Introduction 1

Judah Folkman

Judah Folkman agreed to write an introductory overview on the field of angiogenesis and cancer for this book. The topic was his field of research, indeed his passion, and he put it into the center of interest for a whole generation of researchers and clinicians working to combat and treat cancer. Judah Folkman died suddenly on January 14, 2008 at age 74, on the way to a scientific conference on angiogenesis. He could not finish his chapter. This day witnessed the loss of a scientific pioneer and humanitarian.

Born in 1933, Dr. Folkman was trained at Ohio State University and Harvard Medical School. During his time of serving in the U.S. Navy, he began studying tumors and soon concentrated on the dependence of tumor growth and spread from the formation of new blood vessels. In 1971 the *New England Journal of Medicine* published his ground-breaking hypothesis on angiogenesis and antiangiogenic therapy. Initially met with skepticism, this paper opened the field of neoangiogenesis and cancer for a growing community of scientists and physician—scientists working on biological mechanisms of the connections between the

vascular systems and cancer and on the development of antiangiogenic therapy against cancer. Judah Folkman and his team of scientists were always on the forefront of this research. He and his team isolated the first proangiogenic factor bFGF, identified multiple angiogenic inhibitors such as endostatin, angiostatin, and fumagillin, and made numerous other discoveries that moved the field forward. His laboratory also studied molecular pathways of angiogenesis and helped to develop numerous antiangiogenic drugs.

Today antiangiogenic therapy, as envisaged by Judah Folkman, has made a difference for many patients with cancer. This book will provide the reader with an overview of the field of antiangiogenic therapy for cancer, but because of the large scope of the field, it concentrates on certain aspects as well. The editors hope that it contains interesting and stimulating information for scientists and physicians alike working on aspects of the vascular systems and cancer. In a very real sense, we hope this book will commemorate the tremendous influence Judah Folkman's farsighted thinking and pioneering work has had on all of us.

Germany Wolfgang E. Berdel