Comparative Leukemia Research 1969

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Cherry Hill, N.J. USA, 1969

Comparative Leukemia Research 1969

Edited by Ray M. Dutcher, Philadelphia, Pa.

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Dedication to William Dameshek, M.D.

May 22, 1900-October 6, 1969

The proceedings of this IVth International Symposium on Comparative Leukemia Research have been dedicated to the memory of William Dameshek; physician, scholar, teacher and humanist.

On October 6, 1969 just three weeks following the International Symposium in Cherry Hill, the man who was considered one of the World’s foremost authorities on diseases of the blood and who has been credited with establishing hematology as a separate medical specialty passed away.

Born in Russia, Bill Dameshek was brought to America when two years old. He received his M.D. degree from Harvard Medical School and served as chief of the Blood Clinic at Beth Israel Hospital in Boston for over a decade before going to Tufts-New England Medical Center in 1939. Following his retirement from Tufts in 1966 at the mandatory age of 65, he moved to Mount Sinai Hospital in New York City where he served as Consultant Hematologist and emeritus Professor of Medicine until his death. He was Editor of the journal ‘Blood’ which he founded in 1946. He helped found the American Society and the International Society of Hematology and served as past president of both.

Much has been written about Bill Dameshek’s accomplishments as a physician and researcher. I knew him as the Chairman of the National Medical and Scientific Advisory Committee of the Leukemia Society of America, having served as his Vice-Chairman during the 5 year period just prior to his death. During this period it was an exciting and impressionable
experience to observe his tremendous drive, his electrifying dynamism, his ability to completely surround a problem and to probe it from all sides in attempting to derive the most objective solution possible.

As Vice-President for Medical and Scientific affairs, he provided a rallying point for common sense and reasonableness in helping to guide the Society thru critical periods in it’s growth and development. Bill frequently would observe that complex problems had rather simple solutions, and his ability to find uncomplicated pathways was the true measure of the man.

Throughout our association I found Bill to be a warm and receptive human being, who managed to find time for everyone in the course of his busy life. His patience and desire to communicate were always paramount. His respect and consideration for the individual were always demonstrative.

As Vice-President he guided the Leukemia Society in developing a policy of supporting individual researchers as opposed to projects. The wisdom of this policy is apparent throughout this book.

Embarking on a course of action or assuming a responsibility was to Bill an irrevocable commitment for completion of the task. A few who were close to him during the symposium sensed that he was not himself, and he too must have realized the extent of his illness. Even under these stressful conditions, his main concern was the completion of his manuscript for the symposium. Sadly, this was to prove his final scientific contribution. It was while correcting the dictated draft of his paper that he collapsed at his desk at Mt. Sinai Hospital.

It is given to few of us in this life to be respected and revered by our fellow colleagues and students as was Bill Dameshek. Those of us who knew and worked with him find it difficult to accept that he is no longer available for guidance and counsel. However, his image and the products of his total effort shall live on thru his writings, in the creativity and imagination of those he taught and whose lives he influenced and, with the Leukemia Society of America to which he devoted so much of his time and effort.

‘Thou wert my guide, philosopher and friend’ (Essay on man, Epistle IV, I.)
Ray M. Dutcher
Editor

Preface

On behalf of the Organization Committee and the World Committee for Comparative Leukemia Research I wish to extend a warm welcome to the participants of the Fourth International Symposium on Comparative Leukemia Research. This symposium is the fourth in a series established by
research workers whose interests represent the comparative approach to the study of leukemia.

This symposium as well as those that preceded it are the direct outgrowth of a workshop type meeting which was held in Philadelphia in 1960 under the sponsorship of the World Health Organization under the chairmanship of Dr. Martin Kaplan. The result of that meeting, as reflected in the report to the Director General, revealed the almost unanimous opinion on the part of those in attendance, that a serious communications gap existed between workers who were interested in comparative research on leukemia. The recommendations in this report led directly to the establishment of the World Committee for Comparative Leukemia Research at the first symposium held in Hannover in 1963. This committee, elected by the participants of that symposium, were charged with the responsibility to promote the cooperation of and to assist in the coordination of the study of leukemia in animals and in man on an International scale. This has been accomplished to date through the dissemination of a Newsletter and by the organization of International symposia every two years. The World Health Organization has seen fit to encourage and to otherwise assist in this effort by supporting the activities of the World Committee. In 1965 a Secretariat was established in Copenhagen and was designated a WHO Collaboration Center for the coordination of Comparative studies on Leukemia. The secretariat serves as an information and study center especially for the epidemiology of leukemia in domestic animals.

