William Guy Forbeck Research Foundation
REPORT
VOLUME 7 / SPRING 1992

THE ROLE OF THE FOUNDATION'S SCIENTIFIC ADVISORY BOARD

by Arnold Freeman, M.D.

Richard Goodemote, former Chairman of Trustees confering with Arnold Freeman, M.D., Chairman of Scientific Advisory Board.

From the very beginning, it was decided that a Scientific Advisory Board (SAB) of leading scientists was needed by the William Guy Forbeck Research Foundation. Composition would reflect the Foundation focus on pediatric cancer and represent clinical and basic science.

The role of the SAB is to advise the Foundation's Board of Trustees. Members meet each year, immediately following the Forum. At that time they: evaluate the current Forum, work with the chairman to summarize the Forum and prepare recommendations for study to the National Cancer Institute, discuss ways to improve future Forums, plan future Forums and select Forum chairmen, and respond to questions from the Board of Trustees. The members of the SAB also select the recipient of the oncologist in training award and make recommendations on the merits of special projects.

This year in particular, the board evaluated itself — its role, its structure, and the impact of the Forums. Is representation broad enough? Should members be rotated? Would a narrower Foundation focus be more productive? Could the Forum be better structured? Are there better ways to disseminate the ideas, recommendations and information from each Forum? The SAB took a united stance that an unrestricted approach to the selection of Forum topics is most productive because it allows identification of emerging areas of importance in any area of oncology. It was felt that the greatest impact of the Forum is in the exchange of ideas on current and upcoming areas of research. For example, the 1992 Forum focuses on gene therapy. The Board made several recommendations for improvement of the Forum itself and better communication to the public and within the organization.

The members of the SAB have unbridled enthusiasm for the Foundation. This is evident by time-pressed members who reserve and prioritize the dates for the Foundation each year. The Forums have been highly successful. Nonetheless, any streamlining and improvement to the activities and structure of the Foundation, including the SAB, will be actively pursued.

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FROM THE CHAIRMAN'S DESK

Edward R. Frick

1991 was the best year ever for the William Guy Forbeck Research Foundation!

In October, this Foundation and The Neuroblastoma Society of England co-sponsored a very successful symposium on the International Neuroblastoma Staging System. The international cooperation was illustrated by representation from twelve countries. The results will allow more effective world wide treatment of the disease.

In November, the Forbeck Forum was held on "Dose Intensification in Pediatric Malignancies." This meeting was acclaimed by a number of the attending research scientists as "one of the most productive sessions that we have ever attended." It resulted in the formulation of a new protocol for pediatric cancer patients, currently used in a study at the National Cancer Institute.

You may ask why the Foundation's Forum has been so effective in such a short period of time? There are a number of reasons, but a key reason is the stature, prestige, and the total participation of its Scientific Advisory Board, chaired by Dr. Arnold I. Freeman. Each of the six members of the Scientific Board is recognized in his respective field as a world class scientist. Because of their active involvement and participation, the Forbeck Forum has attracted over one hundred of the world's top research scientists.

All of us owe a debt of gratitude to the Scientific Advisory Board members for their dedication, commitment and leadership. This issue of the Foundation Report features an article introducing these individuals.

1991 FORBECK FORUM

November 7-9, 1991 Hilton Head Island, South Carolina

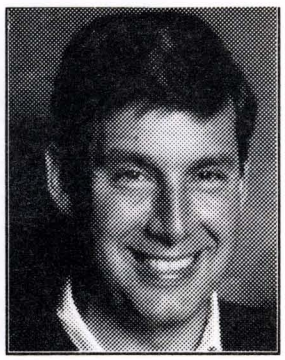
Subject: **Dose Intensification in Pediatric Malignancies**

Session I:	Pharmacological and Biological Basis for Dose Escalation
Session II:	Clinical Strategies for Dose Escalation
Session III:	Overcoming Drug Resistance in Pediatric Tumors
Session IV:	Infectious Complications of Dose-Intensive Therapies

