INFORMATION FOR CONTRIBUTORS (1996)

Aims and Scope
LEARNING & MEMORY welcomes high-quality original research papers on all types of learning, memory, and their models, conducted in humans and in vertebrate and invertebrate species with the following approaches: behavior, cognition, neuroanatomy, neurophysiology, neurotransmission, biochemistry, genetics, and cell and molecular biology. The journal will also publish review articles, theoretical papers, and short communications, including comments on published papers and the authors’ responses.

Submission of Papers
The journal accepts papers that present original unpublished research. Submission to the journal implies that a paper is not currently being considered for another journal or book. Closely related papers that are in press elsewhere or that have been submitted elsewhere should be included with the submitted manuscript. It is also understood that researchers who submit papers to this journal are prepared to make available to qualified academic researchers materials needed to duplicate their research results. Authors should submit nucleic acid and protein sequences to the appropriate data bank. Questions regarding papers should be directed to Judy Cuddihy, Managing Editor, at Cold Spring Harbor Laboratory (516-367-8492).

Manuscripts should be submitted to:
Judy Cuddihy, Managing Editor
Learning & Memory
Cold Spring Harbor Laboratory
1 Bungtown Road
Cold Spring Harbor, New York 11724

Manuscript Preparation
1. General. Papers should be as concise as possible. The entire paper (including tables, figure legends, references, footnotes) should be typed double-spaced on standard-sized European or American bond paper with at least 1-in (2.5 cm) margins on all four sides. Computer printouts should be of letter quality, and should use a computer typeface of at least 11 point size. Each page should be labeled with the first author’s name and a page number. Five copies should be submitted; at least four of these copies should have original art. A cover letter should include: (a) name, address, and telephone and FAX numbers of author responsible for correspondence regarding the manuscript; (b) statement that the manuscript has been seen and approved by all listed authors; (c) specific requirements for reproduction of art; and (d) status of any permissions needed. Five copies of the manuscript should be submitted for use by referees and editors.

2. Submitted Papers on Computer Discs. Publication can be speeded up if accepted papers are supplied on 3 1/2- or 5 1/4-inch floppy discs. We can accept IBM PC, Macintosh, or compatible, formats. Please supply the manuscript on the disc as a “text” or ASCII file, if possible. Please indicate on the disc: computer brand name, whether the disc contains a text or word-processing file (name of software), and the disc format. Five hard copy versions should also be submitted for use by referees and editors.

3. Forms. The following order is preferred: Title page, Abstract, Introduction, Methods, Results, Discussion, Acknowledgments, References, Tables, Figure legends. The Title page should include: (a) title; (b) all authors’ full names; (c) all affiliations clearly indicated; (d) a shortened version of the title for use as a running head (maximum 45 characters); and (e) key words (up to 6) for use in indexing. The Abstract should be about 200 words long and should summarize the aim of the report, the methodological approach, and the significance of the results. Methods should be detailed enough to allow any qualified researcher to duplicate the results.

4. Figures and Legends. Five sets of figures should be supplied as high-quality glossy prints. Half-tones should be high-contrast, particularly in the case of gels, for the best reproduction. Line drawings, graphs, charts, and chemical formulae, should be professionally prepared and labeled. Multiple-part figures should be submitted as mounted, camera-ready composites. Authors submitting color figures as essential data for review with manuscripts undertake to pay the publication costs of four-color artwork. Price estimates are supplied upon acceptance of the paper.

The back of each figure should be labeled with the first author’s name, figure number, and an indication of “top.” The figures should be numbered consecutively in the order to which they are referred in the text. The size of the figures will be adjusted to fit the Journal format, therefore please try to keep labels, symbols, and other call-out devices in proportion to the figure size detail. Figure legends should be brief and should not contain methods. Symbols indicated in the figure should be identified in the legend text. If figures are reprinted from another source, permission to reprint is required.

5. Tables. Tabular data should be presented concisely and logically. Tables should be numbered consecutively according to the order cited in the text and each should have a title. Use only horizontal rules and make sure column headings are unambiguous in indicating columns to which they refer. Table legends and footnotes should be included where needed. If tables are reprinted from another source or if data included are from another source, permission to reprint is required.

6. References. References are name/date citations in text; please do not cite by number. Undated citations (unpublished, in preparation, personal communication) should include first initials and last names of authors. Bibliographic information should be supplied in the following order: For Journal articles; Author(s), year, article title, journal title, volume, inclusive page numbers. For books: Author(s), year, chapter title, book title, editor(s)’ names, volume, inclusive page numbers, publisher, city of publication.

7. Proofs. Proofs are considered the final form of the paper and correction can be made only in the case of factual errors. If additional information must be added at this stage, it should be in the form of "Note added in proof," subject to the approval of the editors.

8. Reprints. A reprint order form will be included with the proofs.

To help defray the cost of publication, a charge of $25 per page will be made for publication in Learning & Memory. Authors unable to meet these charges should include a letter of explanation upon acceptance for publication; inability to meet these charges will have no effect on acceptance and publication of submitted papers.
PCR Primer: A Laboratory Manual

Edited by Carl W. Dieffenbach, National Institute of Allergy and Infectious Diseases, Gabriela S. Dwksler, Uniformed Services University of the Health Sciences

From its first-published account in 1985, the polymerase chain reaction has become a standard research tool in a wide range of laboratories. Its impact has been felt in basic molecular biological research, clinical research, forensics, evolutionary studies, and the Human Genome Project. The PCR technique originally conceived by Nobel laureate Kary Mullis has proven to be exceptionally adaptable and has been transformed into a myriad array of methods, each with different applications.

