

HISTORY

COLLEGE OF MEDICINE

1958 - 1968

CHAPTER - 14

DEPARTMENT OF PHARMACOLOGY

Bernard H. Marks, M. D.

HISTORY OF PHARMACOLOGY

I. Introduction:

Although the history of the academic program in pharmacology began at the time when the Department of Physiological Chemistry and Pharmacology was formed in 1921, the present summary will consider the modern history dating from the creation of a separate academic Department of Pharmacology. This was accomplished by action of the Board of Trustees on April 12, 1963 to become effective on July 1, that year. The Acting Chairman of the Department of Pharmacology was Professor Bernard H. Marks, who was appointed Chairman one year later and who has served continuously in that capacity.

It is important to recognize that the stimulus for the creation of the Department of Pharmacology was provided by the leadership and vision of Professor Chauncey D. Leake, Assistant Dean of the College of Medicine, and an illustrious figure in the history of pharmacology in the United States. Significantly, the formation of the Department of Pharmacology was carried out with the great cooperation and active help of Professor J.B. Brown, Chairman of the Departments of Physiological Chemistry and Pharmacology at the time this department was divided.

The faculty of the Department of Pharmacology at the time of its formation included the following members:

- Professor: Bernard H. Marks (Acting Chairman), Chauncey D. Leake (Emeritus)
- Clayton S. Smith (Emeritus); Associate Professor: Robert W. Gardier;
- Assistant Professor: Paige K. Besch, Rose Dagirmanjian, Joan Vernikos-Danellis, Elmer D. Engelman, Harold Goldman, Phillip E. Leveque; Instructor: Gwendolyn B. Carson, Saradindu Dutta.

II. Teaching Programs and Other Academic Affairs:

The teaching program has been undergoing continuous change. A number of innovative devices have been attempted in trying to individualize the instructional program for medical students. Weekly Pharmacology Coffee Hours were a successful teaching device for several years. Groups of medical students were invited to share coffee, cookies and conversation with the Pharmacology faculty and an invited guest. Some clinical application of Pharmacology was the usual discussion topic. Further directions of change include increasing emphasis on clinical pharmacology teaching in the medical school curriculum. The Pharmacology laboratory teaching program has gradually changed from formal class exercises to greater and greater reliance on demonstrations, until in 1968 the formal laboratory was entirely abandoned, and students were allowed to select 10-week individual or small group research, clinical research, medical records research or library study projects.

The graduate teaching program has grown steadily in size and diversity. The number of graduate students enrolled in degree programs in Pharmacology was 5 in 1963 and has increased to 16 in 1969. Each member of the faculty takes part in an advanced graduate seminar or colloquium in his field of specialization. The number of Pharmacology courses offered has grown from 4 in 1963 to 15 in 1969. The quality of the Pharmacology graduate teaching and faculty was recognized in 1965 by the award of \$383,370 to support the graduate training program by the Institute of General Medical Sciences of the National Institutes of Health for the period 1965-1970.

During this period the following degrees were awarded: 1962, Ph.D., David M. Jacobowitz, Saradindu Dutta; 1963, Ph.D., Heinz Sorer; 1967, Ph.D., Henry R. Besch, Amar Bhattacharya; 1968, Ph.D., George E. Dambach, John O. Lindower. Master's Degrees awarded: MS, 1963, Amar N. Bhattacharya; MS, 1965, Carl Johnson, Robert A. Whitney; 1966, Vernon Carter; 1967, Howard M. Rowe,

Julius M. Tesi, MS, 1968, Eleanor B. Skelley.

Since 1963, a number of faculty changes have taken place. Professor Emeritus Clayton Smith died in 1968. Dr. Robert W. Gardier was promoted to Professor, Dr. Harold Goldman and Dr. Phillip E. Leveque were promoted to Associate Professor, and Dr. Saradindu Dutta to Assistant Professor. Dr. Paige K. Besch received a Research Career Development Award from the National Institutes of Health, on the basis of his great research productivity. He resigned in 1968 to accept a Professorship at Baylor University College of Medicine. Dr. Joan Danellis went on Leave of Absence in 1964 to take part in an endocrine research project for the National Aeronautics and Space Administration at their Ames Research Laboratories, Moffett Field, California. She has since become head of the Pharmacology Research Program there. Dr. Phillip E. Leveque left the University in 1968 to devote two years to teaching pharmacology at the Makerere University in Kampala, Uganda, in Africa, and Dr. Gwendolyn Carson resigned in 1965 to accept a position in toxicology research in the College of Veterinary Medicine.