Chairman: Dr. Bruce A. Chabner, National Cancer Institute, Bethesda, MD

Participants:

Dr. G. Peter Beardsley	Yale University School of Medicine	New Haven, CT
Dr. Joseph Bertino	Memorial Sloan-Kettering Cancer Center	New York City, NY
Dr. Bruce A. Chabner	National Cancer Institute	Bethesda, MD
Dr. Helen Chan	The Hospital for Sick Children	Toronto, Ontario
Dr. William Dalton	University of Arizona	Tucson, AZ
Dr. William Evans	St. Jude Children's Research Hospital	Memphis, TN
Dr. James Hathorn	Duke University Medical Center	Durham, NC
Dr. William Hryniuk	Ontario Cancer Foundation	Hamilton, Ontario
Dr. Barton Kamen	University of Texas Health Science Center	Dallas, TX
Dr. Langdon Miller	National Cancer Institute	Bethesda, MD
Dr. Philip Pizzo	National Cancer Institute	Bethesda, MD
Dr. Norma Ramsay	University of Minnesota Hospital	Minneapolis, MN
Dr. Richard Ungerleider	National Cancer Institute	Bethesda, MD
Dr. Thomas Walsh	National Cancer Institute	Bethesda, MD



SUMMARY

by Dr. Bruce A. Chabner

The Seventh Forbeck Forum addressed the rationale and potential strategies for increasing dose of drug administered per unit time in treating pediatric patients. Evidence accumulating from an analysis of trials in adults, and to a lesser extent children, suggests that greater success is achieved by using the maximum tolerated dose intensity of chemotherapy. There now exists unprecedented opportunities for increasing dose intensity through the use of bone marrow protection or rescue strategies. The challenge facing the pediatric oncologist is to develop the optimal high-dose regimens, factoring in considerations of patient tolerance, optimally effective combinations of agents, and the schedule of drug administration. In order to consider this subject, experts on all phases of dose intensification were assembled, representing the best research in cancer drug testing, bone marrow rescue, treatment of infectious complications of chemotherapy, and the design of regimens that overcome drug resistance.

Speakers discussed the scientific rationale for increasing drug dose intensity as a strategy for improving outcome. Dr. Hryniuk discussed the overwhelming evidence from trials in adult solid tumors that dose intensity correlates closely with response rates for patients with breast, colon, and ovarian cancer. In pediatric tumors, analysis indicated that results are mixed.

Clinical strategies were discussed in the second session. Dr. Ungerleider stressed the need for studies of the benefit of dose intensification focusing on specific agents. The small numbers of patients in pediatric trials make it difficult to answer questions in a timely manner, except in cooperative group trials. Dr. Miller emphasized that new proteins capable of modifying bone marrow toxicity will allow dose escalation. Such strategies should allow more rapid reconstruction of bone marrow elements, lead to decreased dependence on reinfusion of a patient's own bone marrow, and permit expansion of human bone marrow in culture allowing possible genetic alteration of these cells to make them drug resistant. Dr. Ramsay discussed the current status of bone marrow transplantation. With few exceptions, transplantation has not earned a well-defined role in treating pediatric malignancy. However, it was pointed out that there has been little work to date on the development of high-dose regimens that utilize some newer drugs.

Dr. Chan introduced the issue of drug resistance in pediatric tumors. It is a frequent scenario for pediatric sarcomas to initially respond to chemotherapy and then to progress relentlessly after relapse. The Toronto group has found compelling evidence that, in at least three types of pediatric solid malignancies, a very specific form of drug resistance, mediated by the mdr gene and its p-glycoprotein, is associated with early relapse and death. Strategies for overcoming drug resistance were proposed, and results with certain reversal strategies were presented by Dr. Chabner and Dr. Dalton. The group agreed, that in mdr-positive tumors, new strategies should be implemented as initial treatment. Dr. Dalton presented results showing that in multiple myeloma and lymphoma, the development of mdr-type resistance is closely related to the total dose of vincristine and adriamycin received. Mitoxantrone induced a different form of resistance and might be useful in combination with vincristine. Dr. Kamen emphasized the importance of changing schedules of drug administration in the use of methotrexate in pediatric leukemia, not just total dose administered. Dr. Evans discussed the importance of drug level monitoring during dose-escalation with antimetabolites, alkylating agents, and etoposide.

