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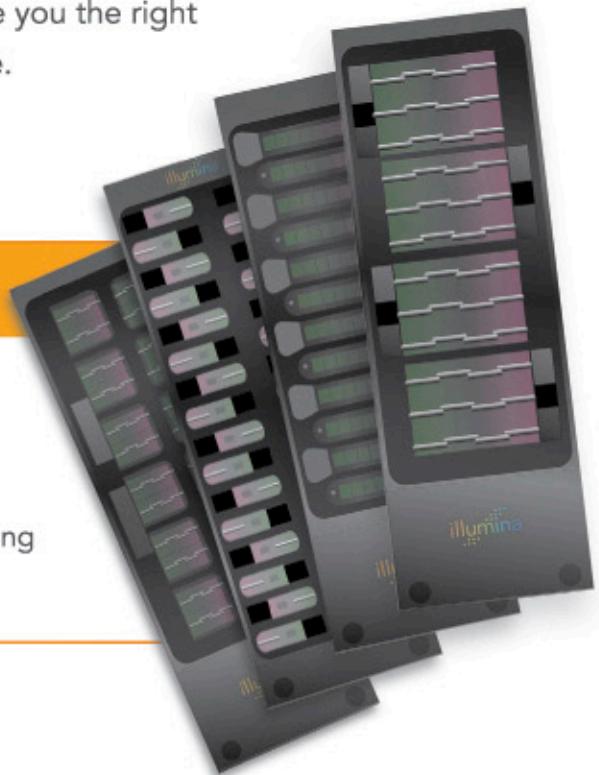
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# Human Variation: Cause and Consequence

20–23 JUNE 2010  
HEIDELBERG | GERMANY  
Advanced Training Centre



## SESSION | Mechanisms of Mutation

CHAIR | Andrew Wilkie

Weatherall Institute of  
Molecular Medicine, UK

**Peter Arndt**  
Max Planck Institute for  
Molecular Genetics, DE

**Laurent Duret**  
University of Lyon, FR

**Evan Eichler**  
University of Washington, US

**Adam Eyre-Walker**  
University of Sussex, UK

**Kateryna Makova**  
Penn State University, US

**Gil McVean**  
University of Oxford, UK

## SESSION | Disease Genetics

CHAIR | Leena Peltonen

Wellcome Trust Sanger Institute, UK

**Mark Daly**  
Harvard Medical School, US

**Helen Hobbs**  
Howard Hughes Medical Institute  
at UT Southwestern, US

**Rick Lifton**  
Yale School of Medicine, US

**Kerstin Lindblad-Toh**  
Uppsala University, SE  
Broad Institute of MIT and Harvard, US

**Steven McCarroll**  
Harvard Medical School, US

**Mark McCarthy**  
Oxford Centre for Diabetes,  
Endocrinology & Metabolism, UK

**Mike Stratton**  
Wellcome Trust Sanger Institute, UK

**John Trowsdale**  
Cambridge Institute for Medical Research, UK

## KEYNOTE SPEAKERS

**Svante Pääbo**

Max Planck Institute for  
Evolutionary Anthropology, DE

**Kári Stefánsson**  
deCODE genetics, IS

## SESSION | Functional Variation

CHAIR | Ewan Birney

European Bioinformatics Institute, UK

**Stephan Beck**  
University College London, UK

**Søren Brunak**  
University of Denmark, DK

**Vivian Cheung**  
University of Pennsylvania, US

**Manolis Dermitzakis**  
University of Geneva Medical School, CH

**Jorge Ferrer**  
Institut d'Investigacions Biomèdiques  
August Pi i Sunyer, ES

## SESSION | Population Genetics

CHAIR | Gonçalo Abecasis

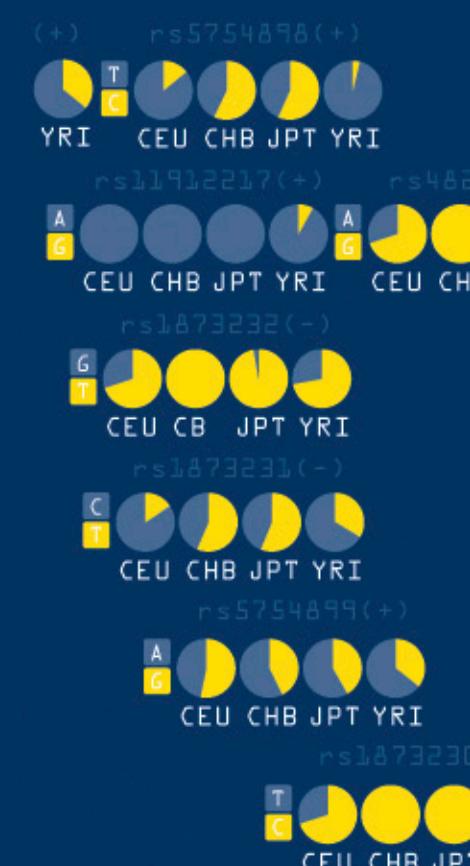
University of Michigan, US

**Carlos D. Bustamante**  
Cornell University, US

**Richard Durbin**  
Wellcome Trust Sanger Institute, UK

**Paul Flicek**  
European Bioinformatics Institute, UK

**Noah Rosenberg**  
University of Michigan, US



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15 April 2010

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selected from abstracts.

