

SOFTWARE SURVEY SECTION

Editor's Note: The following Software Descriptions have been submitted by our readers in response to our call for an open exchange of information on software programs. They are offered without review or comment to provide a rapidly published, easily accessible avenue of communication. Other readers with relevant software packages are invited to complete and submit a Software Description Form (found at the end of this section).

Software package EJCCO-027-S88 AUTOIBLIO

Contributor: J.R. Florini, Syracuse University, Department of Biology, Syracuse, NY 13210

Brief description: AUTOIBLIO stores references and enables their selection, recall and printing in required formats. You can create your own database of literature references and automatically incorporate those cited in your papers in the bibliography listing. AUTOIBLIO Modules are as follows:

FindCite searches your manuscript disk and prepares alphabetized or number-order lists of references which it finds cited as "name, year" or "name(year)" in the text. It can read Text and ASCII files and also text prepared with Microsoft Word. The lists are stored on disks as a Text file and can be edited by wordprocessors.

MakeBiblio prepares the final bibliography in the format required by any chosen journal. You can create formulas to suit your own requirements. The bibliography is stored on disk as a text file and can be incorporated directly into a paper with a wordprocessor. You can store on disk the formats required by your favorite journals.

EditRef prepares the database of references. It can cope with authors who write several papers each year, and with book references. References can be of any size and you can move records from one file to another. There is a search facility enabling you to find references containing any given term, author, year, etc. in your database.

Potential users: Scientists and other authors.

Fields of interest: Bibliographic storage.

- § This application program in the area of bibliographic storage and retrieval has been developed for Apple Macintosh. It is available on 3-1/2" floppy diskette. Required memory is 512K.
- § Distributed by Biosoft.
- § The minimum hardware configuration required is two, single-sided 400K drives or one double-sided (800K) drive. No user training is required. There is extensive external documentation. Source code not available.
- § The package is fully operational. It has been in use at 50 sites for approximately 2 months. The contributor is available for user inquiries.

Software package EJCCO-028-S88

Enzyme Kinetics Program

Contributors: Eric Dahmer, Ph.D., Janina Kears, M.Ed., State University of New York, Department of Biochemistry, 102 Cary Hall, Buffalo, NY 14214

Brief description: The Enzyme Kinetics package consists of four tutorial diskettes, a simulation diskette and a utilities diskette. It has served as a comprehensive enzyme kinetics instructional package for an undergraduate biochemistry laboratory. The tutorial programs provide the student with a comprehensive review of the assumptions, definitions, equations, and derivations associated with basic enzyme kinetics (Michaelis Menten equation, linearizations, simple inhibition and inactivation). The lessons include graphic illustrations of enzyme mechanisms and show how experimental conditions and linearization affect the results of a typical experiment. Challenging questions are distributed throughout the program to maintain student interest. The Kinetics Stimulation programs challenge the student to select appropriate substrate and inhibitor concentration ranges for various enzymes, generate the corresponding experimental data, fit the Michaelis Menten equation to the simulated data and view the numerical and graphical experimental results. The student must estimate kinetic parameters (K_m , V_{max} , K_i) and identify the type of inhibition. The Kinetics Utilities programs enable the student to fit their own data to three different equations: 1) Michaelis - Menten; 2) Michaelis Menten linear transformations, and 3) simple enzyme inactivation. Input consists of experimental enzyme velocities, substrate concentrations, and initial conditions. Output includes optimal parameter estimates, standard errors, and graphs.

Potential users: Undergraduate/graduate students, lab technicians.

Fields of interest: Enzyme kinetics, biochemistry, biology, chemistry.

§ This utility program in the area of enzyme kinetics, biochemistry, biology, chemistry has been developed for Apple II/e/+ in Superpilot, BASIC to run under DOS 3.3. It is available on 5-1/4", single-sided, single-density floppy diskette. Required memory is 64K.

§ Distributed by contributors.

§ There is minimal self-documentation. Source code not available.

§ Design is complete. It has been in use at 2 sites for approximately 3 years. The contributors are available for user inquiries.

