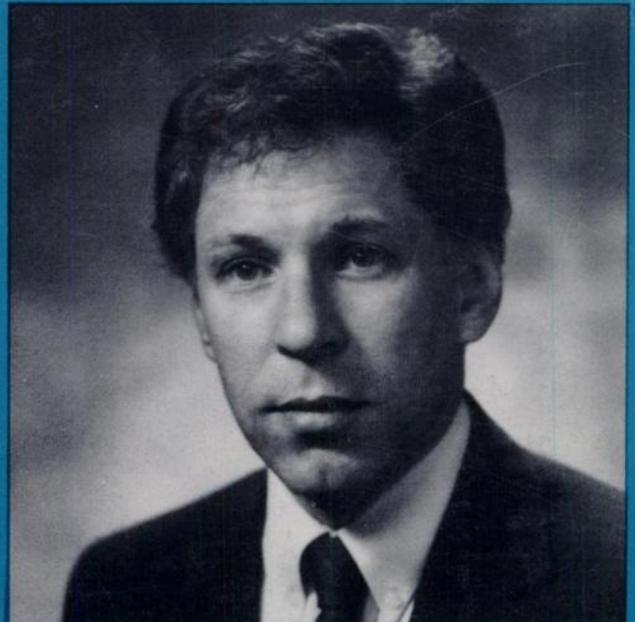
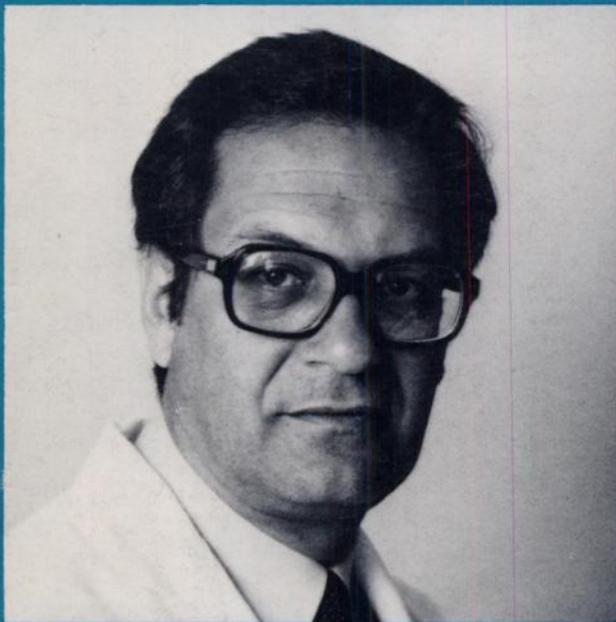
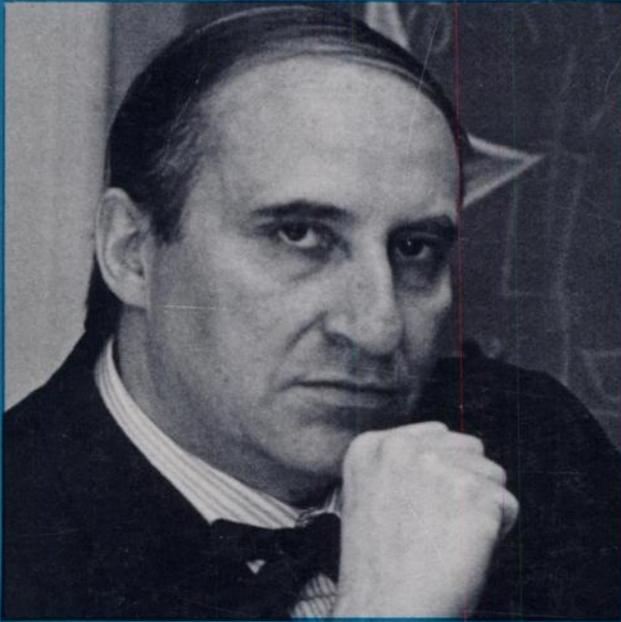


# Cancer Research

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**November 1982**



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# COVER LEGEND

AMERICAN ASSOCIATION  
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**Cancer Research**

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*Cancer Research* this month offers its cover salute to the four Award lecturers at the 75th Anniversary meeting of the American Association for Cancer Research, held in St. Louis, Missouri, in April, 1982:

