

GENSET
CUSTOM

MASS OLIGOS™

**FAST, GUARANTEED
AND AFFORDABLE.**

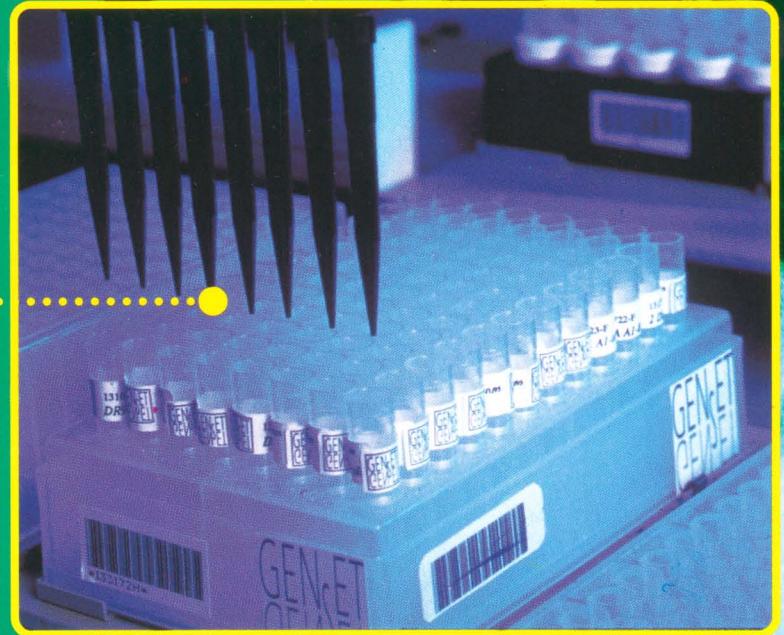
Your schedule depends on receiving 1000's of oligos daily. And your budget demands affordability.

GENSET has the answer. Our new Mass Oligos custom DNA synthesis service uses innovative oligo Ultra-Fast Parallel Synthesis and automated post-synthesis processes to produce large quantities of high quality oligos on a dependable, daily basis.

So now you can get all the oligos you need. When you need them. In the format and concentrations you need. At prices you can easily afford. And all fully guaranteed.

But don't just take our word for it – many of the leading genome projects in the U.S., Europe and Japan are already using GENSET Mass Oligos.

So call us today for more information. And discover how we can be the best single source in all your oligos needs day in and day out.



**USA, Canada, Latin America
GENSET Corporation (La Jolla, CA)**

**Order- E-Mail: oligos@gensetlj.com
FAX: 1-800-551-5291**

Europe

GENSET SA (Paris, France)

**Order- E-Mail: oligos@genset.fr
FAX: (33 1) 43 56 68 18**

Japan and Asia

GENSET KK (Tokyo, Japan)

**Order- E-Mail: oligos@po.ijinet.or.jp
FAX: (81 3) 3585 5351**

**Visit our Web site, and win free
bases! <http://www.genset.fr>.**

GENOME RESEARCH

Volume 6 Number 4
April 1996

Editors

Mark Boguski
National Center for Biotechnology
Information, NIH
Aravinda Chakravarti
Case Western Reserve University
Richard Gibbs
Baylor College of Medicine

Eric Green
National Center for Human Genome
Research, NIH
Richard Myers
Stanford University School of Medicine

Editorial Board

Rakesh Anand
Zeneca Pharmaceuticals
Stylianos Antonarakis
University of Geneva
Charles Auffray
CNRS
Philip Avner
Institut Pasteur
Andrea Ballabio
Telethon Institute of Genetics and
Medicine
David Bentley
The Sanger Centre
Bruce Birren
Whitehead Institute/MIT Center for
Genome Research
Michael Boehnke
University of Michigan School of
Public Health
Anne Bowcock
University of Texas Southwestern
Medical Center
David Burke
University of Michigan Medical School
Jeffrey Chamberlain
University of Michigan Medical School
Ellson Chen
Perkin-Elmer Corporation
David R. Cox
Stanford University School of Medicine
Ronald W. Davis
Stanford University School of Medicine
Richard Durbin
Sanger Centre, UK
Joseph Ecker
University of Pennsylvania
Beverly S. Emanuel
Children's Hospital of Philadelphia
Raymond Fenwick
Biodate Laboratories
Chris Fields
National Center for Genome Resources
Simon Foote
Walter and Eliza Hall Institute of
Medical Research

Phil Green
University of Washington
Kenshi Hayashi
Kyushu University
Philip Hieter
The Johns Hopkins University School
of Medicine
Clare Huxley
St. Mary's Hospital Medical School
Howard J. Jacob
Massachusetts General Hospital-East
Alec Jeffreys
University of Leicester
Mark Johnston
Washington University School of
Medicine
Mary-Claire King
University of Washington
Ben Koop
University of Victoria
Pui-Yan Kwok
Washington University School of
Medicine
Ulf Landegren
Uppsala Biomedical Center
Mark Lathrop
The Wellcome Trust Centre
Michael Lovett
University of Texas Southwestern
Medical Center
Jen-i Mao
Genome Therapeutics Corporation
Douglas Marchuk
Duke University Medical Center
Thomas Marr
Cold Spring Harbor Laboratory
W. Richard McCombie
Cold Spring Harbor Laboratory
Susan Naylor
University of Texas Health Science
Center
David Nelson
Baylor College of Medicine

Managing Editor

Judy Cuddihy
Cold Spring Harbor Laboratory

News and Reviews Editor

Alison Stewart
Cambridge, U.K.