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SECOND INTERNATIONAL NEUROBLASTOMA STAGING SYSTEM (INSS) CONFERENCE

October 13-16, 1991 Berkeley, England

Sponsored by: The William Guy Forbeck Research Foundation and The Neuroblastoma Society, of England.

Session I:	Experiences and Problems with INSS - 10 Reports
Session II:	Modifications of Current INSS & Response Criteria
Session III:	Genetic & Serum Markers for Prognosis in Neuroblastoma
Session IV:	Definitions of Biologic Risk Groups
Session V:	Summation: Proposed Revisions to INSS

Chairmen: Garrett M. Brodeur, MD, Washington University School of Medicine, St. Louis, MO, USA
Jon Pritchard, MD, The Hospital for Sick Children, London, England

Participants:

Frank Berthold, MD	Univ.-Kinderklinik, Kinderonkologie	Koln, GERMANY
Garrett M. Brodeur, MD	Washington University School of Medicine	St. Louis, MO, USA
Niels Carlsen, MD	State University Hospital	Copenhagen, DENMARK
V. Castel, MD	Hospital Infantil La-Fe	Valencia, SPAIN
Robert P. Castleberry, MD	Children's Hospital of Birmingham/UAB	Birmingham, AL ,USA
Bruno De Bernardi, MD	'Giannina Gaslini' Children's Hospital	Genova, ITALY
Audrey E. Evans, MD	Children's Hospital of Philadelphia	Philadelphia, PA, USA
Marie Favrot, MD	Centre Leon Berard	Lyon, FRANCE
Fredrik Hedborg, MD	University Hospital	Uppsala, SWEDEN
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A. Thomas Look, MD	St. Jude Children's Research Hospital	Memphis, TN, USA
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Tadashi Sawada, MD	Kyoto Prefectural University of Medicine	Kyoto, JAPAN
Robert C. Seeger, MD	Los Angeles Children's Hospital	Los Angeles, CA, USA
Yoshiaki Tsuchida, MD	University of Tokyo	Tokyo, JAPAN
prof.dr P. A. Voute	Emma Kinderziekenhuis Academic Medical Center	Amsterdam, NETHERLANDS

Co-Chairman Garret M. Brodeur, MD and Jon Pritchard, MD

SUMMARY

by Garrett M. Brodeur, MD

Neuroblastoma is the most common solid tumor of childhood, but relatively little progress has been made in improving the long-term outcome of these children, despite substantial improvements in the survival of chidren with other common malignancies. Part of the reason for the lack of progress has been the difficulty in comparing the results of clinical trials and laboratory studies done by different groups and countries. Indeed, a variety of systems have been developed to classify the extent of the disease in patients at the time of diagnosis, and different criteria have been used to evaluate response to therapy.

In 1986, a meeting was held at Hilton Head Island, South Carolina, sponsored by the William Guy Forbeck Research Foundation, with representatives of various groups and countries from the United States and Europe. The purpose of the meeting was to develop a universal system to determine the stage of disease in patients with neuroblastoma, and to categorize their response to treatment. In 1988 the first publication of these criteria appeared in the *Journal of Clinical Oncology*. The International Neuroblastoma Staging System (INSS) combined the best aspects of several existing staging systems for neuroblastoma in use around the world. In addition, consensus was reached on the definitions of International Neuroblastoma Response Criteria (INRC) that could be used to evaluate response to treatment. Most cooperative oncology groups and most countries have begun to implement these systems in addition to, or instead of, the previous systems, and in general the INSS and INRC have proven to be as or more effective than other conventional systems. More importantly, the utilization of these criteria are allowing better comparisons of clinical and laboratory studies.