Software package EJCCO-029-S88

Chromatography Program

Contributors: Eric Dahmer, Ph.D., Janina Kears, M.Ed., State University of New York, Department of Biochemistry, 102 Cary Hall, Buffalo, NY 14214

Brief description: The Chromatography package consists of five tutorial diskettes and a simulation diskette. It has served as a comprehensive chromatography package for an undergraduate biochemistry laboratory. The first tutorial program provides the student with a comprehensive review of the terminology, definitions and basic theory of chromatographic separation. The next three tutorials, Molecular Sieve, Ion Exchange, and Affinity verbally and graphically demonstrate these types of separations. Animations of the theory and experimental procedure bring the lessons to life. Experimental optimization of parameters (i.e. column length, gel grade, flow rate, ligand affinity) is stressed and challenging questions are interspersed throughout the lessons to maintain student interest. The final tutorial describes the acquisition and analysis of chromatographic data, including A/D conversion and computer analysis. The Chromatography Simulation program is designed to demonstrate how experimental design decisions affect the speed, resolution and capacity of various chromatographic separations. The student is challenged to select

experimental parameters with three goals in mind: 1) separate the proteins in a moderate amount of time (two hours or less), 2) achieve good resolution and capacity, and 3) maintain the proteins in an active state. A successful separation will show a distinct peak for each protein.

Potential users: Undergraduate/graduate students, lab technicians.

Fields of interest: Chromatography, biochemistry, biology.

§ This utility program in the area of chromatography/biochemistry/biology has been developed for Apple II/e/+ in Superpilot, BASIC to run under DOS 3.3. It is available on 5-1/4", single-sided, single-density floppy diskette. Required memory is 64K.

§ Distributed by contributors.

§ There is minimal self-documentation. Source code not available.

§ Design is complete. It has been in use at 2 sites for approximately 3 years. The contributors are available for user inquiries.

Software package EJCCO-030-S88

Meditext Interactive Learning Programs in
the Basic Healthcare Sciences

Contributor: Interactive Teleducation Corporation, Ironstone Building, B-11,
Medford, NJ 08055

Brief description: The Meditext programs in the basic healthcare sciences provide a comprehensive review of course material at the national board level. Areas covered include anatomy, histology, embryology, neuroanatomy, physiology, biochemistry, microbiology, pathology, pharmacology and medical psychology. End users would include students of medicine, dentistry, physical therapy, nursing, dental hygiene, etc., along with candidates for FMGEMS, MSKIP, FLEX, etc. A realistic test environment is created allowing the learner to skip questions, receive tutorial information regarding missed questions and exit the program at any time, receiving their score(s) and time used per question. Missed questions can be reviewed or printed. The programs are designed to be used by a person with no prior computer experience. When a program is chosen, the database is randomized, thereby creating a different exam each time used. The learner may work at his/her own pace, and learn in the interactive mode. The programs are effective when used with courses as they are currently being taken, and as a comprehensive review. For institutions, an authoring environment is available which gives an individual professor the capability of contributing to the database, creating responses to missed questions, interfacing videodisc, CD-ROM, and electronic imaging to their own tutorials. Consulting available for program development.

Most programs are priced at \$69.95; \$499.95 for complete series. Demonstration disk is available for \$25.00, which is refundable or applicable to purchase.

Potential users: Students and professors.

Fields of interest: Anatomy, histology, neuroanatomy, embryology, physiology, biochemistry, microbiology, pathology, pharmacology, medical psychology.

§ This review/tutorial program has been developed for IBM compatible computers. It is available on 3-1/2" and 5-1/4", double-density, double-sided floppy diskette. Required memory is 360K.

§ Distributed by contributor.

§ It is self-documenting/menu-driven. Source code not available.

§ The package is fully operational. It has been in use at 10 sites for approximately 6 months. The contributor is available for user inquiries.

Software package EJCCO-031-S88

TAG Software Development System

Contributor: Scott Neufeld, Neu Software, 6 Lake Road, Peekskill, NY 10566

Brief description: TAG is a language for the Macintosh family of computers that is specific for presentations or tutorials. Programs can be written in TAG as if you were talking to another person--you can type in complete sentences. Also, through the use of editors, code is created that can be used in the programming via an easy linking command. All files are interrelational (i.e., can be accessed from any program you create). TAG specializes in the manipulation of text and graphics. Two editors available include the Slideshow Editor and the PICBase Editor. The former allows you to present slideshows using pictures created using any PAINT program, and a timing option allows you to create a pictorial/textual database. For example: a picture of a human face is shown on the screen. The user clicks the mouse at the eye, and information pertaining to the eye is displayed. The language is extremely easy to use and is especially ideal for novice programmers to create professional presentations or tutorials.

Price is \$ 195. Demonstration disk is available at \$10 (good toward purchase price).

Potential users: Programmers; presentation personnel; educators, more.

Fields of interest: Many.

§ This language in the area of presentation/tutorials has been developed for the Macintosh family of computers in Compiled code. It is available on 3-1/2", single- and dual-sided, double-density floppy diskettes. Required memory is 512K minimum.