Maynard Olson
University of Washington
Svante Pääbo
University of Munich
Leena Peltonen
National Public Health Institute, Helsinki
David Porteous
MRC Human Genetics Unit
Western General Hospital, Edinburgh
Roger Reeves
Johns Hopkins University School of
Medicine
Bruce Roe
University of Oklahoma
Rodney Rothstein
Columbia University College of P&S
Gerald Rubin
University of California, Berkeley
Lloyd Smith
University of Wisconsin-Madison
Randall Smith
Baylor College of Medicine
Marcelo Bento Soares
Columbia University and the New
York State Psychiatric Institute
William Studier
Brookhaven National Laboratory
Grant Sutherland
Women's and Children's Hospital,
Adelaide
Barbara Trask
University of Washington
Gert-Jan B. van Ommen
Leiden University
Robert B. Weiss
University of Utah
Jean Weissenbach
Genethon, CNRS
Richard Wilson
Washington University School of
Medicine
James Womack
Texas A&M University

Editorial Office

Cold Spring Harbor Laboratory Press
1 Bungtown Road
Cold Spring Harbor, New York 11724
Phone (516) 367-8492
Fax (516) 367-8334
<http://www.cshl.org>

Editorial/Production

N. Dumser, Technical Editor
K. Kraus, Production
C. Schneider, Production
D. Lawrence, Editorial Secretary

RESEARCH PAPERS

Mapping the Human Y Chromosome by Fingerprinting Cosmid Clones Kay Taylor, Nick Hornigold, Darren Conway, Delyth Williams, Zanna Ulinowski, Mahima Agochiya, Paolo Fattorini, Pieter de Jong, Peter F.R. Little, and Jonathan Wolfe **235**

Dominantly and Recessively Inherited Cornea Plana Congenita Map to the Same Small Region of Chromosome 12 Esa Tahvanainen, Aldo Sigler Villanueva, Henrik Forsius, Pia Salo, and Albert de la Chapelle **249**

Mapping the RPIO Locus for Autosomal Dominant Retinitis Pigmentosa on 7q: Refined Genetic Positioning and Localization within a Well-defined YAC Contig Rachel E. McGuire, Siobhán A. Jordan, Valerie V. Braden, Gerard G. Bouffard, Peter Humphries, Eric D. Green, and Stephen P. Daiger **255**

A Palindromic Structure in the Pericentromeric Region of Various Human Chromosomes G. Wöhr, T. Fink, and G. Assum **267**

Genetic Mapping in *Xiphophorus* Hybrid Fish: Assignment of 43 AP-PCR/RAPD and Isozyme Markers to Multipoint Linkage Groups Steven Kazianis, Donald C. Morizot, Brenda B. McEntire, Rodney S. Nairn, and Richard L. Borowsky **280**

Toward the Construction of Integrated Physical and Genetic Maps of the Mouse Genome Using Interspersed Repetitive Sequence PCR (IRS-PCR) Genomics Kent W. Hunter, Laura Riba, Leo Schalkwyk, Matthew Clark, Sergei Resenchuk, Alicia Beeghly, Jenny Su, Felix Tinkov, Pang Lee, Elango Ramu, Hans Lehrach, and David Housman **290**

A Tandem Duplication within the *fibrillin 1* Gene Is Associated with the Mouse *Tight skin* Mutation Linda D. Siracusa, Rodney McGrath, Qing Ma, John J. Moskow, Jayanthi Manne, Paul J. Christner, Arthur M. Buchberg, and Sergio A. Jimenez **300**

GENOME METHODS

**An Efficient Method for Isolating Putative
Promoters and 5'-transcribed Sequences from
Large Genomic Clones**

Douglas P. Mortlock,
Matthew R. Nelson, and
Jeffrey W. Innis

327

**Single Nucleotide Primer Extension: Quantitative
Range, Variability, and Multiplex Analysis**

Alex D. Greenwood and
David T. Burke

336

Product News

349

COVER Genetic mapping in *Xiphophorus* hybrid fish. Shown is phenotypic enhancement of the P² pigment pattern of *X. variatus*. (For details, see Kazianis et al., p. 280.)