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Quick Guide to Unit Structure

The standard elements listed below are fully described in the
“Organization of the Manuscript” section of this guide

- Title Page
 - title, author, affiliation, phone/fax/e-mail contacts, key terms, mini-abstract (one sentence is sufficient), disk information*
- Unit Title and Unit Introduction
 - context with regard to chapter; comparison of protocols in unit*
- Basic Protocol(s)
 - Title
 - parallel with other titles in unit; more specific than unit title*
 - Introduction
 - context with regard to unit; summary of steps involved*
 - Equipment and Patient Setup
 - machine type, gradient capabilities, rf coils, auxiliary devices, contrast agents, monitoring equipment and other devices*
 - Sequences, Imaging Protocol
 - sequence types, sequence priority, imaging parameters, expected SNR, expected contrast, total acquisition time*
 - Tables and/or Figures (optional)
 - to illustrate setup or results; may also be included in other sections*
- Alternate and/or Support Protocols (optional)
 - see elements above for Basic Protocol*
- Commentary
 - Background Information
 - theory, discussion of literature, comparison with other methods, anticipated contrast, applications, sequence priority*
 - Critical Parameters
 - Troubleshooting
 - potential artifacts and patient problems, and how to identify and resolve them; may include table summarizing information; see sample (from another Current Protocols Manual) included at the end of this guide*
 - Critical Parameters and Troubleshooting may be combined.*
 - Anticipated Results
- Literature Cited
 - follow Current Protocols style for journals/books described later in this guide*
- Key References with Annotations (optional if literature citation(s) is provided)
- Internet Resources with Annotations (optional)
 - e.g., WWW and FTP sites, listservs, etc., that are of particular interest*

Style Guide for Contributors

Product Information

Current Protocols manuals are 8.5 × 11–inch loose-leaf manuals that are regularly updated. The manuals are organized into **chapters**, each in turn containing a number of units. The **unit** is the major component of the manual and the focus of your contribution: basically, it consists of a series of sequences, i.e., a clinical protocol plus supporting material such as an introduction, listing of necessary equipment, and a commentary. Each chapter will have a separate introduction of its overall content.

Objectives and Audience

Many purchasers of this work will be trained in some of the subjects covered, but many are neither trained nor experienced in all of the procedures described. Representative disciplines whose members will have an interest in this material include, but are not limited to, radiologists, technologists, neurologists, cardiologists, neuroscientists, physicists, and chemists. Therefore, sufficient detail must be provided to permit duplication of the protocols at any site, whatever the disciplinary background or level of sophistication. Thus, for the benefit of the novice, very specific information should be included where it is important to the success of the protocol. It is preferable that you provide too much detail that can be edited at the discretion of the editorial board, rather than not enough detail.

Role of Contributors

The procedure that you provide should be reliable and efficient. It is also important that the technique be appropriate for mainstream clinical or research practice, i.e., that insofar as is feasible your protocol employ equipment and other materials that are in common use and widely available. Some procedures may nevertheless require special equipment or special preparation. (These are to be itemized in the materials list of the protocol according to item 5 below). Your name will be listed in the unit, so that widespread adoption of the procedure will be associated directly with you.

As a contributor, you are responsible for submitting revisions or corrections to your protocol to maintain its accuracy and timeliness. Contact your chapter editor or the Developmental Editor to have your changes scheduled for a future supplement. Feedback will also be solicited from users of the manual with regard to the utility of protocols; suggestions will be screened and forwarded to you for your consideration toward revisions.

Organization of the Manuscript

The outline on the previous page illustrates the organization of the standard protocol unit. Listed below, corresponding to each element in the outline, are descriptive passages of these elements, *in the order in which they should appear in your manuscript*. It is important that you include all the elements described herein (except those listed as optional). Please feel free to contact the Developmental Editor with any questions regarding the format or style of your submission.

