Materials & Methods: A Macintosh Hypercard stack for laboratory protocols

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In most laboratories, a number of procedures are performed routinely which are generally not well documented. Often, directions for these procedures exist only as nearly illegible photocopies from laboratory notes, or are stored in computers one to a file, in various incompatible formats and scattered throughout the subdirectories of one or more hard disks. Materials & Methods is a Macintosh Hypercard stack in which laboratory protocols are consolidated in a single, conveniently accessed and maintained file.

Materials & Methods consists of a series of 'cards', each of which contains the text of a single protocol contained within a scrolling text field (Figure 1). Control of the stack is through the standard Hypercard menubar (calls to Hypercard are intercepted by the program as required) and a series of stack-specific icons. The text of any protocol is freely editable, and protocols are easily added or removed. Text files can be imported, and existing protocols can be transferred to other applications via the clipboard, or as exported text files. Protocols are accessible through a 'Choose card' dialog box which presents a scrolling list of the available protocols. This list is automatically maintained as protocol cards are added or removed.

Materials & Methods is written in Hypertalk version 2.0, and requires version 2.0 of Hypercard, which in turn requires at least a Macintosh Plus, 1 Mbyte of RAM, the Macintosh operating system version 6.0.5, and preferably a hard disk drive. Materials & Methods is distributed with a large number of protocols describing techniques in molecular biology compiled by the author. The program is available by anonymous FTP from iubio.bio.indiana.edu, by E-mail from the author at brownjw@iubacs (Bitnet), or on floppy disk (enclose a single 800 K disk) free of charge on written request to the author.

Fig. 1. Materials & Methods user interface. An example procedure card is shown, which describes a generalized assay for RNA polymerase activity. Control of the Materials & Methods stack is through the standard Hypercard menubar and the stack-specific icons on the right of the window.

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