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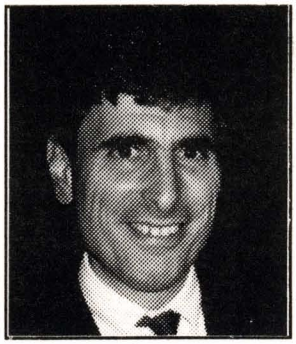
INTRODUCING THE SCIENTIFIC ADVISORY BOARD

The Foundation proudly introduces the capable individuals who are members of its Scientific Advisory Board.



PHILIP A. PIZZO, MD

Dr. Pizzo is Chief of Pediatrics and Head of Infectious Disease in the Clinical Program of the National Cancer Institute. The focus of his efforts has been on the treatment of childhood cancers and on the diagnosis, management, and prevention of infectious complications in immunocompromised hosts. He has led the pediatric effort at the NCI in the development of treatment regimens for children with symptomatic HIV infection. Dr. Pizzo is the co-editor of the major pediatric references *Principles and Practice of Pediatric Oncology, and *Pediatric AIDS: The Challenge of HIV Infection in Infants, Children and Adolescents.* He was an original member of the SAB and chaired the 1989 Forum on "Infectious Complications."

ARNOLD I. FREEMAN, MD

Dr. Freeman graduated from the University of Toronto Medical School and did his oncology fellowship at St. Jude Children's Research Hospital. He was Chief of Pediatrics at Roswell Park Memorial Institute and is currently Chief of Hematology/Oncology and Professor of Pediatrics at the University of Missouri, Kansas City. His primary interest has been treatment of acute leukemia and brain tumors, where he showed the efficacy of platinum compounds in pediatric cancer L-asparaginase in acute Lymphocytic leukemias and non-Hodgkin's lymphoma, and demonstrated that cranial radiation was not necessary in most acute lymphocytic leukemias. He has been involved with the Foundation since its inception in 1984 and has chaired the SAB since then. He chaired the first Forum on Neuroblastoma.

BRUCE A. CHABNER, MD

Dr. Chabner graduated from Harvard Medical School and trained in Medical Oncology and Pharmacology at the National Cancer Institute. His research has concerned mechanisms of action and determinants of response to a variety of cancer drugs, including antifolates and pyrimidine antimetabolites. Currently, Dr. Chabner is the Director of Cancer Treatment at NCI where he is an authority in the field of cancer drug development and directs their treatment research programs. He authored the primary reference, Cancer *Chemotherapy: Principles and Practice.* Dr. Chabner chaired the 1987 Forum on "Reasons for Drug Failure," joined the SAB the following year, and chaired the 1991 Forum on drug "Dose Intensification."

John Kemshead and Dr. William Frackelton,MD

*JOHN T. KEMSHEAD, PhD, MRCP**

Dr. Kemshead attended college at Westminster Medical School and King's College, London, where he obtained a Ph.D. After working at the National Institute of Medical Research, he joined the Imperial Cancer Research Fund (ICRF) where he established a laboratory at the Institute of Child Health in London. Currently, Dr. Kemshead heads a new ICRF laboratory in Bristol with the main purpose of establishing new diagnostic and therapeutic approaches to pediatric solid tumors. Dr. Kemshead is one of the original members of the SAB. He is also a trustee of The Neuroblastoma Society in England, and was responsible for bringing the two organizations together to co-sponsor the 1991 Neuroblastoma Staging Conference.

Member Royal College of Pathologists.

