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## Preface

It is 15 years since the first edition of this book was published and 7 years since the second. The interest in angiogenesis, during the intervening time, continues to increase. It is a testament to the quality of the chapters included in the first two editions, and continued expansion of interest in angiogenesis research, that we now have a third edition of the book.

The original concept in writing this was, and still is, to provide angiogenesis researchers with a single source of relevant methodologies for cell isolation and assessing angiogenesis *in vitro* and *in vivo*. As always, inclusivity was key to this endeavor; techniques are described in detail and range in difficulty and resource requirements—this ensures that most, if not all, interested laboratories can participate in this exciting research area, irrespective of levels of resource and expertise.

As with the first two editions, the foundations remain firmly in place in the form of chapters on cell isolation, assessing angiogenesis in patient samples, and *in vitro* and *in vivo* assays, techniques that now form part of the canon of angiogenesis literature. A number of such chapters continue to be included in the current edition and have been updated to reflect changes that may have occurred since the previous edition. Our understanding of angiogenesis, and lymphangiogenesis, has moved on and our understanding of the complexities of the various processes involved is much more profound. As a result of this the current edition includes an expansion in the number of techniques, with many new chapters being included. There are now 27 chapters reflecting the diverse range of methodological approaches available to researchers.

There are new chapters on assessing leukocyte involvement in angiogenesis, lymphatic cell and pericyte isolation techniques, spheroid and ring based *in vitro* assays, and on pericyte involvement in angiogenesis. New *in vivo* based chapters include the chorioallantoic membrane models, corneal pocket assays to assess angiogenesis and lymphangiogenesis, models of muscle angiogenesis, and use of zebrafish embryos to study vascular angiogenesis and senescence.

By expanding the number of chapters we have, inevitably, had to sacrifice certain chapters from the second edition—very difficult decisions. We like to think, however, that this volume will continue to provide not only a practical handbook for key techniques but also an informative and enjoyable read for all those interested, no matter how directly, in angiogenesis.

*Nottingham, UK*  
*Birmingham, UK*

*Stewart G. Martin*  
*Peter W. Hewett*

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Martin, S.G.; Hewett, P.W. (Eds.)

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