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VOLUME 2

HAEMODYNAMICS, HORMONES & INFLAMMATION

edited by

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Preface to the second volume

This second volume of *Discoveries in Pharmacology* contains three sections dealing with the discoveries made in the past and more recently in the fields of cardiovascular, hormonal and anti-inflammatory drug research. Also for this volume, as for the first one, we have been very fortunate in obtaining the collaboration of a number of acknowledged experts in their fields who were able to illuminate the scientific circumstances which contributed to the pharmacological discoveries made.

In the time period between the first and second volume of *Discovertes in Pharmacology* three of our authors – Drs. Nathan Kline and Zénon Bacq who contributed to the first volume and Dr. Harry Collier who contributed to the present volume – died. We thought that the appearance of this volume would be a suitable occasion to commemorate these well-known scientists by including their obituaries.

Finally, we would like to thank Miss Margret Leffin for her secretarial help and Mr. Ralph Lupton of Elsevier, who acts as desk-editor for this series, for his pleasant cooperation.

MICHAEL J. PARNHAM JACQUES BRUINVELS September, 1984

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Obituaries

ZÉNON-MARCEL BACQ*

Professor Zénon-Marcel Bacq died in Liège on July 11, 1983, at the age of 79. He was it deed a great figure in Science whom we lost that day. His intelligence and vivid curiosity made him a pioneer in different fields of Science. His first achievements were triggered by a long stay in the laboratory of the great American physiologist Walter B. Cannon in 1929 – 1930. He, thereafter, made major contributions to our knowledge of chemical neurotransmitters, especially noradrenaline, a field in which he would keep a keen interest during his whole life.

In 1949, he came to Radiobiology, which was just beginning but he took at once a leading place by discovering the radioprotective power of cysteamine, which was going to remain the most powerful protector ever discovered. His famous book *Fundamentals of Radiobiology* written in collaboration with P. Alexander was for many years the only textbook on Radiobiology.

After becoming Emeritus Professor of general pathology in 1968, he kept a very active life, resumed his former interest in pharmacology and stimulated research on prostanoid substances, where his publications brought him again to the foreground.

He had many disciples all over the world and liked the company of young scientists to whom he would never spare his advice and his efficient help. His great human qualities originated from his keen interest in all human activities, literature, painting, music (he was a very gifted musician, pianist and composer) and of course, science and its impact on every day life. So many prizes and titles were conferred on him that we can only quote the main ones:

- Prix Francqui (Belgium, 1948)
- Member and President of the United Nations Scientific Committee for the Study of Effects of Atomic Radiation (New York, 1956-1960)
- Président de l'Académie royale de Médecine de Belgique
- Founding Member of the European Society for Radiation Biology

Honorary Member of the British Pharmacological Society.
 People only die when they are forgotten.

This will never happen to Zénon Bacq who has so many friends in so many different circles all over the world and whose scientific works will stay as a landmark in the History of Science.

R. Goutier Radiobiology Laboratory University of Liège Liège, Belgium

HENRY OSWALD JACKSON COLLIER

Harry Collier's death on the 29th August 1983 at the age of 71 (the day after completing his chapter for this book - Ed.) means that the scientific world has lost an exceptionally able industrial pharmacologist. In identifying and developing new and important medicines Harry fervently believed that such advances stemmed from a basic understanding of the physiological mechanisms in the body and how they could be altered by drugs. Throughout his career this approach was evident in all his work. His long interest in pain and its attenuation made him firstly investigate the actions of 5-hydroxytryptamine, bradykinin and peptides as the natural mediators of pain in the body. From this work it followed that he became interested in the underlying mechanisms of morphine tolerance and dependence and of inflammation. Indeed, he proposed a possible mechanism for morphine dependence and right up to the time of his death was extending his work to involve studies on the tolerance and dependence on other drugs, such as adenosine. Regarding the problem of inflammation, Harry, after demonstrating the bronchoconstrictor activity of bradykinin, became interested in prostaglandins and he proposed in 1968 that the mode of action of the nonsteroidal anti-inflammatory drugs, such as aspirin, may depend on their abilities to diminish the formation and release of prostaglandins involved in mediating the inflammatory response. The evidence that this indeed occurred was provided a few years later by the elegant studies undertaken by Dr John Vane at the Royal College of Surgeons. But Harry's interests were not limited to pain and inflammation, he successfully undertook research in other areas, such as neuromuscular transmission and chemotherapy. This will not surprise anyone who knew Harry, because he had boundless energy and enthusiasm and was interested in many aspects of pharmacology.