EDWARD E. HARLOW, PhD

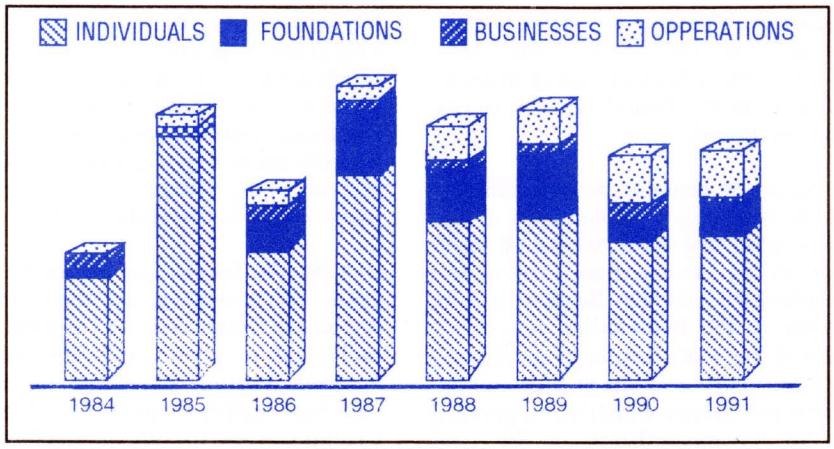
Dr. Harlow studied Microbiology at the University of Oklahoma and earned his Ph.D. at Kings College, University of London. He became a Senior Staff Scientist at the Cold Spring Harbor Laboratory in New York and is currently a Professor of Genetics at the Harvard Medical School and Director of the Laboratory of Molecular Oncology at Massachusetts General Hospital. In his research work, Dr. Harlow has made observations essential to the understanding of the way viruses transform cells and has provided key information regarding the action of viral oncogenes on key pathways that regulate proliferation of normal and tumor cells. He participated in the 1990 Forum on "Molecular Origins of Pediatric Embryonal Malignancies" and joined the SAB shortly thereafter.

GARRETT M. BRODEUR, MD

Dr. Brodeur trained at Washington University School of Medicine in St. Louis where he did post-doctoral work in molecular biology. He joined their faculty and is an Associate Professor of Pediatric Oncology and Genetics. His interest is in clinical and laboratory aspects of neuroblastoma. Dr. Brodeur has identified several characteristic genetic features of tumors that are particularly aggressive and is investigating the mechanisms by which these tumors sometimes regress without treatment or differentiate into benign tumors. Dr. Brodeur participated in the 1985 Forum on Neuroblastoma and co-chaired the Foundation sponsored 1986 and 1991 conferences on the International Neuroblastoma Staging System. He was elected to the SAB in December of 1991.

FINANCIAL REPORT

The accounting firm of Coopers and Lybrand audits the Foundation's financial records every year.



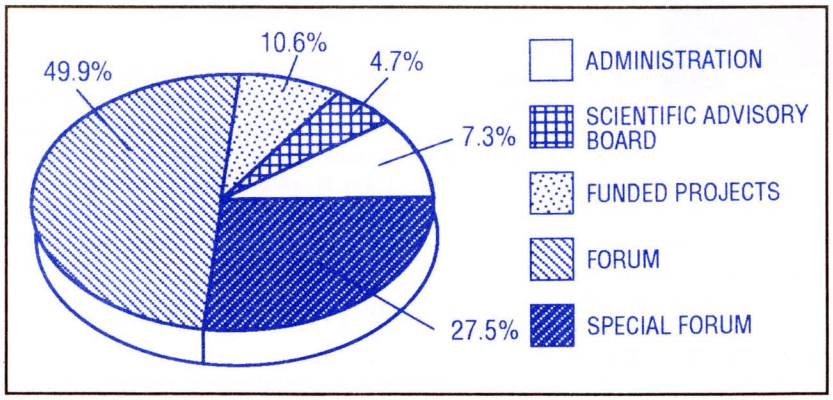
BASIS OF SUPPORT

The William Guy Forbeck Research Foundation has a broad base of support.

Of major significance to the Foundation are the contributions from many individuals and their families, ranging from $1 to very substantial amounts. Many people have chosen to use the Foundation as a fitting memorial gift.

A number of corporations and other foundations have also supported the Foundation with contributions. Some of these organizations have very rigorous standards for qualifying for support, and we are pleased the Foundation has been able to satisfy these requirements.

