Series: Molecular Medicine Institutions

Georgetown University Medical Center: Lombardi Cancer Center

The Lombardi Cancer Center is one of the hallmark programs of Georgetown University Medical Center. Established in 1970 and named in honor of Vincent T. Lombardi, the former coach of the Green Bay Packers and the Washington Redskins who died of colon cancer, the Lombardi Center is a National Cancer Institute designated Comprehensive Cancer Center. Rigorous and imaginative research, an aggressive attitude toward cancer treatment, sensitivity to the emotional needs of cancer patients and their families, teaching excellence, and a sophisticated approach to cancer prevention propel the Lombardi Center into the front ranks of cancer institutions. Its nine major translational research programs, augmented by other clinical care programs, include Breast Cancer, Radiation Biology, Neuro-oncology, Growth Regulation of Cancer, Invasion and Metastasis, Developmental Therapeutics, Experimental Hematology and Lymphoma, Cancer Prevention and Control, and Genetics. Cancer-related annual direct extramural funding grew from \$11.6 million in 1990 to more than \$50 million in 1998. Of the more than 3000 newly diagnosed cancer patients who are seen at the Lombardi Cancer Center each year, more than half are admitted as inpatients to the hospital. Hospital patient days in 1998 reached 26,177 with an average length of stay of 7 days. During 1998 alone, the Lombardi Center had 262 protocols, with 248 articles.

In addition to new patients seen at its multidisciplinary clinics for breast, brain, lung, and head and neck cancer, Lombardi specialists treat patients with scores of other malignancies, including gynecological, renal and esophageal cancer, as well as cancer of the stomach, colon, rectum, pancreas, and prostate, melanoma, and hematologic cancers, including lymphoma, leukemia, and multiple myeloma. Many Lombardi patients with advanced cancers who have exhausted the standard forms of treatment participate in experimental drug trials of advanced biologic and chemotherapeutic agents under the aegis of the Developmental Therapeutics Program.

A major focus of the Lombardi Center is its advanced breast cancer research and clinical program. Learning more about breast cancer and speedily translating what has been learned into improved treatments are the Lombardi researchers' goals. The Lombardi Breast Cancer Program focuses on five overlapping areas that encompass what is currently known and what will be learned about breast cancer, diagnosis, treatment, and prevention in the early decades of the 21st century. These areas include understanding the genetic origins of breast cancer, improving diagnosis, developing new therapies, increasing immune responses, and preventing breast cancer. Recognizing the Lombardi Center's leadership, the federal government, corporations, foundations, and individuals provided Lombardi investigators with some \$8 million for breast cancer research in 1996. Approximately half of this money came from federal grants. In 1996, the Lombardi Center was awarded the government's two most prestigious multi-year, multimillion dollar, peer-reviewed breast cancer research grants (Breast Cancer SPORE and the DOD Breast Cancer Center Grant).

Marc E. Lippman is the Director of the Lombardi Cancer Center and Professor of Medicine and Pharmacology at Georgetown University Medical School. He was previously Head of the Medical Breast Cancer Section of the Medicine Branch of the National Cancer Institute. He received his B.A. from Cornell University (1964) and his M.D. from Yale Medical School (1968), where he was elected to Alpha Omega Alpha. He completed his internship and residency in internal medicine at Johns Hopkins Hospital on the Osler Service and further fellowship training at the National Cancer Institute where he remained

Address correspondence and reprint requests to: Nancy Whelan, Room 142, Building D, 4000 Reservoir Road, Washington, D.C. 20007, U.S.A. Phone: 202-687-4704; Fax: 202-687-5213; E-mail: whelann@gunet.georgetown. edu



Fig. 1. Dr. Marc E. Lippman, Director of the Lombardi Cancer Center and Professor of Medicine and Pharmacology at Georgetown University Medical School.

until 1988 when he came to Georgetown University.

Dr. Lippman has attempted to bridge the gap between basic tumor biology and clinical application in the field of breast cancer. His investigations focus on understanding the molecules produced by human breast cancer responsible for the malignant phenotype. Specifically, he initially characterized the first in vitro cell culture systems for studying estrogen dependence in human breast cancer cells. These studies led to the characterization of a series of growth factors produced by these cells, including transforming growth factors, ligands for the erb-B superfamily of tyrosine kinase receptors, and a variety of heparinbinding growth factors involved in angiogenesis. The concept that steroid hormones are part of the important regulatory system that controls the paracrine and autocrine factors driving malignant and normal breast epithelial growth has been an important advance in understanding this and other types of hormonedependent tumors and those arising from hormone-dependent tissues. Dr. Lippman's

laboratory has explored a variety of strategies aimed at blocking the production or activity of these growth factors and their cognate receptors with a view toward developing novel biological therapies for cancer. He has successfully pursued clinical trials for every stage of breast cancer with basic science.

Dr. Lippman has co-authored over 380 peerreviewed articles, 170 chapters, and 25 books or special volumes, including one of the standard texts on breast cancer, Diseases of the Breast (Harris, JR, Lippman ME, Morrow M, Hellman S, eds. Lippincort-Raven, Philadelphia 1996). He is editor-in-chief of Breast Cancer Research and Treatment and serves on the editorial board of many leading publications in the field, including Cancer Research and Clinical Cancer Research. He has been an associate editor for Cancer Research since 1989, and for Clinical Cancer Research since its inception in 1995. Dr. Lippman is also involved in many national committees, including serving as the American Association for Cancer Research (AACR) representative to the National Cancer Advisory Board since 1994. In addition, he has been active on many AACR committees since becoming a member in 1976. He has sat on several Awards Committees (Clowes Award in 1996; Rosenthal Award in 1992 and 1993), served on the Public Education Committee from 1994 to 1997, and chaired the Endocrinology Section of the Program Committee for two annual meetings (1986, 1995). Finally, Dr. Lippman has been recognized worldwide for his achievements in the field, having received, among other honors, the Rosenthal Award of the AACR (1994), the Brinker International Prize for Basic Research in Breast Cancer (1994), the American Cancer Society Lectureship awarded by the American Society of Clinical Oncology (1993), the Astwood Prize of the Endocrine Society (1991), and the Clinical Investigator Prize of the American Federation for Clinical Research (1985).