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Apoptosis	The Evolution of Gene Networks	Mitochondria	Receptor Tyrosine Kinases
Auxin Signaling	Generation and Interpretation of Morphogen Gradients	Mitosis	Recombination Mechanisms
Axonal Guidance	Germ Cells	Molecular Motors	Regeneration
The Biology of Cardiovascular Disease	The Golgi Apparatus	Muscle Cell Biology	RNA Worlds
The Biology of Schizophrenia	Growth Factor Receptors	The NF-κB Family	Sex Determination
Calcium Signaling	Immune Cell Signaling	Nuclear Hormone Receptors	Symmetry Breaking in Biology
Cell–Cell Junctions	Immune Tolerance	The Nucleus	Synapses
Cilia and Flagella	Lipid Cell Biology	The Origin of Life	Transcriptional Regulation
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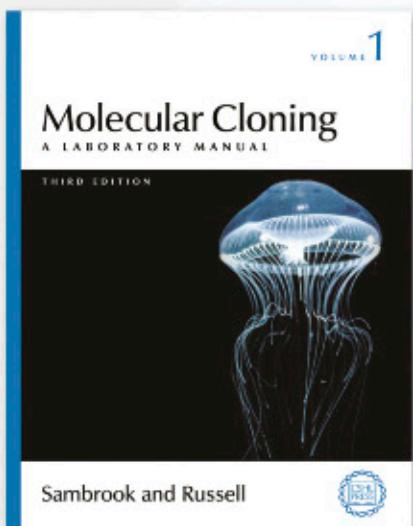
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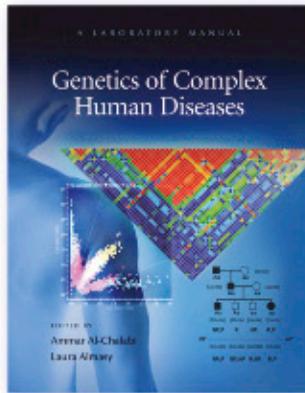
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# Genetics of Complex Human Diseases

## A Laboratory Manual



Edited by Ammar Al-Chalabi, *MRC Centre for Neurodegeneration Research, King's College London*, and Laura Almasy, *Southwest Foundation for Biomedical Research, San Antonio, Texas*

Many human diseases—including Alzheimer's disease, schizophrenia, cancer, and cardiovascular disease—show complex inheritance that requires sophisticated analysis. *Genetics of Complex Human Diseases: A Laboratory Manual* brings together the tools that geneticists use to find disease genes with the genetic concepts and statistical theories that underpin these research approaches. Topics covered include basic genetics and Mendelian inheritance, statistical methods, genetic epidemiology, linkage studies, transmission disequilibrium test analysis, variance components analysis, genome-wide association studies, copy-number variation, methods for high-throughput genotyping, the complexity of RNA editing, and genetic computer programs. The book's chapters, written by leading

investigators in the field, blend practical information and reviews of each topic, providing both the how and the why of complex disease analysis. *Genetics of Complex Human Diseases* is an important guide for anyone with an interest in human genetics or who uses genetic techniques in the study of diseases with complex inheritance.