During the years 1987 through 1989, the Foundation received generous contributions from the Trader's Foundation in Chicago, creating the anomaly in those years. The gradual increase in operational income in primarily a result of funds earning interest.



EXPENSES

In 1991, 88% of the total expenses went directly to supporting the annual Forum and Foundation projects. The Foundation has no paid employees, and the trustees participate at their own expense. Administration expenses incude legal and accounting costs, as well as printing and postage expense.

Members of the Scientific Advisory Board attend the Forum meeting in Hilton Head and hold their annual meeting at the same time. The SAB provides the technical direction for the Foundation.

Projects funded by the Foundation during 1991 include: one half the costs of the Neuroblastoma Staging meeting held in England; funding support of a symposium at the American Association for Cancer Research; and expenses associated with the Foundation's Scholar in Residence Award.

COMMENTS FROM THE 1991 PARTICIPANTS

"I found it a unique and stimulating experience. It was a very positive event to be able to interact with others from around the country."

Norma Ramsay, MD
University of Minnesota, Minneapolis, MN

"The caliber of the presentations and discussion matched completely, I believe, the goals of the Foundation. While the problems remaining are still vast, efforts such as yours cannot but hasten the arrival at answers. The experience was enlightening and inspiring for me..."

David Fisher, MD, PhD
Massachusetts Institute of Technology, MA

"I felt that the meeting went very well and that, in the end, some very important issues were crystallized. Indeed, some will be followed up by our program at the NCI. I also was pleased with the discussion at the Scientific Advisory Board meeting and felt that the directions discussed will enable the Foundation to continue to meet its very important goals and objectives."

Philip Pizzo, MD
National Cancer Institute, Bethesda, MD

"...format of selecting a beautiful area and creating a round-table atmosphere for investigators to discuss their research is excellent."

William Dalton, MD, PhD
University of Arizona, Tucson, AZ

"The chance to interact with the caliber of people that your group organized in an informal way, away from phones and other distractions is terrific. Scientifically, new thoughts appeared and solidification of older concepts occurred."

Barton Kamen, MD, PhD
University of Texas, Dallas,TX

"Though progress may seem slow, the scientific connections made as a result of the Foundation present the opportunity for benefits which may seem intangible in the present, but will have consequential import for the future."

Langdon Miller, MD
National Cancer Institute
Bethesda, MD

The conference "contributed greatly to my possibilities to be adequately oriented in the field of neuroblastoma tumor biology research. It is my belief that [the Foundation] has taken on a pertinent task in supporting exchange of ideas in the scientific community and also the creation of a common language on a world wide basis in the field of clinical management of neuroblastoma."

Fredrik Hedborg, MD
Uppsala University, Sweden

IN APPRECIATION

George & Jennifer Forbeck

Thanks must go first to the Scientific Advisory Board and the Forum participants, the scientists and clinicians whose leadership and effort are the front line in the war against Cancer. The highly capable and respected members of the Scientific Advisory Board are introduced through mini-biographies in this issue of the Foundation Report.

Our special appreciation goes to the Foundation trustees and volunteers whose thoughtfulness, time and energy have done so much for the success of the Foundation and the Forums.

Most importantly, our thanks go to the hundreds of donors, individuals, businesses and foundations, whose financial support assures our continued work in Cancer research.

Sincere Thanks,
George and Jennifer

1991 Forbeck Forum cont. from pg. 2

Drs. Hathorn, Pizzo and Walsh reassured the group that the bacterial infectious complications of high-dose therapy are being diagnosed and treated effectively, although the therapy of fungal infections remains a significant problem.

As a result of the meeting, the attendees were charged with examining pediatric solid tumor protocols in their home institution and addressing the considerations raised. In particular, are doses optimal? Are drug resistance considerations addressed? And are optimal rescue strategies being employed to ameliorate toxicity?