1. Title Page. Include name of procedure; a formal abstract of up to 150 words describing the unit and indicating what makes it valuable to readers (to be added as a prepublication announcement to the Current Protocols World Wide Web homepage); author affiliation, phone and fax numbers, and e-mail address; three or more key terms (for indexing purposes); and information about accompanying floppy disk as described below.

This page is not technically part of the unit, but helps us identify your manuscript.

2. Unit Title and Unit Introduction. The unit title succinctly describes the function of the protocol(s) in your unit and should be parallel in construction with the other unit titles of the chapter to ensure the distinctions between the

approaches are clearly evident to readers (refer to the outline of the manual and consult the chapter editor if necessary or see Table of Contents for the book, available at <http://currentprotocols.com>). Define all abbreviations and avoid the use of words such as “method,” “technique,” “procedure,” and “protocol” in the unit title.

The first few sentences of the unit introduction provide a context for the unit (why the protocol is performed and/or how it relates to other units in the chapter). When only one protocol is contained in the unit, the unit introduction then proceeds to summarize the actual steps of the basic protocol. When multiple protocols are presented in the unit, the second portion of the unit introduction indicates the general approach of the methodology involved and briefly names and compares the protocols that are included. Any important topic-specific terminology or abbreviations should also be defined here.

The unit introduction should not be confused with “Background Information” (see item 9 below, “Commentary”), which appears toward the end of a unit; the purpose of the unit introduction is to briefly orient the reader to the protocol steps..

3. Imaging Protocol Title and Introduction. The protocol title is more specific than the unit title; it should describe the approach being used in such a fashion as to differentiate this from other protocols (alternate and support) in the unit. Please note that the titles of all topics in the unit should be parallel in construction and need not repeat key words that appear in the unit title.

The basic protocol introduction summarizes the specific approach for that topic, mentioning important sequences, equipment, patient setup, etc., that are employed. Occasionally a lead-in statement of context may also be appropriate, although this should not duplicate the contextual description in the unit introduction.

4. Imaging Protocol Materials List. Give trade names of auxiliary equipment only if recommending a specific supplier. Provide correct name including capital letters, italics, super- or subscripts, and symbols.

List suppliers only when (1) the particular brand has actually been found to be of superior quality, or (2) the item is difficult to find in the marketplace. Please provide full address and phone/fax numbers for inclusion in the **Suppliers Appendix** (amended yearly).

5. Imaging Protocol Steps and Annotations. The protocol steps should describe the actions performed, employing the **active tense** instead of the passive: e.g., “Connect the outlet of the vacuum flask...” rather than “The outlet of the vacuum flask is connected to...” Additionally, when there are more than 10 steps to a protocol, provide **subheadings** (also in active tense) to clarify the sequence of steps at each major juncture in the experiment; these headings do not affect the consecutive numbering of the protocol steps, but help organize a long protocol.

Useful auxiliary information can be included after some protocol steps (as needed) in the form of italicized **annotations**. These may cover special tips for performing a step successfully, descriptions of *why* a step is performed, emphasis regarding crucial parameters, descriptions of expected results (e.g., appearance of solution), alternate ways to perform the step, cautions regarding hazardous materials or other safety conditions, time considerations, storage information, and theoretical asides.

6. Alternate and/or Support Protocols. **Alternate protocols** are included when the basic protocol you have chosen is inappropriate for certain important applications, or if different materials are widely used in other labs. The format is identical to that described for imaging protocols in part 5.

7. Commentary. A complete commentary section should include at least a few sentences of discussion for each of the categories listed below.

a. Background Information. A brief discussion of the theory and applications of your procedure. Some or all of the following elements could be included in this section:

- why the procedure is performed (historical development, where pertinent);
- the central advantages (and disadvantages) of the technique chosen (with brief description and references for alternative methods);
- comparison among the protocols or comparison with other methods currently in use;
- applications of methods;
- citation of original or useful literature and brief discussion of primary references.

This section is not to be confused with the introduction at the beginning of a unit. The introduction is a practical organizational tool, while Background Information helps the reader to develop an intuitive sense of the experimental imaging protocol and the interpretation of results.

