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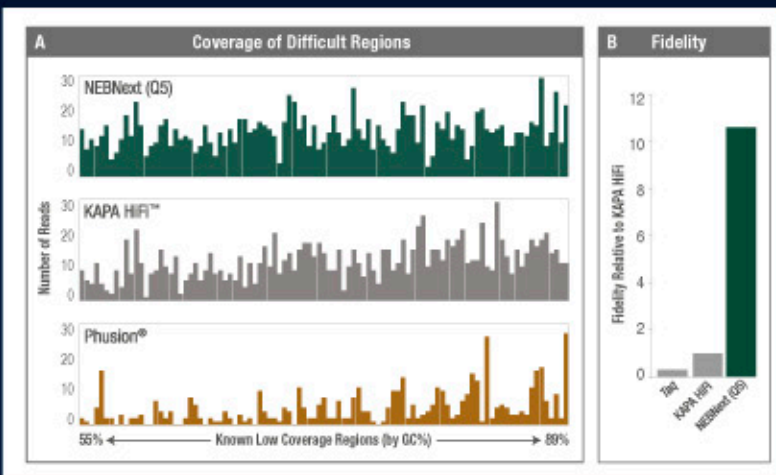


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# METABOLISM AND DISEASE

Cold Spring Harbor Symposia on Quantitative Biology LXXVI

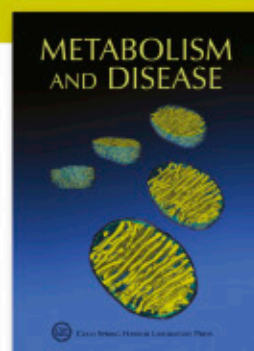
Edited by Terri Grodzicker, *Cold Spring Harbor Laboratory*, Bruce Stillman, *Cold Spring Harbor Laboratory*, and David Stewart, *Cold Spring Harbor Laboratory*

This volume is based on presentations by world-renowned investigators who gathered at the 76th Cold Spring Harbor Symposium on Quantitative Biology. It reviews the latest advances in our understanding of metabolism and disease, including research on fat, exercise and rhythms; insulin resistance and sensitivity; lifespan, aging and cancer; regulation and dysregulation of metabolism; signaling and gene regulation; environment and sensing; metabolic reprogramming; clocks and intermediary metabolism; metabolism and cancer; and autophagy, timing and small RNAs.

2012, 422 pp., illus., index

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# The Synapse

Edited by Morgan Sheng, *Genentech Research Group*; Bernardo Sabatini, *Harvard Medical School*, and Thomas C. Südhof, *Stanford University School of Medicine*

Synapses are specialized cell contacts where two neurons communicate. Neurotransmitter molecules released from the presynaptic terminal of one neuron diffuse to the postsynaptic terminal on the other, binding to receptors that lead to propagation or modulation of the signal.

Written and edited by experts in the field, this collection from *Cold Spring Harbor Perspectives in Biology* examines the highly complex structures and functions of the pre- and postsynaptic regions, as well as the trafficking mechanisms that transport vesicles containing neurotransmitters. The contributors discuss how long-term potentiation (LTP) and long-term depression (LTD) of synaptic transmission form the basis of learning and memory. The roles of calcium signaling in regulating synaptic and cell function and techniques to study such signaling events are also covered.

This volume also includes discussions of synaptic dysfunction in disorders such as autism and Alzheimer's disease. It is an indispensable reference for neurobiologists, cell and developmental biologists, and anyone wishing to understand how the basic building blocks of the brain are put together and communicate.