Harry Collier was educated at The Royal Grammar School, Worcester

(1926 – 1930), from there he went to Trinity Hall, Cambridge. Here, in 1933, he gained his BA First Class Honours in the Natural Science Tripos and then his Ph.D. in 1938 working on primitive nervous systems under the direction of Sir James Gray. He continued his academic career as an assistant lecturer in comparative physiology at the University of Manchester before commencing his industrial career in 1941 as a parasitologist working for Imperial Chemical Industrial career in 1941 as a parasitologist working for Imperial Chemical Industrial career in 1943 as a parasitology Department. He was director of Pharmacological Research with Parke Davis at Hounslow from 1958 – 1969 of Pharmacological Research with Parke Davis at Hounslow from 1958 – 1969 the retired in 1981. Until his death Harry was working as honorary Visiting Professor of Pharmacology at the Chelsea College of London University. He was awarded the Sc.D. of Cambridge University in 1972. During his career he published about 170 original scientific papers and was an experienced writer, lecturer and broadcaster.

I had the privilege of working for Harry Collier when he was at Allen and Hanburys. It was immediately obvious that I was working for someone special. His helpful and critical thinking, guidance and encouragement were always evident and this undoubtedly helped to shape the careers of many young graduates. Harry, however, did more than this, he was interested in people and always showed consideration for their problems. He made many friends and when he left the company these friendships were retained and strengghened. Harry Collect the company these friendships were retained and strengghened. Harry Collect never did less than his best in all his activities and this, coupled with his ability, energy, honesty and application is why he made such an outstanding contribution to pharmacology. Pharmacology has lost an able man and many of us have lost a friend. Of his marriage in 1936 to Irene Marjorie Ritcher there were two daughters, Susan and Sarah, and a son Joseph, to whom we extend our deepest sympathy.

(Reprinted from Trends in Pharmacological Sciences, Vol. 5, issue 3, 1984).

R.T. Brittain Glaxo Research Ltd. Ware U.K.

NATHAN KLINE*

On February 11, 1983, Nathan S. Kline died, at the age of 69, during an openheart operation. With him America lost a great psychiatric clinician and an important innovator. It was mainly due to the early influence of his personal work that psychopharmacology made its revolutionary impact on the psychiatric scene in the United States in the 1950s, an impact that not only changed the face of hospital and community psychiatry in that country but also prepared the way for the tremendous progress in the neurosciences which has left its mark on all research in the field of behaviour.

Nathan S. Kline was born in Atlantic City in the North-Eastern United States. He studied at Clark University where he obtained a Master's Degree in Psychology. For some time he was tempted to make a career in Philosophy but then decided to go into Medicine and obtained a Medical Degree at New York University. He served with the Navy during the war. He served his residency in Psychiatry at St. Elizabeth Hospital in Washington. For two years he was Director of Research at Worcester State Hospital, and in 1950 he became Director of the New York State Rockland Research Institute that is now bearing the name of Nathan S. Kline Institute for Psychiatric Research.

He won two prestigious Lasker Awards: one, in 1957, for his early work with reserpine as an antipsychotic and the other, in 1964, for his original studies that introduced the monoamine oxidase inhibitors into antidepressant therapy. He was influential in motivating the pharmaceutical industry to produce lithium medication for the treatment of affective disorders, and he was the first to receive a major national grant for the use of computers in psychiatry.

He travelled widely in Europe, Africa and the Philippines where he had many contacts with governments and mental health agencies who honoured him for his assistance. He was instrumental in building a Psychiatric Treatment Centre in Haiti and a Research Centre in Israel.

Nathan Kline was a remarkable and colourful person. Enthusiastic, articulate, kind and highly cultured, nobody who had ever met him could forget him. He never fled from controversy – some said he would seek it – but he always fought for a constructive cause or progress. He lived a productive life, and psychiatrists the world over will remember him as a dedicated pioneer and leader toward new ways in psychiatric treatment and research.

H.E. Lehmann*

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SECTION I

Redirected traffic: the history of drugs affecting haemodynamics