- b. Critical Parameters.** Information that is critical to the success of the experiment, supplementing or repeating comments in the protocols or annotations.
- c. Troubleshooting.** Discussion of the problems that may be encountered at any point in the procedure, including variations from anticipated results with potential solutions. Sometimes itemized in list or tabular form for easy access.

Optionally, the two preceding sections may be combined into one, titled “Critical Parameters and Troubleshooting.”

Critical Parameters and Troubleshooting are among the most popular features of Current Protocols. Remember, the commentary is being pitched to users who absolutely must produce good images and/or interpret them.

- d. Anticipated Results.** A discussion of the yield or other results that can be regularly achieved with this protocol, and/or the range of yields that might result from different applications, experimental conditions, or other departures from the listed protocol.

Even the simplest procedures have results, although they might not be quantifiable. This section should always be included, no matter how short it may be.

8. Literature Cited. Full references to any literature cited in the unit. References in this section should be listed alphabetically according to the following style:

a. Journal article

Baker, R.H. Jr., Suebsaeng, L., Rooney, W., Alecrim, C.C., Dourado, H.V., and Wirth, D.F. 1986. Specific DNA probe for the diagnosis of *P. falciparum* malaria. *Science* 231:1434-1436.

b. Book

Sambrook, J., Fritsch, E.F., and Maniatis, T. 1989. *Molecular Cloning: A Laboratory Manual*, 2nd ed. Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y.

c. Chapter in a book

Matthews, B. 1983. Liposome-mediated delivery of DNA to plant protoplast. *In Handbook of Plant Cell Culture*, Vol. 1: Techniques for propagation and breeding (D.A. Evans, W.R. Sharp, P.V. Ammirato, and Y. Yamada, eds.) pp. 520-540. Macmillan, New York.

All references listed in this section must be cited in the unit or they will be removed. Entries should include the names of all authors. Citations in the text are according to the style “(Smith, 1989; Jones, 1992)” or “as described by Ausubel et al. (1991),” where “et al.” is employed for references with more than two authors.

Government regulations and protocols should be cited as described above at first mention but may thereafter be referred to by number, if applicable: “EPA Method 8080 (EPA, 1992)” ; later, “EPA Method 8080.”

9. Key References with Annotations (Optional). One or more key references should be supplied. (These may, but need not necessarily, be drawn from your literature-cited list.) A key reference might be a seminal journal article, an elucidating review chapter or paper, or an important book. For each one, provide a one-sentence descriptive annotation, signaling to the reader why you consider this reference to be of particular value.

10. Internet Resources with Annotations (Optional). Listing of World Wide Web sites, FTP servers, and the like that are of particular interest or utility to the researcher. For each one, provide a one-sentence descriptive annotation signaling to the reader why you consider this resource to be of particular value.

www.mrimaging.com

Web site for questions about the text Magnetic Resonance Imaging: Physical Principals and Sequence Design.

<http://www.med.harvard.edu/AANLIB/home.html>

The Whole Brain Atlas.

Figures

If appropriate, submit one or more diagrams to the Developmental Editor, illustrating some aspect of the protocol (equipment, flow chart of steps, appearance of gradients, etc.) or a graph of the expected results. Figures of example images are encouraged. Submit hard copy of all figures. If the figures are computer-generated, please also include the files on your diskette; *see the Guidelines for Current Protocols Illustrations and Photographs that follow for details of acceptable image file formats.* If your figures are sufficiently detailed, we may elect to use the original art but may rework the labels to match our type font and style. Noncomputer-generated sketches will be redrawn electronically by our staff artist. Of course, we will confer with you about these options, and you will see the final renderings. *Contact the Developmental Editor if you have questions.*

Photographs, which will print as halftones (glossy prints, not negatives), may be submitted. Be sure to include your name and the figure number on the reverse side of the print.

