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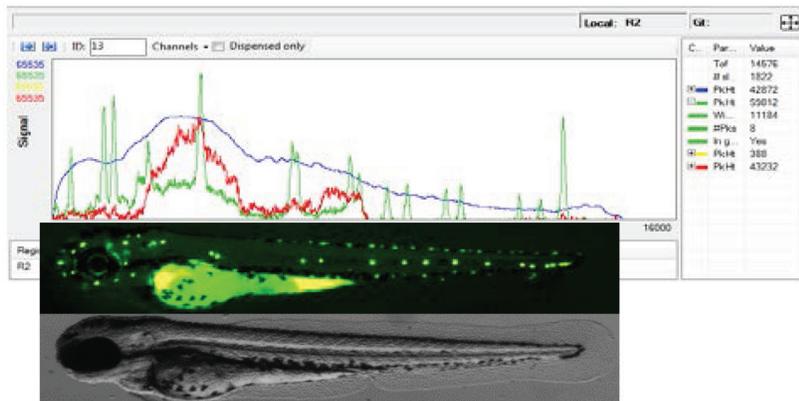
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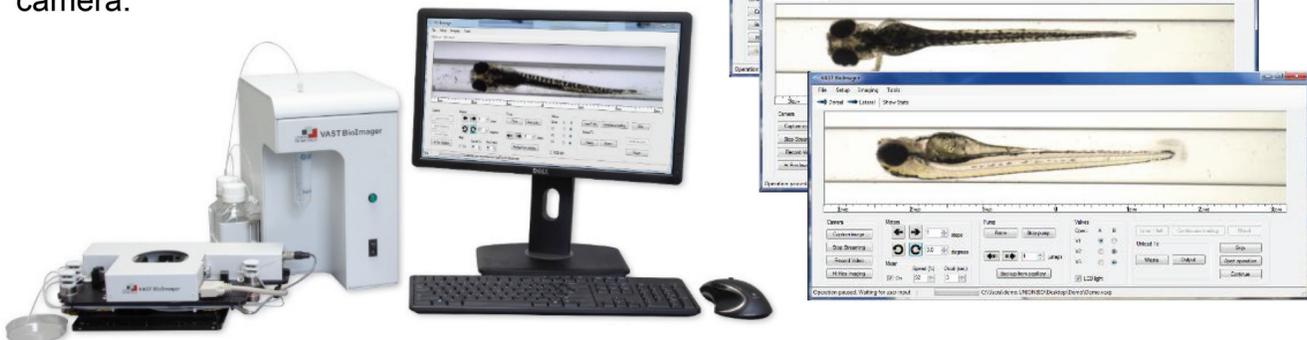
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(see Schertel, et al., 25:1-11 in this issue)



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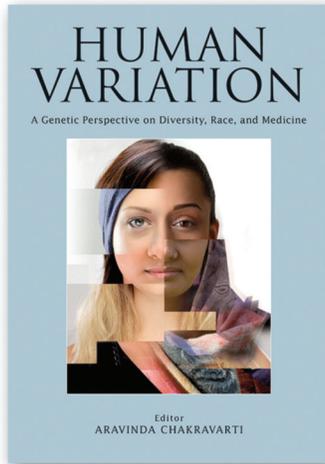
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HUMAN VARIATION

A Genetic Perspective on Diversity, Race, and Medicine



Edited by Aravinda Chakravarti, *Johns Hopkins University School of Medicine, Institute of Genetic Medicine*

Since the appearance of modern humans in Africa ~200,000 years ago, we have migrated around the globe and accumulated genetic variations that affect our appearance, skin color, food tolerance, and susceptibility to different diseases. This book provides a state-of-the-art view of human genetic variation and what we can infer from it, surveying the genetic diversity seen in Africa, Europe, the Americas and India, and discussing how this new knowledge can be used to improve human health in the era of personalized medicine.

2014, 131 pp., illustrated (21 4C, 5 B&W), index

Hardcover \$75 £47

Paperback \$59 £37

ISBN 978-1-621820-90-1

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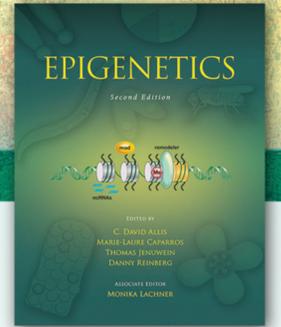


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EPIGENETICS

Second Edition



Edited by C. David Allis, *The Rockefeller University*; Marie-Laure Caparros, *London*; Thomas Jenuwein, *Max-Planck Institute of Immunobiology and Epigenetics*; Danny Reinberg, *Howard Hughes Medical Institute, New York University School of Medicine-Smilow Research Center*; and Monika Lachner, *Associate Editor, Max-Planck Institute of Immunobiology and Epigenetics*

In many biological processes the regulation of gene expression involves epigenetic mechanisms. In this new edition of *Epigenetics*, 36 chapters written by experts in the field introduce and explain epigenetic effects from many perspectives. These include the varied molecular mechanisms underpinning epigenetic regulation, discussion of cellular processes that rely on this kind of regulation, and surveys of model organisms in which epigenetic effects have been most studied.

