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Mitochondrial Medicine

Volume 1: Targeting Mitochondria

Second Edition

Edited by

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Preface

It is our distinct pleasure to present the second edition of MiMB *Mitochondrial Medicine* to the ever increasing number of scientists and physicians who are as fascinated by this tiny organelle as we are. We started working on the first edition in September 2014 and were able to bring about one year later two volumes with a total of 70 chapters to the market. As of today (July 2020), 195K downloads have been recorded for Volume I¹ and 90K downloads for volume II². In light of the rapidly growing and expanding field of Mitochondrial Medicine, we readily accepted the invitation to compile a second edition, which we started to work on in March 2019. This second edition as offered here involves a total of 88 chapters with 45 of them written by new contributors who were not part of our first edition. The first and second editions combined subsequently present work from 115 mitochondrial laboratories from around the globe. We therefore believe these five volumes combined to be the most comprehensive source of know-how in the wide-ranging field of Mitochondrial Medicine.

Dividing 87 chapters equally over three volumes proved to be a bit challenging. We chose the subtitle *Targeting Mitochondria* for volume I, *Assessing Mitochondria* for volume II, and *Manipulating Mitochondria and Disease Specific Approaches* for volume III while of course being well aware of significant overlaps between these three areas of research. For example, it is quite obvious that mitochondria are being targeted for the purpose of either assessing them or to manipulate them. We therefore ask all authors not to be too critical regarding the placement of their particular chapter. The reader we believe will anyway choose to download a chapter of his/her interest quite independently of its placement in one of the three volumes.

All chapters in these three volumes were written for graduate students, postdoctoral associates, independent investigators in academia and industry as well as physicians by leading experts in their particular field. We are extremely grateful to them for having found the time to either update their chapter from the first edition or to write a new chapter. We will not forget that for many if not all of our contributors the worldwide COVID-19 pandemic posed additional and unexpected hurdles towards finishing their manuscript in due time. Thank you to all!

The idea for our original book proposal leading to the first edition of MiMB *Mitochondrial Medicine* originated in our efforts to organize a series of annual conferences on Targeting Mitochondria (www.targeting-mitochondria.com), the tenth one of which meanwhile has taken place in November 2019 in Berlin, Germany. Due to the ongoing pandemic, our 11th conference (October 29–30, 2020) will be a virtual one but we are sure it will not be less exciting than all the previous editions.

¹ <https://link.springer.com/book/10.1007/978-1-4939-2257-4>

² <https://link.springer.com/book/10.1007/978-1-4939-2288-8>

Last but not least we would like to sincerely thank John Walker, the series editor of *Methods in Molecular Biology*, for having invited us to compile this second edition and for his unlimited guidance and help throughout the entire process. We also owe sincere thanks to Patrick Marton, the Executive Editor of the Springer Protocol Series, for always having been available in assisting us throughout the entire project.

Glendale, AZ, USA
Paris, France

Volkmar Weissig
Marvin Edeas

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