

# NIH



# record

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PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

## DR. RALPH WYCKOFF RETIRES FROM NIAMD

Dr. Ralph W. G. Wyckoff, internationally known biophysicist, retired on August 31 from his position as Chief of the Section on Molecular Biophysics, NIAMD, after 12 years at NIH. Dr. Wyckoff has been named Professor of Bacteriology and Physics at the University of Arizona.

Since coming to NIH, Dr. Wyckoff has been primarily concerned with investigations of the whole structure of cells and intracellular organisms, and with the fine structure of material composing cells. His many research achievements include the development of methods for photographing the exact arrangement of molecular particles in cell crystals, thus confirming geometrical theories of structure. His recent work has added to existing knowledge of the

(See Dr. Wyckoff, Page 3)

## VISITING SCIENTISTS JOIN NINDB STAFF

Three outstanding investigators were recently named to Visiting Scientist posts in NINDB laboratories.

Professors Ulrich Franck and Torsten Teorell will spend three months in the Section on Special Senses, where they will participate in a project aimed at explaining the basic processes of biological excitation.

Dr. William A. H. Rushton, Director of Medical Studies at Trinity College, Cambridge, England, has joined NINDB's Ophthalmology Branch for one year. He will continue his studies of color vision and its abnormalities.

Professor Franck is Chairman of Electrochemistry at the Edward-Zintl-Institut, Darmstadt, Germany, and Professor Teorell is Chairman of Physiology and Biophysics, Uppsala University, Sweden.

## DR. MASLAND NAMED DIRECTOR OF NINDB



Dr. Richard L. Masland

The appointment of Dr. Richard L. Masland as Director of NINDB was announced September 2 by PHS Surgeon General Leroy E. Burney.

Dr. Masland succeeds Dr. Pearce Bailey, who served as NINDB Director since the Institute's inception in 1951. Dr. Bailey has been appointed director of the Institute's new International Neurological Research Programs, and will serve in a liaison capacity with the World Federation of Neurology. He will leave shortly for Antwerp, Belgium, where the Federation has headquarters.

Dr. Masland has been Assistant Director of NINDB since 1957, when he came to NIH. Among other responsibilities he has developed NINDB's perinatal project, a collaborative study of neurological and sensory disorders of the newborn.

From 1947 until 1957 Dr. Masland was professor and head of the Department of Neurology at the Bowman Gray School of Medicine, Winston-Salem, N. C. During that time he took leave to serve as Research Director of the National Association for Retarded Children.

While in U. S. Army service during

(See Dr. Masland, Page 3)

## EXHIBITORS NAME "STEERING COMMITTEE"



Six of the NIH hostesses selected to register and guide visitors at the National Equipment Exhibit, September 28 to October 1, pose for an informal picture in George Hoff's (OAM) convertible. Seated, from left, are Pat Bolton, OAM; Charlotte Schlosser, NCI; and Peggy Becker, DBS. Standing (l. to r.) are Becky Ann Gephart, NCI; Linda Weeden, DGMS; and Babette Pickler, DBS. Not present for the picture were the chief hostess, Sue La Fontise, NIMH; Joan Carter, OAM; Betty Hennigan, NIAID; Barbara Schaefer, DGMS; and Mary Virts, OAM.

## NIH APPROPRIATION BREAKDOWN FOR FISCAL YEAR 1960

The August 31 issue of the RECORD listed total NIH appropriations for fiscal year 1960 as \$430 million, with \$400 million provided for operating activities and \$30 million for grants for construction of health research facilities. The following table gives a breakdown of appropriations (in millions) by Institute and activity.

Institute	Total Appropriations	Direct Operations	Grants & Training
NIAMD	\$ 46.9	\$ 8.3	\$ 38.6
NIAID	34.0	7.7	26.3
NINDB	41.5	7.6	33.9
NCI	91.3	41.4*	49.9
NIMH	68.1	11.4	56.7
NHI	62.2	11.3	50.9
NIDR	10.0	3.8	6.2
General research and services	46.0	4.1	41.9
Total	400.0	95.6	304.4
Construction grants	30.0		30.0
Grand total	430.0	95.6	334.4

\*Contains \$22 million for cancer chemotherapy contracts.