Additions to the Pharmacology faculty include the following: Dr. Philip B. Hollander joined the Department of Pharmacology in 1964 as Associate Professor, as a recipient of a Research Career Development Awardee of the National Institutes of Health. He was made Professor of Pharmacology in 1969. Dr. G. Thomas Passananti came in 1965 to be Director of Toxicology and Assistant Professor of Pharmacology. He remained in this capacity until 1967, when he resigned to accept a faculty position at the new medical school of Pennsylvania State University at Hershey. Dr. Daniel Couri came as Instructor in 1965, and in 1967 succeeded Dr. Passananti as Director of the Toxicology Laboratory, being promoted to Assistant Professor.

Dr. Edward B. Truitt, Jr. joined the University in 1967 as Professor of Pharmacology. He simultaneously works as a Senior Research Fellow at the Battelle Memorial Institute laboratories, thus initiating a program of graduate research cooperation between Battelle and the Department of Pharmacology, which it is hoped will be mutually beneficial. Dr. Julius M. Tesi became Instructor in 1967; Dr. Roland Fischer, whose major university appointment is in Psychiatry, joined the Department of Pharmacology as Associate Professor in 1968. Dr. John O. Lindower became Instructor of Pharmacology in 1968 and Assistant Professor in 1969. Dr. John J. O'Neill came to the university in Autumn, 1969, to become Professor of Pharmacology. These various staff changes have resulted in a faculty composition which in 1970 follows: Professor: Bernard H. Marks (Chairman); Robert W. Gardier, Philip B. Hollander, John J. O'Neill, Edward B. Truitt; Associate Professor: Roland Fischer, Harold Goldman; Assistant Professor: Daniel Couri (Director of Toxicology), Rose Dagirmanjian, Saradindu Dutta, Elmer D. Engelman, John O. Lindower; Instructor: Julius M. Tesi.

Among the honors received by our faculty, in addition to numerous research grants and research publications and speaking engagements, are the following: Chauncey D. Leake was elected President of the American Society for Pharmacology and Experimental Therapeutics, President of the American Society of the History of Medicine, The Society of Experimental Biology and Medicine, and the American Association for the Advancement of Science. Five members of our faculty joined Bernard H. Marks, Chauncey D. Leake and Robert W. Gardier as members of the American Society for Pharmacology and Experimental Therapeutics; Drs. Philip Hollander, Phillip E. Leveque, Rose Dagirmanjian, Saradindu Dutta and John J. O'Neill. Drs. Bernard Marks and Harold Goldman and Paige Besch were elected to the Endocrine Society.

Dr. Harold Goldman was elected to membership in the American Physiological Society. Dr. John O'Neill was made a member of the International Neurochemistry Society. Dr. John Lindower received the first special fellowship of the Pharmaceutical Manufacturers Association Foundation in Pharmacologic-Pathology. Dr. Bernard Marks was elected President of the Ohio Valley Section of the Society for Experimental Biology and Medicine. He also became a member of the Editorial Board of the Journal of Pharmacology and Experimental Therapeutics and in 1969 a member of the PET-A Study Section of the National Institutes of Health. Dr. Roland Fischer was organizer of one of the sessions of the IV International Pharmacology Congress in Basle. He also became a member of the Editorial Board of the newly formed journal "Agents and Actions", of the Swiss Society of Pharmacology, of which he is a member.

III. Research Program:

The following is a list of the current faculty members of the Department of Pharmacology and their research interests: Dr. Daniel Couri, Toxicology, Biochemical Pharmacology; Rose Dagirmanjian, Autonomic Pharmacology, Neuropharmacology, Toxicology of Heavy Metals; Saradindu Dutta, Distribution Kinetics of Radiolabeled Drugs in Isolated Organs, Cardiovascular Pharmacology; Roland Fischer, Pharmacology and Experience, Tranquilizing and Psychotomimetic Drug-induced Autonomic, Perceptual and Behavioral Change; Robert W. Gardier, Pharmacology of Anesthetic Agents, Autonomic Pharmacology, Renal Pharmacology; Harold Goldman, Neuropharmacology, Neuroendocrinology, Effects of Drugs on the Distribution of Blood; Philip B. Hollander, Electropharmacology--Effect of Drugs on Bioelectric Activity, Cardiac Muscle Transmembrane Potentials, Biomedical Electronics, Membrane Biophysics; John O. Lindower, Cardiovascular Pharmacology, Cellular Pharmacology, Pharmacologic Pathology.

Bernard H. Marks, Neuroendocrinology, Localization of the Sites of Drug Action in the Heart, Cellular Pharmacology; John J. O'Neill, Biochemistry of the Central Nervous System, Neurochemistry of Development, Autonomic Neurotransmitters; Edward B. Truitt, Jr., Neuropharmacology, Psychopharmacology, Drug Metabolism.