PCR Primer: A Laboratory Manual introduces the complex world of PCR by beginning at an accessible level and then moving to more advanced levels of application. First, the practical requirements for performing PCR and other amplification techniques in the lab are introduced and then the basic aspects of the technique are explained by exploring important issues such as sample preparation, primer design, efficiency, detection of products, and quantitation. Protocols for a wide range of PCR and amplification techniques—each written by an expert investigator—are presented for cloning, sequencing, mutagenesis, library construction and screening, exon trapping, differential display, and expression, and these include RT-PCR, RNA PCR, LCR, multiplex PCR, panhandle PCR, capture PCR, expression PCR, 3' and 5' RACE, in situ PCR, and ligation-mediated PCR. Each protocol is augmented by analysis and troubleshooting sections and complete references.

CONTENTS

Introduction to PCR

Setting Up a PCR Laboratory (C.W. Dieffenbach et al.); A Standard PCR Protocol: Rapid Isolation of DNA and PCR Assay for β-Globin (M.T. Vahey et al.); Enzymatic Control of Carvery Over Contamination in PCR (J.L. Hartley, A. Rashchtian); Ultraviolet Irradiation of Surfaces to Reduce PCR Contamination (R.W. Cone, M.R. Fairfax); Specificity, Efficiency, and Fidelity of the PCR (R.S. Cha, W.G. Thilly); Optimization and Troubleshooting in PCR (K.H. Roux); Long-Distance PCR (O.S. Foor, E.A. Rose)

Sample Preparation

Rapid Preparation of DNA for PCR Amplification with Gene Release™ (E.P. Dawson et al.); PCR Amplification from Paraffin-embedded Tissues: Sample Preparation and the Effects of Fixation (C.E. Greer et al.); RNA Purification (J.J. Adamovicz, W.C. Gause)

Primer Design

General Concepts for PCR Primer Design (C.W. Dieffenbach et al.); Design and Use of Mismatched and Degenerate Primers (S. Kwok et al.); Multiplex PCR (M.C. Edwards, R.A. Gibbs)

Detection of PCR Products: Quantitation and Analysis

Immunological Detection of PCR Products (J.G. Lazar); Quantitative PCR Using the AmpliSensor® Assay (C.N. Wang); DNA Fingerprinting Using Arbitrarily Primed PCR (M. McClelland, J. Welsh); RNA Fingerprinting Using Arbitrarily Primed PCR (M. McClelland, J. Welsh); In Situ PCR (G.J. Nuovo); Single-strand Conformational Polymorphism (K. Fujita, J. Silver); Genetic Subtyping of Human Immunodeficiency Virus Using a Heteroduplex Mobility Assay (E.L. Delwart et al.); Sensitive and Fast Mutation Detection by Solid-phase Chemical Cleavage (L.L. Hansen et al.)

PCR Starting from RNA

Use of the PCR to Quantitate Relative Differences in Gene Expression (W.C. Gause, J.J. Adamovicz); Quantitative Liquid Hybridization PCR Method Employing Storage Phosphor Technology (M.T. Vahey, M.T. Wong); Use of the SNuPE Assay to Quantitate Allele-specific Sequences Differing by a Single Nucleotide (J. Singer-Sam); Trapping Internal and 3'-Terminal Exons (P.E. Nisson et al.); Expression-PCR (D.E. Lanar, K.C. Kain)

PCR-mediated Cloning

Rapid Amplification of cDNA Ends (M.A. Frohman); Panhandle PCR (D.H. Jones); Detection and Identification of Expressed Genes by Differential Display (P. Warthoe et al.); Construction of Subtractive cDNA Library Using Magnetic Beads and PCR (A. Lonneborg et al.); PCR-based Method for Screening DNA Libraries (D.I. Israel); Screening of YAC Libraries with Robotic Support (M.M. Blanchard, V. Nowotny); Phagemid Display Libraries Derived from PCR-immortalized Rearranged Immunoglobulin Genes (H.H. Hogrefe, B. Shopes)

PCR Sequencing

Direct Sequencing of PCR-amplified DNA (V.B. Rao); Cycle Sequencing (K. Kretz et al.)

Cloning of PCR Products

Strategies for Cloning PCR Products (R. Levis); Cloning and Analysis of PCR-generated Fragments (G.L. Costa, M.P. Weiner)

Mutagenesis by PCR

Mutagenic PCR (R.C. Cadwell, G.F. Joyce); PCR Mutagenesis and Recombination In Vivo (D.H. Jones); Mutagenesis and Synthesis of Novel Recombinant Genes Using PCR (A.N. Vallejo et al.); Rapid PCR Site-directed Mutagenesis (M.P. Weiner, G.L. Costa)

Alternative Amplification Technologies

Ligase Chain Reaction (M. Weidmann et al.); Optimization and Characterization of 3SR-based Assays (T.R. Gingeras et al.); One-tube Quantitative HIV-1 RNA NASBA (B. van Gemen et al.)

Appendices

Computer Software for Selecting Primers; Reagents and Equipment

1995, 714 pp., illus., appendices, index