At the National Cancer Institute, a new multidrug infusion protocol was begun in patients with pediatric sarcomas, modeled after a protocol outlined by the conference participants. The proposed study will be brought to the attention of the cooperative group study committees. A meeting report was published in the *Journal of the National Cancer Institute** (December, 1991).

AT A GLANCE...

SCIENTIFIC ADVISORY BOARD

Dr. Lawrence Helson, New York Medical College, and Dr. Isaiah Fidler, M.D. Anderson Hospital and Tumor Institute, retired from the Foundation's Scientific Advisory Board.

Dr. Garrett M. Brodeur, Associate Professor of Pediatrics and Genetics at the Washington University School of Medicine in St. Louis has joined the Foundation's SAB. Dr. Brodeur is very familiar to the Foundation: he participated in the 1985 Forum; he co-chaired the 1986 Neuroblastoma Staging and Response conference which was organized on the recommendation of the 1986 Forum participants; he co-chaired the 1991 Neuroblastoma Staging conference. The Foundation is very pleased that Dr. Brodeur will continue to be involved through this new role.

1991 SCHOLAR IN RESIDENCE AWARD

David E. Fisher

The recipient of the 1991 "Scholar in Residence Award" , David E. Fisher, MD, PhD, is currently working in a research laboratory at MIT. He was nominated by the Department of Pediatrics at the Harvard Medical School.

Dr. Fisher is truly an amazing young man. As an undergraduate he was a full time student at Swathmore, where he completed double majors in Biology and Chemistry, and was elected to Phi Beta Kapa. At the same time, he attended the Curtis Institute of Music where he received a BA in cello and was the first chair player for the Curtis Symphony. He then embarked on an equally ambitious MD-PhD program at Cornell and Rockefeller Universities, where he did PhD projects in two separate areas and laboratories. During these years he continued his cello studies, and made his solo debut at Carnegie Recital Hall in New York. Dr. Fisher's long time interest is in developing drugs for specifically turning genes on and off in cancer cells and to use such drugs as therapeutic agents. His nomination letter says "David Fisher is clearly an unusual and gifted man. His accomplishments prior to entering our program are the most outstanding I've seen in any applicant. He has performed well as a clinician, and set lofty goals for himself - goals which could revolutionize our approach to cancer therapy..." In addition, Dr. Fisher is a charming and delightful person. The Foundation is very pleased to be able to recognize the efforts and accomplishments of Dr. David Fisher.

In 1989, the Foundation began the program of honoring an outstanding oncologist-in-training, by inviting that individual to attend and observe the Forbeck Forum. Directors of major oncology centers are invited to nominate a candidate and to submit qualifications and an explanation as to why the candidate was recommended. The Foundation Scientific Advisory Board reviews these applications and selects the recipient of this award. It is hoped that this experience will augment the productivity of a promising young research scientist.

AACR

The Foundation sponsored a symposium on "Clonal Evolution in Cancer" at the annual meeting of the American Association for Cancer Research, held in Houston, Texas in May, 1991.

1992 FORUM

The 1992 Forbeck Forum will be held in Hilton Head in October, 1992. The Forum will focus on "Gene Therapy and Tumor Vaccines." Dr. Drew Pardol from John Hopkins Cancer Center will chair this Forum, and Dr. John Kemshead will be the Scientific Advisory Board's Forum advisor.

PUBLICATIONS

- A meeting report on the 1991 Forum was published in the December, 1991 issue of the *Journal of the National Cancer Institute*. The article was titled "Pediatric Cancer Forum Examines Chemotherapy Variables."

- Dr. Jon Pritchard published an article in the SIOP News (Feb, 1991), titled "Report on: Forbeck Criteria Workshop." The workshop was held in Rome, Italy in October, 1990. Its purpose was to determine the status of the usage of the International Neuroblastoma Staging System.