The original chapters have all been rewritten and brand new chapters cover topics such as the structure, function, and dynamics of histone-modifying enzymes and histone-interacting proteins. Other chapters address chromatin remodeling, DNA methylation, siRNAs, and gene silencing; X-chromosome inactivation, dosage compensation, and imprinting; and epigenetics in microbes, plants, insects, and mammals.

How epigenetic mechanisms act in cell division and cell type specification, and how errors in these pathways contribute to cancer and other human diseases are also considered, along with the importance of epigenetics for induced pluripotency and reprogramming. In addition, new chapters describe the involvement of epigenetic processes in epigenetic inheritance, neuronal development, metabolism and signaling, responses to the environment, and long-range chromatin interactions. A series of short essays highlight important recent discoveries.

All the chapters provide conceptual illustrations that help readers understand epigenetic control. The book is thus a benchmark text for advanced undergraduate and graduate courses on gene regulation, as well as an essential resource for scientists interested in this rapidly moving field.

2015, 984 pp, illustrated (408 4C images and 9 B&W), index
Hardcover \$165

ISBN 978-1-936113-59-0

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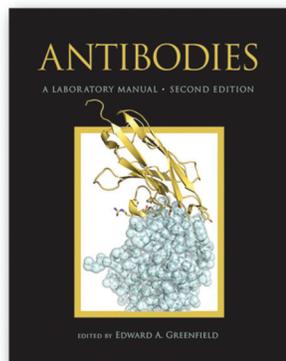


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ANTIBODIES

A Laboratory Manual, Second Edition



Edited by Edward A. Greenfield, *Dana-Farber Cancer Institute*

The second edition of the now-classic lab manual *Antibodies*, by Harlow and Lane, has been revised, extended, and updated by Edward Greenfield of the Dana-Farber Cancer Center, with contributions from other leaders in the field. This manual continues to be an essential resource for molecular biology, immunology, and cell culture labs on all matters relating to antibodies. The chapters on hybridomas and monoclonal antibodies have been recast with extensive new information and there are additional chapters on characterizing antibodies, antibody engineering, and flow cytometry. As in the original book, the emphasis in this second edition is on providing clear and authoritative protocols with sufficient background information and troubleshooting advice for the novice as well as the experienced investigator.

2014, 847 pp., illus. (32 4C, 103 B&W), appendices, index

Hardcover \$260

Paperback \$175

ISBN 978-1-936113-80-4

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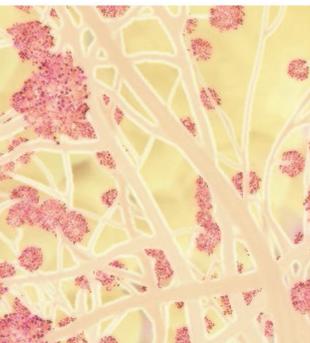
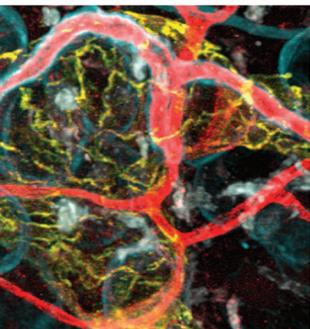
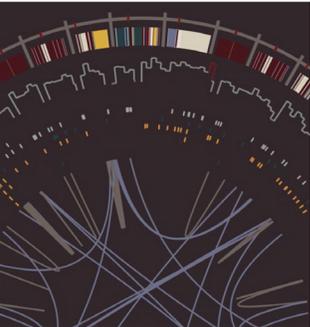
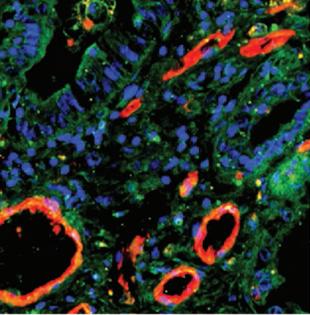
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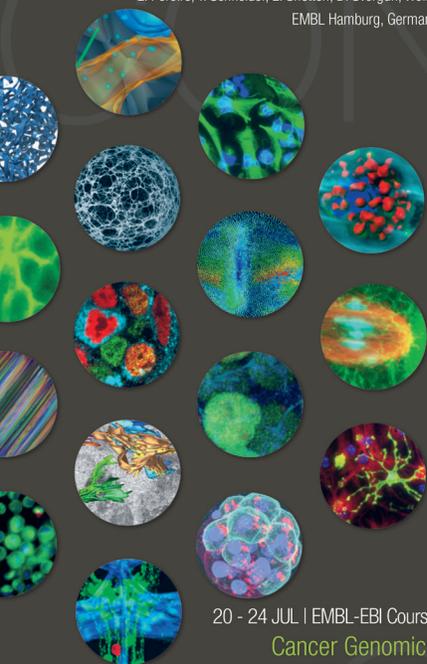
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From Nucleotides to Genomes: Chromosome Biology in the Three Domains of Life

