The Role of Microtubules in Cell Biology, Neurobiology, and Oncology

Cancer Drug Discovery and Development

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Edited by

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Cover Illustration: Figure 2B, Chapter 4, "Microtubule-Associated Proteins and Microtubule-Interacting Proteins: *Regulators of Microtubule Dynamics*," by Maria Kavallaris, Sima Don, and Nicole M. Verrills.

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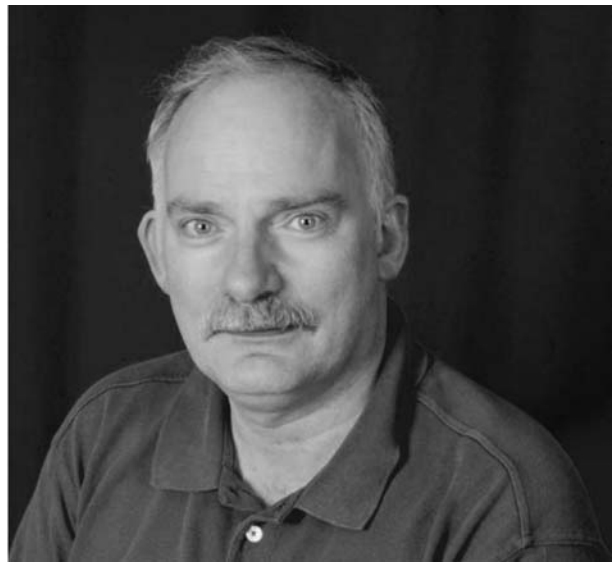

This book is dedicated to the memory of Dr. George A. Orr, a dear friend and colleague. George was a talented and creative scientist who set very high standards for himself and expected the same from his collaborators. He loved to share concepts and ideas, and many of us had the privilege of interacting and collaborating with him. He inspired and encouraged many young scientists and stimulated them to do their best work. About his own accomplishments, he was extremely humble.

George did his undergraduate and PhD studies at Queen's University, Belfast, N. Ireland. His postdoctoral work was done with Dr. Jeremy Knowles at the University of Oxford and then at Harvard University. George came to the Albert Einstein College of Medicine as an assistant professor in the Department of Molecular Pharmacology in 1978 and rose through the ranks to become a full professor in 1989.

George had many scientific interests but he was particularly dedicated to the development and application of new technologies to enhance our insights into the mode of action of drugs. His participation in the field of microtubule pharmacology and proteomics has opened new avenues of research to all of us. He is sorely missed.

PREFACE

I want to thank all who contributed to this first edition for their hard work and professionalism, and especially for their patience. I hope the readers will find this volume as helpful as I have found it.

There is no doubt that the family of proteins we call the tubulins and the microtubules that they form when they aggregate are extremely important in the cell and, as we are increasingly learning, important in diseases that afflict so many. This field of investigation is a testament to how important both basic and clinical sciences are in understanding disease mechanisms and making inroads into therapies. Without the basic science knowledge that has been accumulated, to which the authors of this work have contributed greatly, we would not be in the position we find ourselves of increasingly understanding disease and advancing therapies. As I read the chapters, I was humbled to think of the insights that so many have contributed to this field, and again became aware of how the collaborative effort of so many is needed to understand the complexities of nature. By working together, many have helped to advance this field. Because of their efforts, we find ourselves with the wealth of knowledge contained in this book. This knowledge gives us so much insight even as it challenges us to continue working. Thanks again to all of the wonderful collaborators for their excellence and their patience.

Tito Fojo, MD, PhD

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