2012, 397 pp., illus., index  
Hardcover \$135

ISBN 978-1-936113-02-6

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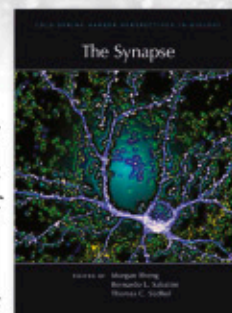
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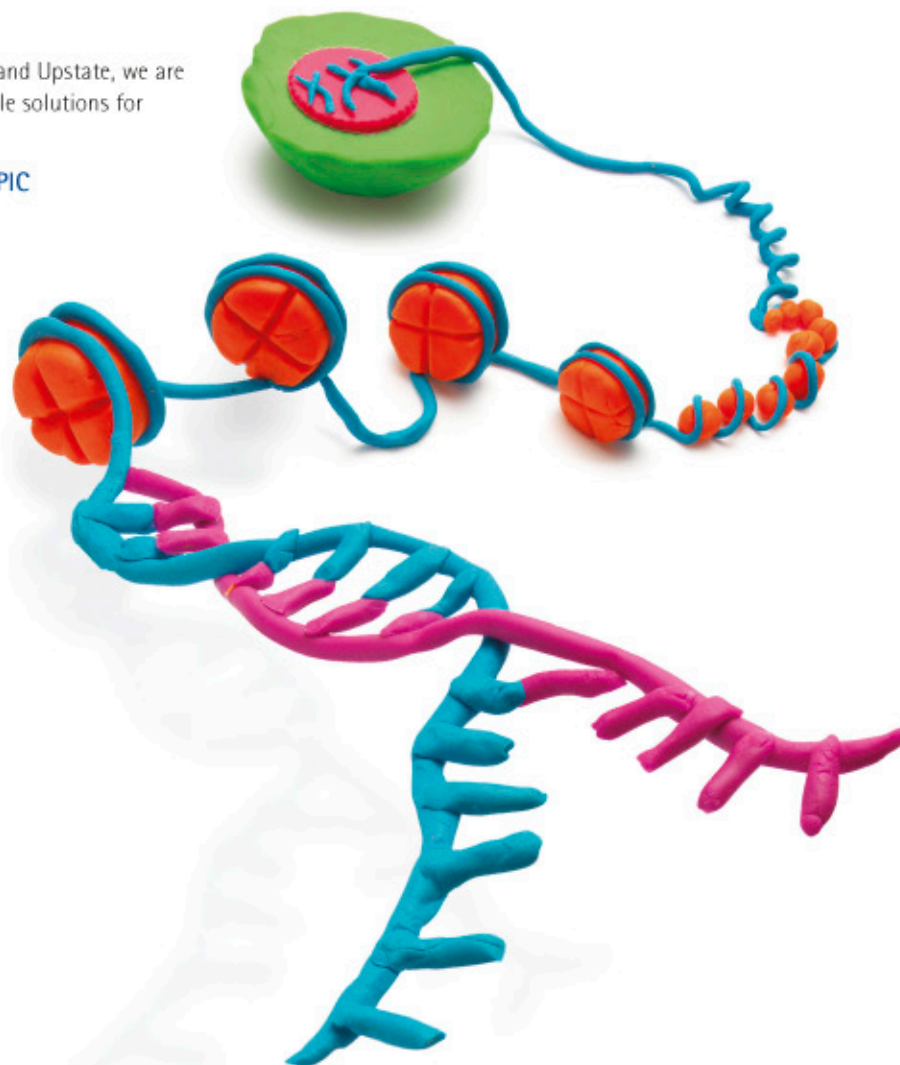
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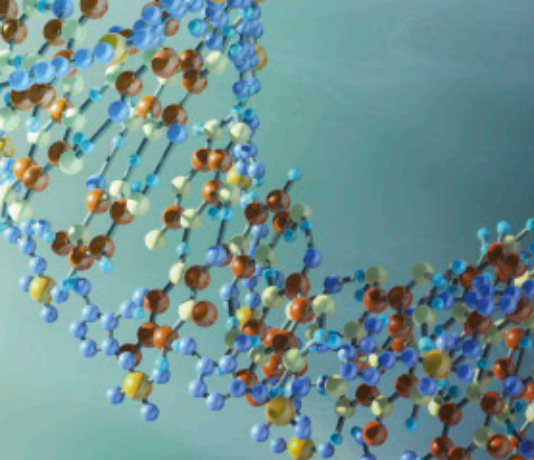
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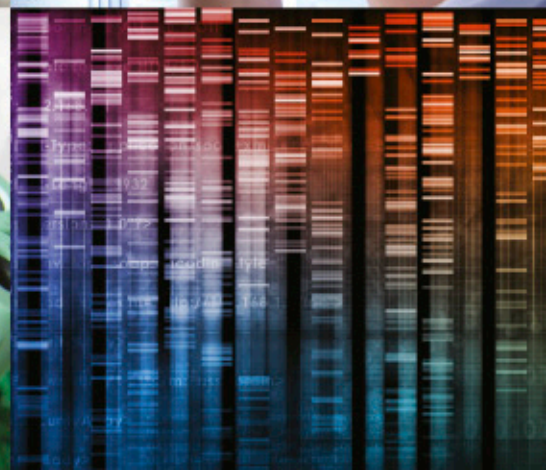
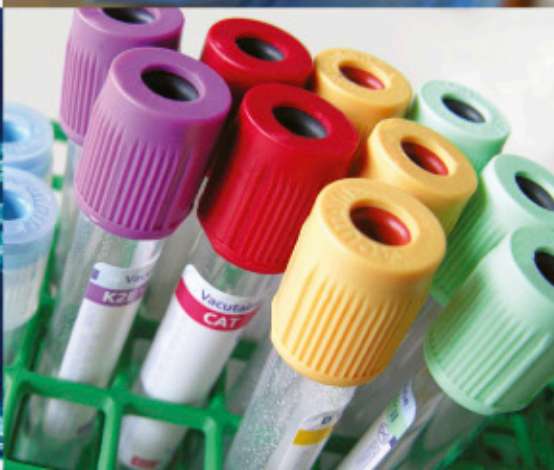
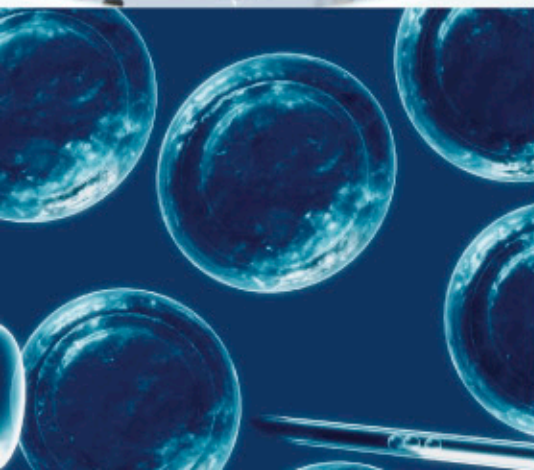
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Scientific Organizers: Kelly A. Frazer and Geoffrey S. Ginsburg

### Keynote Speaker:

John Bell, University of Oxford

### Session Topics:

*Breakthroughs in Genomic and Personalized Medicine • Genomes and Biology • Cancer Genomics and Applications • Advances and Challenges in the Field • Pharmacogenomics • Personalized Genomes • Policy • Translating Biomarkers to Personalized Medicine*

**Abstract & Scholarship Deadline:** February 20, 2013 / **Early Registration Deadline:** April 16, 2013

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