell dysfunction in AIDS patients.

This study was reported in the Aug. 25, 1983, issue of the *New England Journal of Medicine*. The authors are Drs. H. Clifford Lane, NIAID; Henry Masur, NIH Clinical Center; Lynn C. Edgar, and Gail Whalen, NIAID; Alain H. Rook, FDA; and Anthony S. Fauci, NIAID. □

The current IRP director also credits Dr. Kety with recognizing early the potential of using radioactive tracers to study brain mechanisms and facilitating use of this research strategy which underlies the Nobel prize-winning studies on catecholamines (epinephrine, norepinephrine, etc.) of Dr. Julius Axelrod, Dr. Louis Sokoloff's Lasker award-winning glucose mapping experiments, and such recent innovations as positron emission tomography.

Dr. Kety was the first investigator to perfect cerebral blood flow technology and apply it to the study of mental illness during the early 1950s. During a sabbatical in France during the 1960s, he conducted important experiments on stress and electroconvulsive therapy. His later adoption-and-twin studies of schizophrenia, conducted in Denmark, have been widely recognized as breakthroughs in understanding the role of genetics in that disorder.

Dr. Kety will serve as a principle advisor to Dr. Goodwin on matters of science policy, program management and research planning. He will also serve as a mentor to younger investigators and conduct his own research projects in neuropharmacology and models of schizophrenia. As interim chief, he will help restructure his old Laboratory of Clinical Science following Dr. Irwin Kopin's recent departure. □

AIDS Nursing Conference Set for October at NIH

AIDS (Acquired Immune Deficiency Syndrome) will be the subject of a national clinical nursing conference on Friday, Oct. 7. The conference, sponsored by the Clinical Center Nursing Department, will be held from 8 a.m. to 5 p.m. in the Masur Auditorium.

The conference is designed to provide nurses with information on current theories regarding the etiology and transmission of AIDS. Issues related to diagnosis, research protocols, and treatment will be explored. The psychosocial needs of patients, families, and health care workers will also be addressed.

The conference will be opened by Rena M. Murtha, associate director for nursing at the Clinical Center. Clinical Center nurses will also give presentations on topics such as "Nursing Diagnosis, Defining Characteristics and Care Plans for Ambulatory Care Patients," and "Psychosocial Needs of Patients."

Other speakers include Dr. Anthony Fauci, chief of NIAID's Laboratory of Immunoregulation—who has led the investigations on AIDS—as well as Dr. David K. Henderson, the Clinical Center's epidemiologist, and Dr. Henry Masur, deputy chief of the Clinical Center's Critical Care Medicine Department. Speakers from the Clinical Center Social Work Department, NINCCDS, and NIMH will also join in the conference.

For further information, call 496-5661. The registration deadline is Sept. 16. □



NIH Merit Award Given To Five NIADDK Employees

Five NIADDK employees were recently honored with NIH Merit Awards by Dr. Lester B. Salans, NIADDK Director. (See picture.)

These are: (front row, l to r) **Helen C. Jenerick**, secretary (Stenography), Division of Intramural Research, "for superlative performance as a secretary for the Laboratory of Biochemical Pharmacology, NIADDK"; **Rose Lee Claggett**, copier-duplication equipment operator, DIR, "for consistently superior performance in the Division of Intramural Research, NIADDK;" (back row, l to r) **Dr. David G. Badman**, Director, Hematology Program, Division of Kidney, Urologic and Hematologic Diseases, "in recognition of his superior administration of the Hematology Program, NIADDK, and his leadership of the study, Research Needs in Hematology;" **Dr. Sarah C. Kalsner**, Director, Liver and Biliary Diseases Program, Division of Digestive Diseases and Nutrition, "for her high level of leadership in directing and administering the Liver Diseases extramural program for the Institute" and **Dr. Walter S. Stolz**, Acting Director, Division of Extramural Affairs, "in recognition of major contributions to NIADDK which have exemplified the very highest standards of excellence in health science administration."

The NIH Merit Award is the second highest honor presented by NIH to Civil Service employees. It is designed to "recognize and acknowledge the work of some of the highly motivated and dedicated staff at NIH who have made worthy contributions toward the support of scientific research." □

Volunteers Needed

Volunteers are needed in health research, computer science, medical, education, arts/culture, counseling/guidance, recreation, public relations, environmental, and administrative/clerical programs in the Metropolitan area.