Halftones and sketches for line drawings should be referred to, e.g., as Figure A7.4.1, Figure A7.4.2, etc., where the first numeral (A7) refers to the chapter number, the second numeral (4) refers to the unit number, and the third numeral (1, 2, 3, etc.) refers to the particular figure being cited. All figures must be cited in the unit. If previously published, cite the original source(s) and provide a copyright permission form (see below).

IMPORTANT: Include corresponding figure legends at the end of your manuscript.

Tables

Tables should be self-explanatory and prepared on separate pages. Include a table number (see numbering system for figures, above), table title, and explanatory footnotes. If previously published, cite the original source(s) and provide a copyright permission form (see below).

Abbreviations, Measurements, and Mathematical Notation

Current Protocols manuals follow the guidelines of the *American Society for Microbiology Style Manual for Journals and Books* (ASM, Washington, D.C., 1991). Please define all standard abbreviations at their first usage and clearly indicate the accepted style (bold, italics, upper- or lower-case, super- or subscript) for names of chemicals, genetic elements, commercial products, etc.

Submission of Manuscript

Manuscript should be double-spaced and submitted with diskette to the Developmental Editor no later than the date specified in your letter of agreement. The address and phone number of the Developmental Editor are listed on the cover page of this guide. Also listed are the addresses and phone numbers of the editorial board members, whom you should contact regarding questions of scientific content or approach.

Revised 9/9/2004

Send a disk copy of the manuscript. Be sure to include the following information with the disk: the type of computer (IBM, Macintosh), the word processing program and version number (e.g., Microsoft Word 97, WordPerfect 8.0), and the file name. *Contact our office if you have questions.* Objects (e.g., figures) should not be embedded in the manuscript files; they should be included on the diskette as separate files.

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Please do not hesitate to contact the Developmental Editor or our offices at any time. We would appreciate any suggestions you might offer.

GENERAL REQUIREMENTS

- ❑ Line drawings (graphs, charts, etc.) should be submitted as high quality, camera-ready prints (either glossy or from a laser printer). Your artwork will not be redrawn.
- ❑ Halftones (photographs and gels) should be submitted as camera-ready, glossy prints.
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- ❑ If the figure requires a KEY (e.g., "◆ morphine, □ dexamethasone, ● nimesulide"), the key should be part of the figure (not the figure caption).
- ❑ PANEL IDENTIFIERS should be HELVETICA medium type (not bold), capital letters (A, B, C, etc.) and should appear in the upper left-hand corner. They should be 4 POINTS LARGER than the labels.
- ❑ Please note, your FIGURE will be REDUCED TO less than FIVE INCHES wide in order to fit the page. At this size, labels should be approximately 9 points and panel identifiers should be approximately 13 points.