## NEWS BRIEFS

Dr. Roderick Murray, Director of DBS, left for Geneva, Switzerland, August 25, to attend the WHO Expert Committee on Biological Standardization. On September 14 he will present a paper at the 5th International Congress for Biological Standardization in Jerusalem, Israel.

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Dr. Ernest M. Allen, Chief, DRG, attended the Second World Conference on Medical Education in Chicago, August 30-September 4. He spoke on "Fellowships and Assistantships as Economic Assistance from Government and Foun-

dations." The conference was sponsored by the World Medical Association, WHO, the Council for International Organizations of Medical Sciences, and the International Association of Universities.

\* \* \* \* \*

Dr. John A. Clausen, Chief of Socio-Environmental Studies, NIMH, has been appointed editor of "Sociometry, a Journal of Research and Social Psychology," the official publication of the American Sociological Society. Dr. Clausen is also Chairman-elect of the recently established Section of Social Psychology of the American Sociological Society.



Dr. Jack Masur, CC Director (on left), and Dr. Ali Mofty (right), personal physician to Egypt's President Nasser, watch Dr. Ludwig Von Sallmann, Chief of the Ophthalmology Branch, NINDB, demonstrate apparatus for eye pressure experiments. Dr. Mofty visited NIH September 3 while on a U. S. tour.

## Publication Preview

The following manuscripts were received by the SRB Editorial Section between April 21 and April 30.

### DGMS

Briggs, G. M. The future of livestock and poultry nutrition.

### DRS

Demonet, I. M. The medical illustrator and the scientific exhibit.

Gay, W. I. Tattooing of dogs used in medical research.

### NCI

Fahey, J. L., and Potter, M. Bence Jones proteinuria associated with a transplantable mouse plasma-cell neoplasm.

Ketcham, A. S.; Wexler, H.; and Mantel, N. The effect of removal of a "primary" tumor on the development of spontaneous metastases. A. Development of a standardized experimental technique.

Levenson, S. M., and Watkin, D. M. Protein requirements in injury and certain acute and chronic diseases.

Mider, G. B. Jesse Philip Greenstein, 1902-1959.

Nadler, C. F., and Reisfeld, R. A. Gonadotropic hormone distribution in the protein extracts of trophoblastic tumors in man.

Pendergrast, W. J.; Milmore, B. K.; and Marcus, S. C. Thyroid cancer and thyrotoxicosis in the United States: Their relation to endemic goiter.

Shnider, B. I.; Frei, E.; Tuohy, J.; Gorman, J.; Freireich, E. J.; Brindley, C. O.; and Clements, J. Clinical studies of 6-azauracil.

Suzuki, K.; Weisburger, E. K.; and Weisburger, J. H. Nitration of fluorine derivatives of polycyclic compounds.

White, W. C. An adiabatic calorimeter for continuous direct measurement of the heat production of small laboratory animals.

Shelton, E., and Rice, M. E. Relation of invasive capacity to passage of lymphocytic cells through cellulose membrane filters.

Zubrod, C. G.; Schneiderman, M.; Frei, E., III; and Brindley, C. Appraisal of methods for the study of chemotherapy of cancer in man: Comparative therapeutic trial of nitrogen mustard and thiopeta.

### NHI

Braunwald, E., and Morrow, A. G. Left ventricle-right atrial communication: Diagnosis by clinical, hemodynamic and angiographic methods. Braunwald, E.; Morrow, A. G.; and Cooper, T. Left ventricular angiography in the diagnosis of persistent atrioventricular canal and related anomalies.

Davis, J. O.; Trapasso, M.; and Yankopoulos, N. A. Studies of actomyosin from cardiac muscle of dogs with experimental congestive heart failure.

Gilbert, J. W., Jr.; Morrow, A. G.; and Braunwald, E. The results of open commissurotomy in acquired calcific aortic stenosis: Clinical and hemodynamic studies in patients operated upon with general hypothermia.