**Clowes Memorial Award:** George Weber, M.D., Professor and Director of the Laboratory for Experimental Oncology, Indiana University School of Medicine, Indianapolis, Indiana, who spoke on "Biochemical Programs of Cancer Cells and the Design of Chemotherapy." Dr. Weber is primarily known for his studies of the enzymatic changes in the cells of various tissues as they progress from the normal to a neoplastic state. He introduced the molecular correlation concept and the key enzyme concept, which provided testable predictions and proved to be productive in the analysis and recognition of the biochemical pattern of cancer cells. In addition, Dr. Weber has developed a profile of metabolism in the malignant tissue which promises to be useful in the design of therapeutic measures for equivalent problems in human neoplasia. His current research primarily concerns the elucidation of the biochemical program of cancer cells and the design of enzyme pattern-directed anticancer chemotherapy. Dr. Weber is pictured on the *upper left*.

**Cain Memorial Award:** John A. Montgomery, Ph.D., Senior Vice President and Director of the Kettering-Meyer Laboratory, Birmingham, Alabama, who described the development of cancer chemotherapeutic agents under the title, "Has the Well Gone Dry?" For the past 30 years, Dr. Montgomery has carried out research on the synthesis, metabolism, and biological evaluation of more than 20 nitrogen heterocycles, nucleoside and nucleotide derivatives of certain of these ring systems, carbohydrates, nitrosoureas, organophosphorus compounds, fluorine compounds, and other types of organic compounds. Major accomplishments include the development of two new classes of anticancer

drugs (BCNU, CCNU, methyl-CCNU, and DTIC); an improved method for the synthesis of methotrexate of high purity; contributions to the understanding of the fundamental mechanisms of cellular resistance, cross-resistance, and lack of cross-resistance between purine antagonists, between pyrimidine antagonists, and between purine and pyrimidine analogs. Dr. Montgomery appears at *upper right*.

**Rosenthal Foundation Award:** Gianni Bonadonna, M.D., Director of Medical Oncology at the Istituto Nazionale Tumori, Milan, Italy, whose address was, "New Chemotherapeutic Strategies to Improve the Control of Hodgkin's Disease." Dr. Bonadonna's main fields of activity are clinical trials with new anticancer drugs and multimodal treatments for breast cancer, malignant lymphomas, and melanomas. His major contributions to the field of cancer therapy include: the first Phase I and II trials with Adriamycin; the first adjuvant chemotherapy program [CMF (Cytosan-methotrexate-5-fluorouracil)] for operable breast cancer with positive axillary nodes, and the first report on dose-response effect after CMF in breast cancer and of improved 5-year survival after adjuvant chemotherapy; improved 5-year survival of Stage I and II non-Hodgkin's lymphomas by radiotherapy plus CVP (Cytosan-vincristine-prednisone) chemotherapy *versus* radiotherapy alone; improved 5-year survival of advanced Hodgkin's disease by combined modality treatment; and the development of ABVD (Adriamycin-bleomycin-vinblastine-dacarbazine) chemotherapy for Hodgkin's disease resistant to MOPP (nitrogen mustard, oncovin, procarbazine, and prednisone) chemotherapy. Dr. Bonadonna's portrait is on the *lower left*.

**Rhoads Memorial Award:** Stuart A. Aaronson, Chief of the Laboratory of Cellular and Molecular Biology, National Cancer Institute, Bethesda, Maryland, whose lecture was on "Unique Aspects of the Interactions of Retroviruses with Vertebrate Cells." Dr. Aaronson's research has focused on mechanisms of malignant transformation. He has developed cell lines that are among the most widely utilized in cancer research and cell biology. His early retrovirus studies provided an important conceptual framework for subsequent biological and molecular analysis of this significant virus group. His laboratory has also developed some of the most sensitive, specific methods available for identification and classification of retroviruses. His contributions include: genetic ordering of proteins encoded by the type C viral *gag* gene; demonstration of the common evolutionary origin of mammalian type C viruses; and establishment of evolutionary links between different retrovirus groups. In recent years, Dr. Aaronson and his coworkers have been in the vanguard of research into molecular biology of mammalian retroviruses. Their work has led to the molecular cloning of biologically active DNAs of a number of transforming viruses, the complete nucleotide sequencing of a mammalian sarcoma virus, and the demonstration that human gene homologues of sarcoma viral transforming genes are expressed in human tumors. Dr. Aaronson is pictured on the *lower right*.

M. B. S.