INSS Conferrence cont. from pg. 3

Some difficulties encountered in the interpretation and implementation of these criteria have hindered their acceptance internationally. Therefore, a second meeting was held in Berkeley, England, in October 1991 to review the experience with the INSS and INRC and to clarify the original criteria. At this meeting there was broad representation from the United States, Europe and Japan, with prominent clinical and biological experts on neuroblastoma invited to attend. In addition to pediatric oncology, there were representatives from pediatric surgery, radiology and pathology, as well as those actively investigating selected biological aspects of neuroblastoma.

Conferees representing the various groups and countries reviewed their experiences with the INSS and INRC. Almost all were using the international criteria or had adopted these criteria instead of the system they had been using.

Selected experts discussed the use of various biological markers to predict the likelihood of treatment response or failure, and the utility of these markers in making therapeutic decisions. Proposals were made for risk groups that incorporate both clinical and biological features in the determination of prognosis including: tumor histopathology, serum markers, and genetic features of the tumor. It was not clear which markers were most important, because no group had been able to examine all variables in a large group of patients treated with modern therapy. In addition, some studies could be done easily only in central laboratories in selected countries, and the group had to consider availability to the majority of institutions and groups throughout the world.

It was agreed that modification and clarification of the INSS and INRC would be made to enhance their universal implementation, but there would not be major revisions of the criteria at this time. The representatives would continue to gain experience with the system in anticipation of consolidating categories at the next meeting. In addition, the focus of the next INSS conference would be to develop a set of International Neuroblastoma Risk Groups taking into consideration selected biological markers that add substantial prognostic information. This would allow the duration and intensity of therapy to be tailored to the individual patients more precisely, thereby increasing cure rates and reducing toxicity. The modifications of the INSS and INRC made at this conference, and proposals for the development of International Neuroblastoma Risk Groups, will be submitted soon for publication in the *Journal of Clinical Oncology*. The third INSS Conference is planned for the Fall of 1994.

In grateful acknowledgement of our donors...

(from November, 1991 thru December, 1992)

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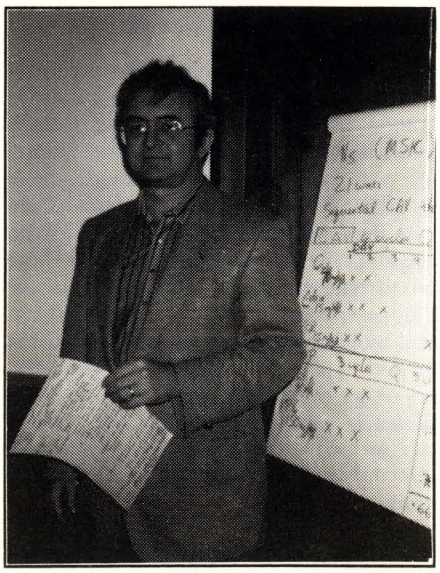

Dr. Hryniuk, session leader at 1991 Forum

Participants at International Neuroblastoma Staging System Conference in front of Edward Jenner Home, Berkeley, England, dicoverer of Smallpox Vaccine, "Father of Immunology."

OBJECTIVES

- The objective of the William Guy Forbeck Research Foundation is to promote advances in the field of oncology, particularly pediatric oncology.
- While the foundation may provide grants for pilot research studies and educational efforts, its centerpiece activity will be an annual scientific roundtable held at Hilton Head Island, South Carolina.
- Attending each year will be up to twelve physicians and scientists who will meet in a completely private "think tank" environment, where they can exchange ideas freely in the hope of building on each other's ideas, knowledge, and experience.
- The objective is not to discuss published research, but rather to provide a forum for the cross fertilization of ideas, concepts, and observations. The hope is to shorten the cancer research timetable.
- Participants will be invited on the recommendation of the Foundation's Scientific Advisory Board, a distinguished panel of medical scientists.

It is through your generous support that continuing research in the field of childhood cancer can be ensured. Contributions are tax deductible for federal IRS purposes. The IRS file number is 580063499. For additional information please write: William Guy Forbeck Research Foundation, 17 Cedar Lane, Hilton Head Island, South Carolina 29926