Chromosome Dynamics

June 28 - July 3, 2015
Waterville Valley
Waterville Valley, NH
Has associated GRS June 27-28

State-of-the-Art Human Genome Science: Illuminating Past and Shaping Future Controversies

Human Genetics & Genomics

July 19-24, 2015
Salve Regina University
Newport, RI

Has associated GRS July 18-19

Epigenetic Dynamics: Roles in Development, Inheritance, and Responses to the Environment

Epigenetics

August 2-7, 2015
Bentley University
Waltham, MA

Has associated GRS August 1-2

Gordon Research Seminars (GRS) are two day meetings for students and post-docs that precede an associated GRC.

Visit www.grc.org for program details, online application, and more!

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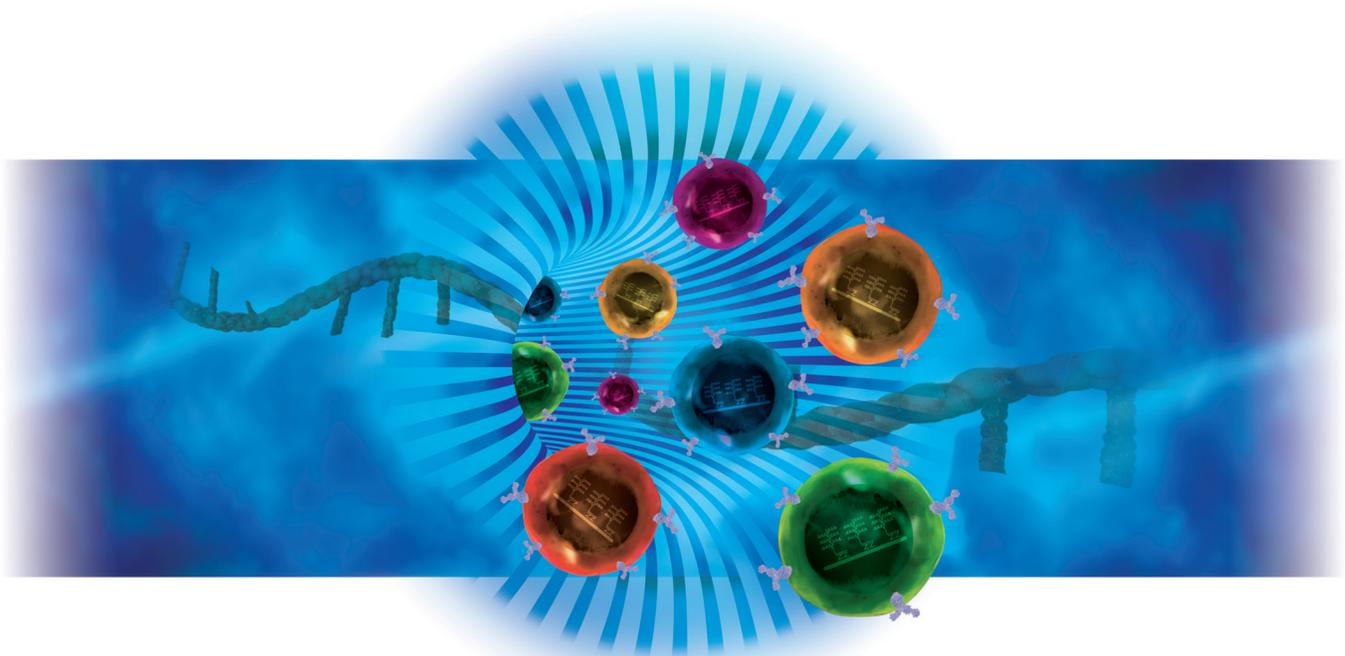
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