

# Preface

This book consolidates drebrin studies that have accumulated over three decades, since the first identification of drebrin by our group in 1985. Although in the 1980s we could not envision exactly how the study of drebrin would develop, the progress reflected in the chapters presented here was beyond our wildest expectations. This book begins with a general introduction of drebrin from a historical perspective, and then the chapters in the second part provide the molecular characterization of drebrin and drebrin-decorated F-actin. The third and fourth parts discuss its function in the nervous and non-nervous system, respectively.

This review will appeal to researchers who are interested in synapse formation and synaptic plasticity, as well as subcellular local morphogenesis, such as cell protrusion formation, cell migration, intercellular junction formation, and endocytosis. The book will also appeal to researchers who use drebrin as a tool, such as a marker of synaptic function or a disease marker. This book was kept as concise as possible, to be understood by readers from diverse scientific disciplines. Because of the clarity of its presentations, it can also serve as a textbook in graduate courses.

We wish to express our gratitude to the authors who so willingly contributed to this book. We would also like to thank the staff of Springer Japan, in particular Ms. Momoko Asawa and Dr. Yasutaka Okazaki.

Maebashi, Japan  
Tokyo, Japan

Tomoaki Shirao  
Yuko Sekino

Drebrin

From Structure and Function to Physiological and  
Pathological Roles

Shirao, T.; Sekino, Y. (Eds.)

2017, XII, 401 p. 111 illus., 82 illus. in color., Hardcover

ISBN: 978-4-431-56548-2