The first symposium in Hannover, Germany, in 1963 was documented by the compilation and distribution of working documents for the participants largely through the efforts of the Chairman, Professor G. Rosenberger. The second symposium took place in Stockholm in 1965 with Professor Sven Gard as the Chairman. The proceedings of that symposium, edited by Dr. G. WiNQViST were published by Pergamon Press under the title Comparative Leukemia Research. The third symposium was held in Paris in 1967 with Professor Ch. Lombard as Chairman. The proceedings were edited by Dr. H.J. Bendixen and published by S. Karger of Basel, Switzerland, in Bibliotheca Haematologica under the title Leukemia of Animals and Man.

This fourth International Symposium demonstrates the continued and growing interest of research workers in the comparative approach to the study of leukemia. This is manifested by an increased participation and registered attendance as well as the co-sponsorship of the symposium by the Special Virus Cancer Program of the National Cancer Institute of the National Institutes of Health and the Leukemia Society of America, Inc.

XVI Preface
The proceedings of the IVth International Symposium have once again been published by Karger in Bibliotheca Haematologica.

Justification for the continuation of the work of the committee and the perpetuation of the symposia series lies in the continued need to bring people together who have similar interests and a common purpose; the development of knowledge leading to an understanding of the cause and control of leukemia in animals and man.

During the course of this symposium several meetings were held by attending members of the World Committee for Comparative Leukemia Research. Others, representing a variety of disciplines as well as geographical regions involved, in leukemia research, also participated.

It was unanimously agreed by all that the World Committee fills a necessary void, and that its primary purpose should be to perpetuate the International Symposia on Comparative Leukemia Research.

With the consent of the members of the Symposium, the World Committee underwent a re-organization, including the addition of new members. It was agreed that the chairman of the IVth International Symposium shall also serve as the chairman of the World Committee for Comparative Leukemia Research until the next symposium scheduled to be held in Venice in 1971. The Vice Chairman of the committee shall organize the next symposium at which time he shall be duly installed as the chairman and will serve until the following symposium.

The current officers and members of the World Committee for Comparative Leukemia Research are listed on page XVII Dr. Luigi Chieco-Bianchi was elected as the Vice chairman along with Dr. Edward P. Larkin, secretary of the IVth International Symposium who will continue as the Secretary of the Committee until 1971.

Ray M. Dutcher, Chairman

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1967-1969

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Vice Chairman
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Statens Vet. Serumlab.  
Howitzvej II  
Copenhagen, Denmark

W.I.B. Beveridge (W.H.O.)  
University of Cambridge  
School of Veterinary Medicine  
Madingley Road  
Cambridge. CB3 OES  
England

Peter Biggs  
Houghton Poultry Res. Station  
Houghton, Huntingdonshire  
England

XVIII Members of the World Committee for Comparative Leukemia Research

Michel Boiron  
Laboratoire d’Hematologie  
Experiments  
Institut de Recherches sur les mal. du sang  
Hospital Saint Louis  
Paris, 10e, France

Yohei Ito  
Aichi Cancer Center  
Research Institute  
Chikusa-Ku, Nagoya  
Japan

Boris Lapin  
Institute of Experimental Pathology and Therapy  
Gora Trapetziya  
Sukhumi  
Georgia, U.S.S.R.

Frank J. Rauscher  
National Cancer Institute
National Institutes of Health
Bethesda, Maryland 20014
(USA)

Werner Schäfer
Max-Planck-Institut
für Virusforschung
7400 Tubingen
Spemann-Str. 35/111
Germany

Jan Svoboda
Czechoslovakian
Academy of Sciences
Institute of Experimental
Biology and Genetics
Prague, Czechoslovakia

Dr. G. Winqvist
Kungl. Veterinarhögskolan
Histologi Avdelningen
for Anatomi Och
Stockholm 50, Sweden

Members of the Organization Committee

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Statens Vet. Serumlab., Denmark
World Committee for
Comparative Leukemia Research

Dr. W. Ray Bryan
National Cancer Institute
National Institutes of Health

Dr. William Dameshek
Mt. Sinai Medical School & Hospital
Vice President, Leukemia Society
of America, Inc.

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National Cancer Institute
National Institutes of Health
World Committee for
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Harrisburg Hospital

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Ray M. Dutcher, Chairman
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Philadelphia, Pennsylvania
Leukemia Society of America, Inc.
World Committee for Comparative
Leukemia Research

Joseph Beard
Duke University
Durham, North Carolina

W.I.B. Beveridge
World Health Organization
Geneva, Switzerland

Michel Boiron
Institut de Recherches sur les mal. du sang
Paris, France

W. Ray Bryan
National Cancer Institute
National Institutes of Health
Bethesda, Maryland

William Dameshek
Mt. Sinai Medical School and Hospital
New York, New York
Leukemia Society of America, Inc.