Funds to support research and graduate student training have essentially tripled since the formation of the Department of Pharmacology. Non-OSU funds for 1963-1964 totaled \$145,000; 1964-1965, \$190,000; 1965-1966, \$385,000; 1966-1967, \$370,000; 1967-1968, \$430,000 and 1968-1969, \$340,000.

BESCH, PAIGE K.

See Obstetrics-Gynecology

B.S., Trinity Univ., 1956; Ph.D., OSU, 1961; Asst. Prof. 1963-1968.

BERNARD, PAUL J.J.A.

M.D., State Univ. of Ghent, 1962; Asst. Prof. (Visiting), 1967.

CARSON, GWENDOLYN B.

B.Sc., OSU, 1943; M.A., OSU, 1945; Ph.D., OSU, 1954; Instr. 1952-1965.

COURI, DANIEL

B.S., Queens College, 1954; M.S., New York Univ., 1958; Ph.D., State Univ. of New York, 1965; Instr. 1965; Assist. Prof., 1967--

DAGIRMANJIAN, ROSE

B.A., Clark Univ., 1952; M.S., Univ. of Rochester, 1954; Ph.D., Univ. of Rochester, 1960; Asst. Prof. 1963--

DANELLIS, JOAN VERNIKOS-

B. Pharm., Univ. of Alexandria, 1955; Ph.D., Univ. of London, Sch. Med., 1960; Assist. Prof. 1961-1964.

DELAUNOIS, AUGUST LOUIS

Ph.D. (Chemical Engineering), State Univ. Gent, 1933; Ph.D. (Electrical Engineering), State Univ. Gent, 1935; Ph.D. (Electronic Engineering), State Univ. Gent, 1935; Prof. (Visiting), 1968-1969.

DUTTA, SARADINDU

DVM, Bengal Vet. Coll., 1950; B.Sc., Calcutta Univ., 1952; M.S., U. of Wisconsin, 1959; Ph.D., OSU, 1962; Instr., 1963; Asst. Prof. 1965--

ENGELMAN, ELMER DAVID

A.B., Western Reserve Univ., 1930; M.D., OSU, 1934; Asst. Prof., 1950--

FISCHER, ROLAND

See Psychiatry

B.Sc., Cistercian High School, 1933; M.A., Univ. of Budapest, 1940;
Ph.D., U. of Basel, 1945; Assoc. Prof. 1968--

GARDIER, ROBERT W.

See Anesthesiology

B.S., U. of Scranton, 1949; M.S., U. of Tennessee, 1952; Ph.D.,
U. of Tennessee, 1954; Assoc. Prof. 1963; Prof. 1967--

GOLDMAN, HAROLD

See Psychiatry

B.S., U. of Chicago, 1950; M.S., U. of Chicago, 1953; Ph.D.,
U. of Illinois, 1957; Asst. Prof. 1963; Assoc. Prof. 1966--

HOLLANDER, PHILIP B.

B.S., U. of California, 1948; M.S., U. of Southern California;
1955; Ph.D., U. of Southern California, 1960; Assoc. Prof. 1964;
Prof. 1969--

ITO, MORIO

B.S.E., Kyushu Univ., 1956; M.D., Kyushu Univ., (Japan), 1960;
Instr. (Visiting) 1967-1969.

LEAKE, CHAUNCEY D.

Litt. B., Princeton, 1917; M.S., U. of Wisconsin, 1920; Ph.D.,
U. of Wisconsin, 1923; Prof. 1955-1962; Asst. Dean, Coll. of Med.
1955-1962.

LEVEQUE, PHILLIP E.

B.S., Oregon State Coll., 1947; M.S., Oregon State Coll., 1951;
M.S., Univ. of Oregon, 1952; Ph.D., Univ. of Oregon, 1954; Asst.
Prof., 1962; Assoc. Prof. 1968.

LINDOWER, JOHN O.

A.B., Ashland Coll., 1950; M.D., OSU, 1955; Ph.D., OSU, 1968;
Instr. 1968; Assist. Prof., 1969--

MARKS, BERNARD H.

B.A., OSU, 1942; M.D., OSU, 1945; M.A., OSU, 1950; Instr., 1950;
Assist. Prof., 1953; Assoc. Prof., 1957; Prof., 1961--; Chr., 1963--

O'NEILL, JOHN J.

B.S., St. Francis College, 1942; M.S., U. of Maryland, 1953;
Ph.D., U. of Maryland, 1955; Prof. 1969--

PASSANANTI, G. THOMAS

B.S., Penn. State Univ., 1949; M.S., Penn. State Univ., 1953;
Ph.D., Penn. State Univ., 1957; Assist. Prof., 1956-1967.

TRUITT, EDWARD B., Jr.

B.S., Med. Coll. of Virginia, 1943; Ph.D., U. of Maryland, 1950;
Prof., 1967--