2009, 220 pp., illus., index

Hardcover \$158

Paperback \$95

ISBN 978-087969-882-9

ISBN 978-087969-883-6

### CONTENTS

1. Introduction  
*Ammar Al-Chalabi and Laura Almasy*
2. "Statistics 101"—A Primer for the Genetics of Complex Human Diseases  
*Janet Sinsheimer*
3. Linkage Analysis of Discrete Traits  
*Ingrid B. Borecki and John P. Rice*
4. Epidemiologic Considerations in Complex Disease Genetics  
*John Gallacher*
5. Variance Component Methods for Analysis of Complex Phenotypes  
*Laura Almasy and John Blangero*
6. Multiple Testing and Power Calculations in Genetic Association Studies  
*Hon-Cheong So and Pak C. Sham*
7. Introduction to Genetic Association Studies  
*Cathryn M. Lewis and Jo Knight*
8. Genome-Wide Association Studies  
*Ammar Al-Chalabi*
9. Introduction to Linkage Disequilibrium, the HapMap, and Imputation  
*Benjamin M. Neale*
10. Meta-Analysis of Genome-Wide Association Studies  
*Paul I.W. de Bakker, Benjamin M. Neale, and Mark J. Daly*
11. Gene-Environment Interaction and Common Disease  
*Ruth J.F. Loos and Nicholas J. Wareham*
12. Family-Based Genetic Association Tests  
*Eden R. Martin and Eavadnie Rampersaud*
13. Copy-Number Variation and Common Human Diseases  
*Dheeraj Malhotra and Jonathan Sebat*
14. Oncogenomics  
*Simon J. Furney, Gunes Gundem, and Nuria Lopez-Bigas*
15. When the Genetic Code Is Not Enough—How Sequence Variations Can Affect Pre-mRNA Splicing and Cause (Complex) Disease  
*Brage Storstein Andresen and Adrian R. Krainer*
16. Laboratory Methods for High-Throughput Genotyping  
*Howard J. Edenberg and Yunlong Liu*
17. Gene Set Analysis and Network Analysis for Genome-Wide Association Studies  
*Inti Pedroso and Jerome Breen*
- Index

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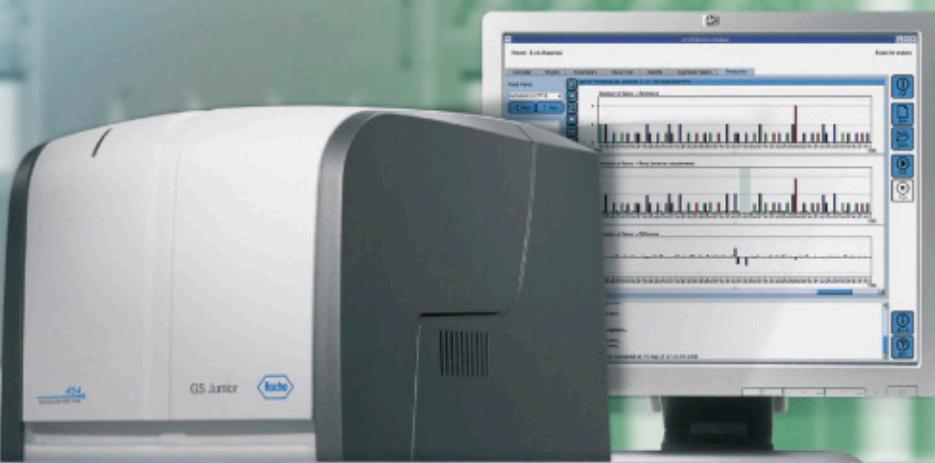
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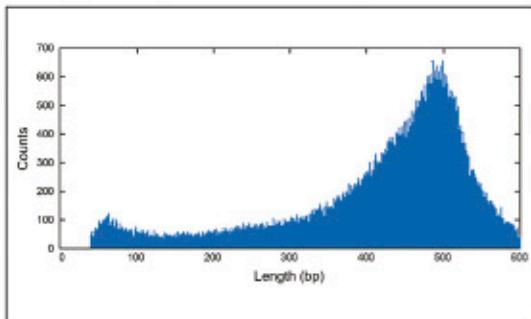




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# ICSB edinburgh 2010



Edinburgh

10 - 16 October 2010

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### Session Topics:

- Applications in Medicine
- Functional Genomics and Biological Networks
- Computational Theory in Systems Biology
- The Spatial Dimension of Intracellular Dynamics
- Biomedical Simulations
- Understanding the Brain Function
- Computational Methods and Tools
- Cell Signalling Dynamics
- Systems Biology in Health and Disease
- Parameterising Proteomics
- Biological Rhythms
- Combinational Multi-scale Systems Responses in Biology and Medicine
- Engineering Aspects in Systems Biology
- Systems Biology and Metabolism
- Systems Science Behind Medical Application in Industry
- Biological Noise and Cellular Decision-Making

### Keynote Speakers will include:

• Sydney Brenner (Nobel Laureate)	• Steve Kay
• David Rand	• Luis Serrano
• Denis Noble	• Thomas Pollard

### Important Dates:

5 January 2010	Delegate Registration Open
5 January 2010	Call for Papers Open
15 January 2010	Call for Tutorials Deadline
15 January 2010	Call for Workshops Deadline
3 May 2010	Call for Papers Deadline
2 June 2010	Early Registration Deadline
4 June 2010	Notification of Acceptance
1 October 2010	Pre-Registration Deadline
10 October 2010	ICSB 2010 Tutorials
11-14 October 2010	ICSB 2010 Conference
15 October 2010	ICSB 2010 Workshops



Genetics Society of America

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## **GENETICS 2010: Model Organisms to Human Biology**

June 12 – 15 • Boston, Massachusetts

## **51st Annual Drosophila Research Conference**

April 7 – 11 • Washington, D.C.

