1954

SCIENTIFIC PERSONNEL

Name Fredrik Berglund Robert W. Berliner Gerrit Bevelander Albert W. Biggs Jerome B. Block Saul Boyarsky Joseph G. Brown Elmer D. Bucker J. Wendell Burger Joseph Buxer Beverly Cox William L. Doyle Alfred P. Fishman Roy P. Forster Hubert & Mable Frings Harry W. Fritts B. Vincent Hall H. O. Heinemann O. C. Jaffee Eunice Johnson David A. Karnofsky Albert S. Keston Herbert G. Langford Sidlee Leeper Warren H. Lewis E. Sue Lumb Thomas H. Maren E. K. Marshall, Jr. B. W. McCashland Wallace W. McCrory J. D. Myers Helen E. Osburg A. G. E. Pearse Lorraine Peissner Sarah Plimpton Raymond Rappaport Johannes Rhodin

Alvin F. Rieck Martin I. Rubin John W. Saunders, Jr. Lilyan Saunders Wilbur H. Sawyer John J. Sayen Richard M. Schisgall Warner F. Sheldon Homer W. Smith Robert L. Soley Hans Ussing Daniel L. Wachtel Philip R. White Charles E. Wilde, Jr. Hisato Yoshimura Irving Zeidman Charles G. Zubrod

Department Physiology Medicine Histology Pathology Student Urology Student Anatomy Biology Student Zoology Anatomy Medicine Zoology Zoology Medicine Zoology Physiology Anatomy Pathology Medicine Biochemistry Medicine Student Anatomy Zoology Pharmacology Pharmacology Physiology Pediatrics Medicine Histology Pathology Zoology Student Biology Anatomy

Physiology Chemistry Biology Biology Physiology Medicine Student Pathology Physiology Student Physiology Student

Embryology Physiology Pathology Medicine Cincinnati-Stockholm National Heart Institute New York Bowman Gray New York Duke Missouri Missouri Trinity New York Oklahoma Chicago Columbia Dartmouth Pennsylvania State Columbia Illinios New York Arkansas

Institution

Arkansas Alabama Sloan-Kettering Institute New York Medical College of Virginia Harvard Wistar Institute

Vassar American Cyanamid Co. Johns Hopkins Nebraska Pennsylvania Duke New York

New York
Alabama-London
Oklahoma
Brearley School
Union
Karolinska Institute, Stockholm

Marquette
Georgetown
Marquette
Mount Mary
New York
Pennsylvania
New York
Pennsylvania
New York
Yale
Copenhagen
Union

Jackson Memorial Lab. Pennsylvania Kyoto, Japan-New York

Pennsylvania St. Louis

STAFF

Caretaker: Nelson Mitchell, Salisbury Cove Collector: Robert B. Kohn, Kenyon College

Secretaries:

(for Director) Ann L. Merz, Bryn Mawr College (for Dr. Smith) Judith Hardy, Wellesley College

Co-op Manager: Mary Jean Chapman, University of Maine

SEMINAR PROGRAM

Evening Seminars

- July 6 Homer W. Smith, New York University "On a Proper Knowledge of Man".
- July 13 Hubert Frings, Pennsylvania State University
 "The Pied Piper of Salisbury Cove: Sound Control for
 Pests From Flies to Elephants".
- July 20 Irving Zeidman, University of Pennsylvania "Studies on the Mechanism of Invasiveness and Metastasis of Neoplasms".
- July 27 Charles C. G. Chaplin, Academy of Natural Sciences, Phila. "Sea Gardens of the Bahamas," Underwater Kodachrome Movies.
- August 3 William L. Doyle, University of Chicago "Location of Peptidases in Lymphatic Tissue."
- August 9 A. G. E. Pearse, University of London, University of Alabama "Localization of Cholinesterases and Aliesterases."
- August 16 Hans Ussing, University of Copenhagen "Hormonal Control of Active Ion Transport."

Informal Seminars

- July 9 Charles E. Wilde, Jr., University of Pennsylvania "Metabolites Causally Related to Cell Differentiation". E. Sue Lumb, Vassar College "The Functional Differentiation of Embryonic Chicken Kidney".
- July 16 Roy P. Forster, Dartmouth College "Active Cellular Transport Mechanisms."

- July 23 Elmer D. Bueker, University of Missouri "Growth of Tumors in the Embryonic Chicken".

 David A. Karnofsky, Sloan-Kettering Institute "Effects of Organic Compounds on the Chick".
- July 30 Martin I. Rubin, Georgetown University "Exogenous Control of Mineral Movement".

 Benjamin F. Miller, Peter Bent Brigham Hospital "Kidney Transplantation".
- August 6 Gerrit Bevelander, New York University
 "Calcification in Molluscs."

 Alvin F. Rieck, Marquette University
 "Morphogenesis in Amphibian Forelimb Buds".
- August 13 Albert S. Keston, New York University
 "The Occurrence of Mutarotase in Animals, its Relation to
 Sugar Transport and Reabsorption." Discussion led by
 Drs. Carl and Gerti Cori, Washington University.
- August 20 John W. Saunders, Jr., Marquette University
 "The Induction of Regional Specificity in Epidermal
 Derivatives of the Fowl."
- August 27 Leonard D. Hamilton, Sloan-Kettering Institute
 "Structure of Nucleic Acid."

 Johannes Rhodin, Karolinska Institute, Stockholm
 "Electronmicroscopy of the Nucleus".

 A. G. E. Pearse, University of London and University of Alabama "Histochemistry of the Nucleus".

Special Symposium

"Protoplasmic Structure and Cellular Transport Mechanisms."

- August 23 Hans Ussing, University of Copenhagen
 "Active Sodium Transport".

 Ernest G. Hul, Medical College of Virginia
 "The Significance of Potassium Ion in Active Sodium Transport."
- August 24 Johannes Rhodin, Karolinska Institute, Stockholm "Electronmicroscopy of the Proximal Tubule in the Mouse".

 C. Barber Mueller, Washington University "Electronmicroscopy of the Renal Tubule in the Dog".

 Rudolph T. Kempton, Vassar College "TV-Microscopic Movies of Living Dogfish Tubules".

August 25 B. Vincent Hall, University of Illinois
"The Glomerulus in the Rat."
Don F. Fawcett, Harvard University
"The Amphibian Nephron".
J. F. Rinehart, University of California
"Sinusoid and Vesicular Structures in the Pituitary and Kidney".

Special Meetings and Seminars

- July 7 Informal meeting of laboratory personnel to discuss the summer work.
- July 17 Roy P. Forster, Dartmouth College "Comparative Physiology of the Kidney".
- July 21 Roy P. Forster, Dartmouth College "The Geography of the Sea".
- July 31 J. Wendell Burger, Trinity College "Marine Biology".
- August 7 Alfred P. Fishman, Columbia University "Homeostasis."
- August 14 Homer W. Smith, New York University "The Hydrogen Ion."
- August 21 Robert W. Berliner, National Heart Institute "Regulation of Acid-Base Balance by the Kidney."

Calcification in Molluscs: Repair and Regeneration Studies in Mytilus edulis*, **

Gerrit Bevelander New York University

A study of the process of repair and regeneration of the shell of *Mytilus edulis* was carried out by utilizing a method whereby a glass cover slip was introduced between the mantle and the shell of the animal. Following this, the animals were placed in sea water and the cover slips were withdrawn and examined at various intervals.

After the cover slips were exposed to the mantle for a few hours, the predominant feature observed was the presence of numerous amebocytes. Following Giemsa staining, a delicate fibrillar ground substance was also

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** With the technical assistance of Miss Helen Osburg.