Call the Volunteer Clearinghouse nearest your home for an interview: Alexandria, 836-2176; Arlington, 558-2654; Washington, D.C., 638-2664; Fairfax, 691-3460; Montgomery, 279-1690; and Prince William, 369-5292. □

Dr. Gerald Aurbach Receives Gairdner Foundation Award

Dr. Gerald D. Aurbach was recently named recipient of one of six 1983 Gairdner Foundation Awards for outstanding contributions to medical science. He is chief of the Metabolic Diseases Branch, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases.



Dr. Aurbach

Dr. Aurbach was cited for his pioneering work in isolating parathyroid hormone (PTH) and his continuing studies of its mechanism of action. PTH is a polypeptide hormone secreted by the parathyroid glands that promotes release of calcium from bone into the extracellular fluid, which in turn helps to regulate levels of calcium and phosphorus in the blood. Various disorders of bone are believed to be related to errors in PTH metabolism.

Isolates PTH

Dr. Aurbach was the first person to isolate PTH in pure form. Additional studies led to elucidating the hormone's composition and structure (amino acid sequence), and of factors regulating its secretion and mechanisms of action.

The Gairdner Foundation was established in 1957 by the late James Arthur Gairdner. Since its founding in Toronto, Canada, the Foundation has honored more than 150 scientists worldwide for achievements in the field of medical science.

This year's awards will be presented Oct. 28, by Dr. George Ignatieff, University of Toronto chancellor. Each recipient will receive a \$15,000 prize and a guest lectureship at the University of Toronto. Dr. Aurbach's lecture, entitled *Mechanism of Action of Parathyroid Hormone—Clinical Implications*; will be given Oct. 25. □

Investment Seminar Scheduled

An investment seminar will be held Sept. 28 from noon to 1 p.m. in Conf. Rm. 4, Bldg. 31, by Jo Ostby, account executive from Laidlaw, Adams & Peck, Inc., Rockville, Md. Prospectuses and other information will be available on a pickup basis. For reservation, call 770-6317. □

Coma Data Bank Profiles Critical Head Injuries

Each year—mostly on spring and summer weekends—more than 400,000 Americans suffering from head injuries incurred during accidents are admitted to hospitals.

Although anyone can suffer an accidental head injury, the most severe kinds—resulting in coma—tend to occur among white males between the age of 15 and 29, most of whom are hurt in motor vehicle accidents.

Many of these victims never regain consciousness or intelligent thought. Those who manage to recover from coma often undergo subtle personality changes caused by widespread damage to nerve cells and brain tissues.

To learn more about head injuries and find ways to minimize resulting brain damage, the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) established a Traumatic Coma Data Bank in 1979, which will provide vital information to neurosurgeons who take care of patients with head injury.

The Traumatic Coma Data Bank, which has just completed its initial 3-year pilot phase has collected information on a series of head injury victims. These include the kinds of injuries that occur, types of accidents that result in injury, and factors (such as speed of transport to the hospital and quality of early care) that may affect recovery.

In the past, record keeping on head injury patients has not been consistent or uniform, and data have been difficult to find when needed. The new Traumatic Coma Data Bank, the largest data-gathering effort of its kind, is designed to correct these deficiencies.

So far, a total of 581 patients with severe head injuries (excluding those caused by gunshot wounds) have been studied at six medical centers throughout the United States. The data show that 50 percent were between ages 15 and 29, 67 percent were victims of motor vehicle accidents, and 76 percent were male.

In addition to the usual automobile and motorcycle accidents, there were head injuries caused by riding in the backs of pickup trucks, hang gliding, hydroplane racing, and being struck by an automobile while horseback riding.

The pilot study also revealed a strong link between age and type of injury. For example, people aged 60 and over were more often injured by falls and assaults than by vehicles. Most common among children under 15 were injuries caused by being struck by a car while walking or riding a bicycle.

A new 5-year phase is about to begin and will include larger numbers of patients than the pilot study. This data will form a basis for future research and clinical studies, and may eventually uncover ways to limit disability from this major public health problem.—**Maureen Mylander** □

If you want to be merely happy, that's easy. But to be happier than others, that's much harder, because we always think others are happier than they are.—**Montesquieu** □

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