Clyde Dawe
National Cancer Institute
National Institutes of Health
Bethesda, Maryland

James Grace
Roswell Park Memorial Institute
Buffalo, New York

Boris Lapin
Institute of Experimental Pathology & Therapy
Sukhumi, Georgia, U.S.S.R.

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Ithaca, New York
The de Villiers Award
of the Leukemia Society of America Inc.
to George H. Hitchings, Ph.D.

The Robert Roesler de Villiers Award
of the Leukemia Society of America,
Inc. was established in 1954 for the
purpose of recognizing the contributions
of leading leukemia researchers
to the overall advancement of the
attack upon leukemia. From time to
time the Society selects an individual
whose work warrants special recogni-
tion
Since its establishment the de Villiers
Award for achievement in leukemia
research has been awarded six
times, once to two investigators. The
award consists of a scroll, medal and
a S 1000 prize.

In 1950, as Editor of the Journal BLOOD, I wrote an editorial labelled,
‘The Ten Greats in Hematology - 1900-1950’. One of them, Yellapragada
SubbaRow (1896-1948), came to many as a surprise and I wrote:
‘Yellapragada SubbaRow (1896-1948). In this list, SubbaRow stands
mainly as a symbol of the growing importance in hematology, as elsewhere
in medicine, of the pure chemist and of the great contributions of
the ‘commercial’ pharmaceutical houses to medical investigations. SubbaRow
originated from India and at the time of his sudden death was chief of research
at Lederle Laboratories. He organized first-rate research laboratories and research teams. Partly through his efforts and example the investigations of pharmaceutical houses were placed in a new and better light. Numerous fundamental discoveries and such first-rate therapeutic principles as pteroyl glutamic acid, aminopterin, vitamin B12, and cortisone have eventuated. The chemist stands today at the very forefront of hematologic advance and

XXII The de Villiers Award of the Leukemia Society of America Inc.

achievement. Upon him we must rely for the unravelling of the mysteries of cellular metabolism and eventually for the control of such monstrous things as leukemia and leukosarcoma and for the eventual ‘medical’ management of hemolytic anemia, thrombocytopenic purpura and the like.’

The recipient of the de Villiers Award of 1969 is certainly in this great tradition. He had been associated with SubbaRow at Harvard Medical School and there the beginnings of the folic acid folic-acid antagonist saga began. Later, he synthesized the anti-purines, of which 6-MP became the most prominent and the one most rapidly adopted for the chemotherapy of leukemia. Eventually, he was led to the synthesis of the imidazole-analogue, which was eventually given the name of imuran. Perhaps the basis for that name was its remarkable effects as an immunosuppressive agent, in which Robert Schwartz and I had a hand. Later, Dr. Hitchings helped in the exploration and evaluation of the clinical use of such agents as chlorambucil (leukeran), busulfan (myleran), and melphalan mustard (alkeran) all of which have proved so useful in the treatment of chronic leukemia. Finally his continued work with the thiopurines led, with Dr. Gertrude Elion, to the synthesis of allopurinol (zylorprim) and its use as a uricosuric agent of extraordinary potency. This led to its use as a prophylactic against the common development of hyperuricemia and possible renal blockade in the chemotherapy of leukemia.

It is now a great privilege and honor for me to bestow upon Dr. George Hitchings, the de Villiers Award of the Leukemia Society of America for his outstanding contributions in the development of chemotherapeutic agents for Leukemia.

William Dameshek, M.D.
Vice President for Medical and Scientific Affairs Leukemia Society of America, Inc.

Past Recipients of the de Villiers Award of the Leukemia Society of America Inc.
1967
Dr. W. Ray Bryan
Scientific Coordinator in Viral Oncology
National Cancer Institute
National Institutes of Health
Bethesda, Maryland

1964
Dr. Edwin E. Osgood
University of Oregon Medical School
Portland, Oregon

1960
Sir Alexander Haddow
Director
Chester Beatty Research Institute
Institute of Cancer Research
Royal Cancer Hospital
London, England

1958
Dr. Jacob Furth
Professor, Department of Pathology
Columbia University
New York, N. Y.

1956
Dr. Leon O. Jacobson
Dean, Division of Biological Sciences
and the Pritzker School of Medicine
University of Chicago
Chicago, Illinois

and

Dr. John F. Louitit
Director of Radiobiological Research
Atomic Energy Research Establishment
Harwell, England

1954
Dr. Ludwik Gross
Veterans’ Administration Hospital
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