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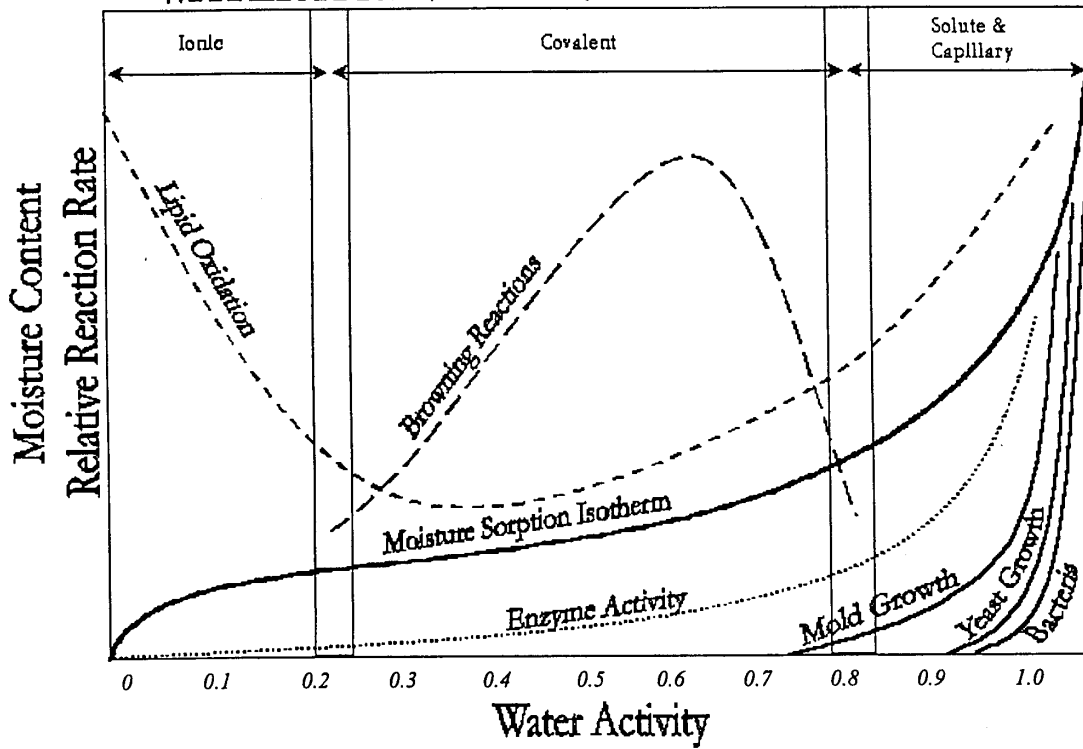
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- ❑ Color camera-ready, glossy copy must be supplied in addition to the electronic file.
- ❑ **Questions?** Please contact your editor or Tom Cannon, Current Protocols Digital Production Manager, 201-748-6110, tcannon@wiley.com

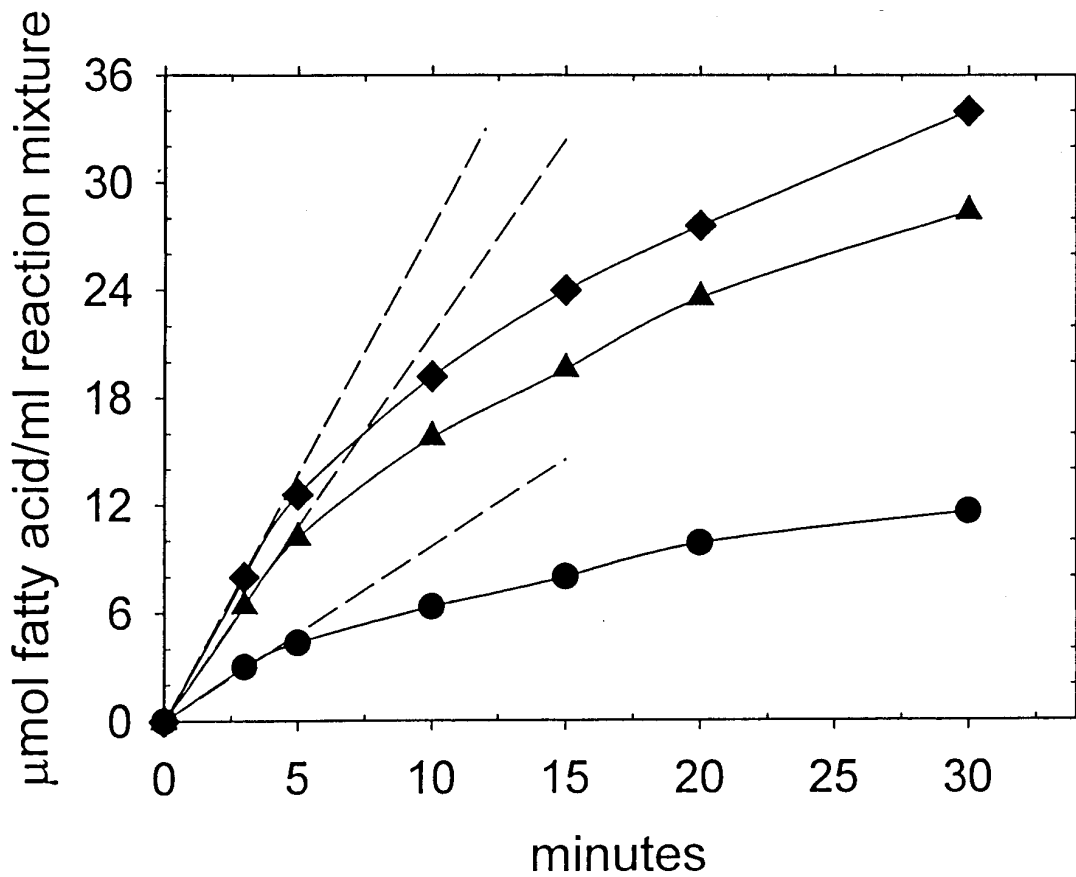
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WATER ACTIVITY - STABILITY DIAGRAM