## **Yeast Genetics and Molecular Biology Meeting**

July 27 – August 1 • Vancouver, BC, Canada

## **GENETICS SOCIETY OF AMERICA CONFERENCES**

**and Coming in 2011...**

### **26th Fungal Genetics Conference**

March 15 – 20 • Pacific Grove, California

### **52nd Annual Drosophila Research Conference**

March 30 – April 2 • San Diego, California

### **18th International *C. elegans* Meeting**

June • Los Angeles, California

### **MouseGenetics 2011**

June 22 – 26 • Washington, D.C.

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**Upcoming 2010  
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(in chronological order)**

**March 2010**

Biomolecular Interaction Networks:  
Function & Disease (new!)  
Cell Death Pathways: Apoptosis, Autophagy & Necrosis  
Metabolism & Cancer Progression (new!)  
Receptors and Signaling in Plant Development & Biotic Interactions  
HIV Vaccines  
Viral Immunity  
Nuclear Receptors: Signaling, Gene Regulation & Cancer  
Nuclear Receptors: Development, Physiology & Disease  
New Paradigms in Cancer Therapeutics  
Integration of Developmental Signaling Pathways

**April 2010**

G Protein-Coupled Receptors  
Dynamics of Eukaryotic Transcription During Development  
Synapses: Formation, Function & Misfunction  
Towards Defining the Pathophysiology of Autistic Behavior  
Malaria: New Approaches to Understanding Host-Parasite Interactions  
Molecular Targets for Control of Vector-Borne Diseases: Bridging Lab & Field Research  
Islet Biology  
Diabetes  
Computer-Aided Drug Design  
New Directions in Small Molecule Drug Discovery (new!)  
Developmental Origins & Epigenesis in Human Health and Disease (new!)

**June 2010**

Bioactive Lipids: Biochemistry & Diseases  
Innate Immunity: Mechanisms Linking with Adaptive Immunity

**October 2010**

Immunological Mechanisms of Vaccination



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- *Cardiovascular Disease*
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- *Development*
- *Drug Discovery*
- *Genetics/Genomics/Epigenetics*
- *Immunology*
- *Infectious Disease*
- *Metabolic Disease*
- *Molecular Biology*
- *Neurobiology*
- *Plant Biology*
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## ADVANCED COURSES 2010

### **Mathematical Models for Infectious Disease Dynamics**

15–26 February

### **Virus Discovery in the Clinical Setting**

7–12 March

### **Technologies and Applications for Genome Analysis**

18–27 April

### **Molecular Basis of Bacterial Infection: Basic & Applied Research Approaches**

9–15 May

### **Functional Genomics and Systems Biology**

16–25 June

### **Molecular Neurology and Neuropathology**

19–26 June

### **Practical Aspects of Small Molecule Drug Discovery**

4–9 July

### **Next Generation Sequencing**

18–24 July

### **Human Genome Analysis: Genetic Analysis of Multifactorial Diseases**

21–27 July

### **Design and Analysis of Genetic-based Association Studies**

23–27 August

## WORKSHOPS

### **Working with the Human Genome Sequence**

10–12 May

### **Proteomics Bioinformatics**

12–18 December

## OVERSEAS COURSES

### **Working with Pathogen Genomes**

Ho Chi Minh City, Vietnam

28 February–6 March

### **Genomic Epidemiology of Malaria**

Bangkok, Thailand

29 August–4 September

## SCIENTIFIC CONFERENCES 2010

### **Computational Cell Biology**

10–14 February

### **Therapeutic Applications of Computational Biology and Chemistry: TACBAC**

1–3 March

### **Perspectives in Clinical Proteomics**

Training workshop 17–18 March

Conference 18–19 March

### **Genomic Disorders**

24–27 March

### **The Evolutionary Biology of *Caenorhabditis* and Other Nematodes**

6–9 June

### **Genomics of Malaria Epidemiology**

9–13 June

### **EBI-Wellcome Trust Bioinformatics Summer School**

14–18 June

### **Sub Nuclear Structures and Disease**

27–30 July

### **Systems Biology: Networks**

11–15 August

### **Wellcome Trust School of Human Genomics**

22–26 August

### **16th Meeting of the European Society for Pigment Cell Research**

4–7 September

### **Signalling to Chromatin**

8–11 September

### **Infectious Disease Genomics & Global Health**

12–15 September

### **Genome Informatics**

15–19 September

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22–25 September

### **Bridging the Gap on Biomedical Genetics**

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