Popjak, G.; Horning, M.; Bucher, N. L. R.; and Cornforth, R. H. The formation of "Terpenoid" acids from mevalonic acids from mevalonic acid in liver enzyme preparations and their relation to sterol biosynthesis.

Suci, G. J. A comparison of semantic structures in American southwest culture groups.

Sweeley, C. C.; Moscatelli, E. A.; and Horning, E. C. Polyester liquid phases in gas-liquid chromatography.

Waldhausen, J. A.; Ross, J., Jr.; Lombardo, C. R.; Cooper, T.; Gilbert, J. W., Jr., and Morrow, A. G. Flow and volume regulation during cardiopulmonary bypass: The use of an electromagnetic flowmeter and a device for automatic control of oxygenator volume.

Yankopoulos, N. A.; Davis, J. O.; McFarland, J.; and Holman, J. Physiological changes during chronic congestive heart failure in dogs with tricuspid insufficiency and pulmonic stenosis.

Yiengst, M. J.; Barrows, C. H., Jr.; and Shock, N. W. Age changes in the biochemical composition of muscle and liver in the rat.

#### NIAID

Batten, P. J., and Olivier, L. Histopathology of swimmers' itch. III. Further observations on the skin and pulmonary lesions.

Eagle, H. Metabolic studies with normal and malignant human cells in culture.

Ribi, E.; Hoyer, B. H.; Kelsey, C. M.; Perrine, T.; Larson, C. L.; and Goode, G. Physical and chemical analysis of endotoxin from salmonella enteritidis.

Salvin, S. B. Current concepts of diagnostic serology and skin hypersensitivity in the mycoses.

#### NIAMD

Findlay, S. P. The three-dimensional structures of the cocaine. Part II. Racemic allococaine and racemic allopseudococaine.

Jakoby, W. B., and Fredericks, J. Pyrrolidine and putrescine metabolism:  $\gamma$ -aminobutyraldehyde dehydrogenase.

Senoh, S.; Daly, J.; Axelrod, J.; and Witkop, B. Enzymatic p-O-methylation by catechol O-methyl transferase.

#### NIDR

Folk, J. E.; Gladner, J. A.; and Levin, Y. Thrombin-induced formation of co-fibrin. III. Acid degradation studies and summary of sequential evidence on peptide A.

Likins, R. C.; Piez, K. A.; and Kunde, M. L. Mineralization of turkey leg tendon. I. The chemical nature of the protein and mineral phase.

Nylen, M. U.; Scott, D. B.; and Mosley, V. M. Mineralization of turkey leg tendon. II. Collagen-mineral relations revealed by electron and x-ray microscopy.

#### NIMH

Bell, R. Q. Relations between behavior manifestations in the human neonate.

Cole, J. N. Behavioral toxicity.

Isbell, H. Comparison of the reactions induced by psilocybin and LSD-25 in man.

Kitchener, H. L. Self mutilation episodes in a hyperaggressive boy.

Knee, R. I. Who helps the family.

Linn, E. L. Institutional change, patients' socio-economic characteristics, and release from a mental hospital.

Noshpitz, J. D. Some observations on self mutilating behavior in adolescents.

Spielman, P. M. Some experiences with self mutilation in children.

Weil-Malherbe, H. Effects of maleic acid on the metabolism of brain slices.

Wikler, A. Drug addiction.

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## NIH Spotlight



Dr. Sara Jane Uhrich examines a week-old goat in the NIH animal hospital.

Looking more like the gay, attractive girl next door than a Doctor of Veterinary Medicine, Sara Jane Uhrich is well-embarked on a career heretofore largely pursued by men.

One of two women students to graduate last June from the University of Georgia School of Veterinary Medicine, Dr. Uhrich is already establishing precedents.

She is the first woman veterinarian to be appointed to the PHS's 76-year-old commissioned corps of medical officers, and the only woman veterinarian now employed at NIH.

Assigned to duty with the Laboratory Aids Branch of DRS two months ago, the petite, soft-spoken Dr. Uhrich is a junior assistant veterinary officer in the NIH animal hospital. Here, she helps to care for as many as 1,500 dogs, cats, monkeys, and other animals used in medical research.

