Methods in ENZYMOLOGY

Volume 476

Guide to Techniques in Mouse Development, Part A

Mice, Embryos, and Cells
Second Edition

Edited by

Paul M. Wassarman
and
Philippe M. Soriano

VOLUME FOUR HUNDRED AND SEVENTY-SIX

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METHODS IN ENZYMOLOGY

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NEW YORK • OXFORD • PARIS • SAN DIEGO
SAN FRANCISCO • SINGAPORE • SYDNEY • TOKYO
Academic Press is an imprint of Elsevier

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525 B Street, Suite 1900, San Diego, CA 92101-4495, USA
30 Corporate Drive, Suite 400, Burlington, MA 01803, USA
32 Jamestown Road, London NW1 7BY, UK

First edition 2010

ISBN: 978-0-12-384883-3 (Paperback)
ISBN: 978-0-12-374775-4 (Hardback)
ISSN: 0076-6879

Printed and bound in United States of America
10 11 12 10 9 8 7 6 5 4 3 2 1

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PREFACE

It has been 17 years since the first edition of the ''Guide to Techniques in Mouse Development,'' Volume 225 of *Methods in Enzymology*, was published by Academic Press. Needless to say, the development of technology used to investigate mouse development has not stood still during the interim. Enormous advances have occurred in genomics, transgenic and ES cell methodology, and reprogramming, culminating in the development of iPS cells. At both the cellular and molecular levels, a great many technological advances have been made that permit investigators to probe ever more deeply into all aspects of mouse development. Consequently, it appeared to be an appropriate time to publish a completely new version of the Guide, highlighting the technological advances used to study mouse development.

As in the first edition of the Guide in 1993, ''Our purpose in assembling this volume is to create a source of state-of-the-art experimental approaches in mouse development useful at the laboratory bench to a diverse group of investigators. The aim is to provide investigators with reliable experimental protocols and recipes that are described in sufficient detail by leaders in the field.'' We believe that these goals have been achieved with publication of the new version of the Guide in 2010.

It is notable that the new version of the Guide is divided into two volumes, whereas the 1993 version was published as a single volume. This change reflects the increased number of topics covered and the increased sophistication of the methodology. In addition, we have not shied away from including articles on the same topic written by authors from different laboratories. Users of the first edition found this aspect of the Guide particularly helpful, since it enabled them to compare protocols on the same or similar topics and choose the methodology just right for them.

We sincerely hope that the Guide will find its way into many laboratories and prove useful at the bench. We are grateful to the authors for both their contributions and forbearance in dealing with publication schedules. Finally, one of us (PMW) thanks the other (PS) for agreeing to co-edit the volume, which made the job infinitely more enjoyable.

PAUL M. WASSARMAN AND PHILIPPE M. SORIANO

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