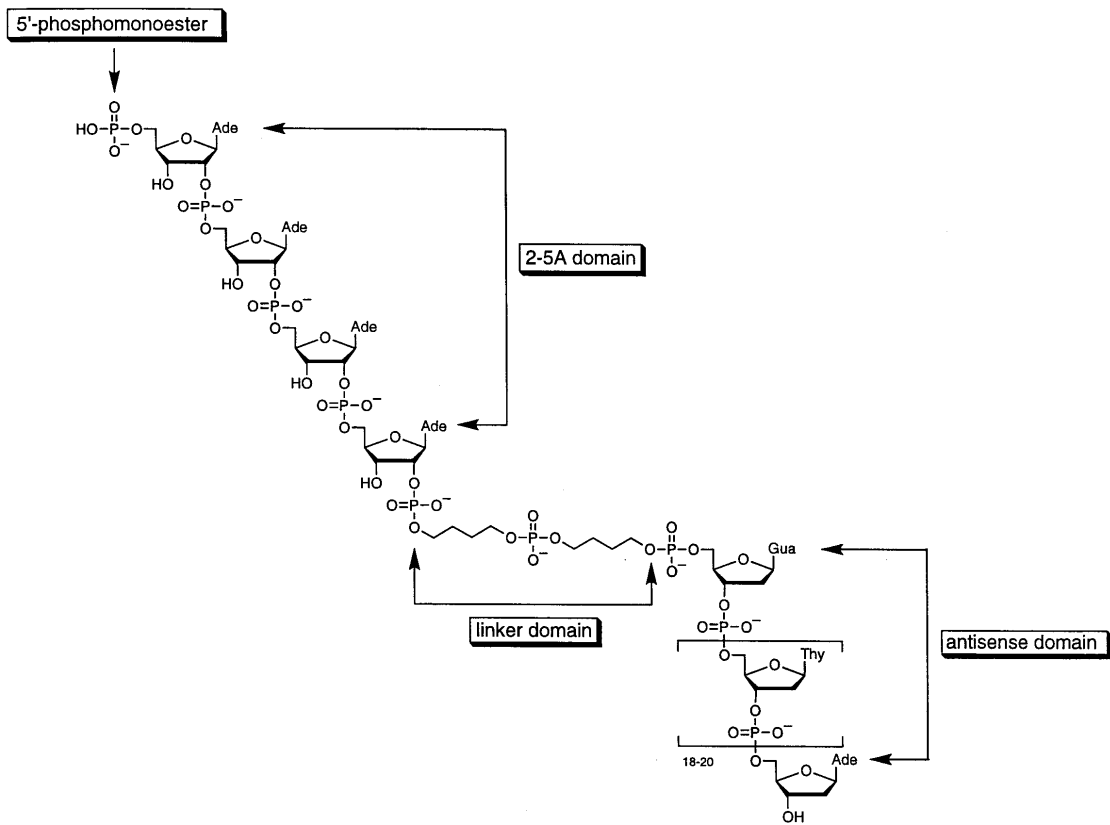
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