The clean, spacious quarters at NIH and the meticulous care, Dr. Uhrich explains, insure that the animals are healthy subjects for use in medical research. All new animals, she points out, are carefully quarantined and conditioned, both nutritionally and medically.

As part of her service to NIH investigators, Dr. Uhrich puts her training in animal surgery to good use in researching for new methods and techniques which may eventually help other veterinarians in restoring injured animals to good health. New surgical techniques she employs include the use of metal prostheses to replace injured bone shafts in dogs, and the introduction of plastic "windows" into

## DR. MASLAND Contd.

World War II, he was Director of the Department of Physiology of the School of Aviation Medicine.

A graduate of Haverford College and the University of Pennsylvania School of Medicine, Dr. Masland is a Diplomate of the American Board of Neurology and Psychiatry. He is Vice President of the Association for Research in Nervous and Mental Disease, chairman of the membership committee of the American Academy of Neurology, and has served as president of the North Carolina Neuropsychiatric Association and of the American Epilepsy Society.

## DR. WYCKOFF Contd.

macromolecular structure of muscle, connective tissue, nerves, and teeth.

The author of over 300 scientific papers, Dr. Wyckoff is a member of numerous professional societies, including the National Academy of Sciences, and is past president of the International Union of Crystallography, the American Crystallographic Association, and the Electron Microscopy Society of America. He is a foreign member of the Royal Society of London and the Royal Netherlands Academy of Science and Literature.

the skin of small animals for observation of metabolic processes. Many of the animals arrive at NIH in conditions that warrant surgery.

Dr. Uhrich became familiar with the PHS commissioned corps during the past three summers, spent at NIH under a selective training program known as COSTEP--Commissioned Officer Student Training and Extern Program. During her first two summers, she worked in the NIH animal hospital under the supervision of Dr. William I. Gay, head of the Animal Hospital Section, LAB. Last summer she joined an NIH research team in Puerto Rico, headed by Dr. William Windle, NINDB.

As a permanent employee, Dr. Uhrich is one of four highly qualified veterinarians who supervise the animal hospital. Perfectly at ease in a predominantly male profession, she demonstrates the confidence and gentleness essential to those who work with animals. She is not certain what prompted her decision to become a veterinarian, but finds unlimited satisfaction in her work.

## PREPARING GLASSWARE AT NIH IS MAJOR TASK

Investigators at NIH are often unaware of the availability of the wide range of scientific services that contribute to the success of their research projects. One such service is provided by the Laboratory Glassware Preparation Section, Laboratory Aids Branch, DRS, under the direction of Raymond M. Jones.

As the central facility for cleaning and sterilizing glassware, this Section receives, processes, and re-issues all common types and sizes of bacteriological glassware used in NIH laboratories. When shortages of certain types of glassware occur, supplies are replenished to meet the demand. New glassware is also processed to insure sterility. Last year, nearly five million pipettes, flasks, petri dishes, and other pieces of glass-



Glassware that is suspected of containing infectious materials is autoclaved before it is handled.



Washed pieces of glassware are wrapped and plugged with cotton before they are sterilized.

ware were issued, a 25 percent increase over 1957. The estimated value of the glassware issued to NIH scientists in fiscal year 1958 totalled \$1,732,524.

An important member of the Section's staff is a full-time glassblower who inspects all damaged pieces and repairs those that can be made serviceable. Other of the Section's 40 employees are responsible for sorting, inspecting, and wrapping glassware.

Processed glassware is sent to investigators on request or is issued from the central stockroom on the B2 level of Bldg. 10. A pickup and delivery service is available to buildings other than the Clinical Center. Instructions for requesting glassware services are contained in the NIH telephone directory on page 84 of the "yellow" section.



Pipettes account for about 30 percent of the glassware received. They are washed and dried in a special machine, then inspected (above), and sterilized.



After sorting and rinsing to extract solids, glassware is placed in washing baskets and fed into this large washing machine. The machine provides 45 minutes of alternate washing and rinsing with a final drying cycle. Each piece is then inspected for cleanliness and breakage.



Movable racks containing baskets of glassware are rolled into this large dry sterilizer. Glassware is then cooled and shelved in the stockroom for distribution.