

Editors
 David Bentley
Sanger Centre
 Richard Gibbs
Baylor College of Medicine
 Eric Green
Washington University School of Medicine
 Richard Myers
Stanford University School of Medicine

Editorial Board
 Rakesh Anand
Zeneca Pharmaceuticals
 Johannes Bos
University of Utrecht
 Anne Bowcock
University of Texas Southwestern Medical Center
 Jeff Chamberlain
University of Michigan Medical School
 Nicholas Dracopoli
National Center for Human Genome Research
 Joe Ecker
University of Pennsylvania
 Ray Fenwick
Dianon Systems, Inc.
 Kenshi Hayashi
National Cancer Center Research Institute, Tokyo

Bernhard Horsthemke
University of Essen
 Pieter de Jong
Lawrence Livermore National Laboratory
 David Kemp
Menzies School of Health Research
 Mary-Claire King
University of California, Berkeley
 Ulf Landegren
University of Uppsala Medical Center
 Doug Marchuk
University of Michigan Medical School
 Chris Mathew

UMDS Guy's & St. Thomas' Medical and Dental School
 David Nelson
Baylor College of Medicine

Debbie Nickerson
University of Washington School of Medicine
 Svante Pääbo
University of Munich
 Lena Peltonen
University of Helsinki
 Eric Spitzer
SUNY at Stony Brook
 Lap-Chee Tsui
Hospital for Sick Children, Toronto
 Rick Wilson

Washington University School of Medicine
 Steven Wolinsky
Northwestern University School of Medicine
 Maria Zapp
University of Massachusetts Medical Center

Managing Editor
 Judy Cuddihy
Cold Spring Harbor Laboratory Press

Contents
December, 1993
Volume 3, Number 3

REVIEW

141 Isolating Vector-Insert Junctions from Yeast Artificial Chromosomes
 Gary A. Silverman

RESEARCH

151 Photochemical Sterilization of 3SR Reactions
 John Versailles, Kelly Berckhan, Soumitra S. Ghosh, and Eoin Fahy

159 Evaluation of Running Conditions for SSCP Analysis: Application of SSCP for Detection of Point Mutations in the LDL Receptor Gene
 Trond P. Leren, Kari Solbeg, Olaug K. Rødningen, Leiv Ose, Serena Tonstad, and Kåre Berg

163 Quantitation of *c-myc* Gene Amplification by a Competitive PCR Assay System
 Seth P. Harlow and Carleton C. Stewart

169 Quantitative PCR for Hepatitis B Virus with Colorimetric Detection
 Päivi Lehtovaara, Mikko Uusi-Oukari, Petri Buchert, Matti Laaksonen, Marina Bengtström, and Marjut Ranki

176 Quantitative Aspects of the Mutant Analysis by PCR and Restriction Enzyme Cleavage (MAPREC)
 Zhengbin Lu, Monica P. Douthitt, Rolf E. Taffs, Yuxin Ran, Laurie P. Norwood, and Konstantin M. Chumakov

181 Effect of Amplicon Size on PCR Detection of Bacteria Exposed to Chlorine
 Shawn C. McCarty and Ronald M. Atlas

186 Effect of PCR Conditions on the Formation of Heteroduplex and Single-stranded DNA Products in the Amplification of Bacterial Ribosomal DNA Spacer Regions
 Mark A. Jensen and Neil Straus

195 Selective Amplification of DNA Fragments Coding for the G Domain of Factors IF2 and EF-Tu, Two G Proteins from the Myxobacterium *Stigmatella aurantiaca*
 L. Bremaud, B. Derijard, and Y. Cenatiempo

200 Genotyping Ocular Strains of *Chlamydia trachomatis* by Single-tube Nested PCR
 Suphat Pecharatana, Mark A. Pickett, Peter J. Watt, and Michael E. Ward

TECHNICAL TIPS

205 PCR-mediated Detection of Heteroplasmy in Maize Mitochondrial Mutants
Joachim R. Marienfeld, Jianying Gu, and Kathleen J. Newton

(continued)

Editorial Staff

Nadine Dumser, Technical Editor
Valerie Nicolette, Production Editor
Doris Lawrence, Secretary
Jim Suddaby, Design

Advertising
Nancy Kuhle

208 Spermidine Facilitates PCR Amplification of Taget DNA
Ching-Yi Wan and Thea A. Wilkins

211 PCR Protocol for DNA Recovery from Spurr's-Embedded Muscle Biopsies
Francesca Capon, Stefania Lo Cicero, Giuseppe Novelli, and Bruno Dallapiccola

213 **Erratum**

Manual Supplement

215 **Getting Started: A PCR Primer**

217 **Contents**