§ Distributed by contributor.

§ The minimum hardware configuration required is any Macintosh. No user training is required. It is self-documenting with extensive external documentation. Source code not available.

§ Design is complete. The contributor would welcome collaboration. It has been in use at 6 sites for several months. The contributor is available for user inquiries.

Software package EJCCO-032-S88

MedUSA version 1.3 - Medical Usage of Scientific Algorithms

Contributor: Dr. Peter Varkonyi, SCIAN Software, Inc., 121 Kennedy Avenue, Toronto, Ontario M6S 2X8, Canada

Brief description: MedUSA is a program designed to aid pharmacological laboratories and medical departments in the measurement, evaluation and documentation of the pharmacological and pharmacokinetic behavior of drugs and other chemicals. MedUSA provides a wide range of features from a simple graphic representation to a more sophisticated analysis satisfying the needs of both less experienced and of more advanced users.

MedUSA is an interactive, menu-driven and highly user-friendly program. The data entry and correction from the keyboard are facilitated by a built-in data editor, and the data can be loaded from or saved in file. The output can be obtained on the screen and/or as diskfile or hardcopy, and a previous evaluation can be continued, reviewed on screen, and printed out by recalling from file.

MedUSA contains the 16 most frequently applied pharmacokinetic and dose response models used to estimate and simulate the most important characteristics of experiments by means of nonlinear regression. The initial parameter estimates are provided by MedUSA automatically, and the evaluation includes the approximation of the standard deviation and correlation matrix of parameter estimates.

Potential users: Pharmacologists.

Fields of interest: Pharmacokinetics, dose-response relations.

§ This application program in the area of pharmacology has been developed for IBM PC and compatibles in PASCAL to run under MS-DOS 2.0 or above. It is available on 5-1/4", dual-sided floppy diskette. Required memory is 264K.

§ Distributed by SCIAN Software Inc.

§ The minimum hardware configuration required is CGA, graphic monitor, printer. No user training is required. It is self-documenting with extensive external documentation. Source code not available.

§ The package is fully operational. The contributor would welcome collaboration. It has been in use at 6 sites for approximately 1 year. The contributor is available for user inquiries.

Software package EJCC0-033-S88

3DIGIT

Contributors: Drs. B.P. Hayes and F.W. Fitzke, Department of Visual Science, Institute of Ophthalmology, Judd Street, London WC1H 9QS, England

Brief description: 3DIGIT (£30 for BBC micro, £50 for Acorn Archimedes) is used for three-dimensional reconstruction of serial or semi-serial sections or contours traced on a digitiser tablet with the DIGIT software (see Comput. Biol. Med. 17, No. 3, IV). Multiple sections are combined into disk data files and may then be realigned on the monitor screen, if necessary. 3D views are reconstructed on the screen with zooming, xy movement, and rotation around the X, Y and Z axes. The foreground may be shown as solid lines and the background dotted. 3D views may be saved to disk, printed out, or labelled and shaded with a digitiser art program. Rapid animation of these views is possible on the BBC Master or Acorn Archimedes computers, giving the appearance of real time rotation. Measurements of surface area and volume may be made of the reconstructed object, and volume density of cells or particles may also be found.

Potential users: Biologists, medical sciences, materials science, geographers.

Fields of interest: Microscopy, map measurement, morphometry, electron microscopy.

§ This application program in the area of image analysis has been developed for BBC Micro, Acorn Archimedes in BBC BASIC/Machine Code to run under OS1-2 and later. It is available on 3-1/2" and 5-1/4", single-sided, single-density floppy diskette. Required memory is 32K.

§ Distributed by Institute of Ophthalmology.

§ The minimum hardware configuration required is Grafpad or Summagraphics Bit Pad 2 Digitiser Tablet. No user training is required. There is extensive external documentation. Source code not available.

§ The package is fully operational. It has been in use at 6 sites for approximately 1 year. The contributor is available for user inquiries.

Software package EJCCO-034-S87

Sci-Mate Software System V2.0

Contributor: Dan Giancaterino, I.S.I., 3501 Market Street, Philadelphia, PA 19104

Brief description: The Sci-Mate manager builds files of text downloaded from online databases or entered at the keyboard. The Sci-Mate Editor formats bibliographic references in any of fifteen recognized styles or in any style you design yourself. The Sci-Mate Searcher is a gateway to databases on BRS, DIALOG, NLM and ORBIT.

Potential users: Any professional who needs to manage information.

- § This application program in the area of text management has been developed for IBM PC/XT/AT and compatibles to run under MS-DOS 2.0 and above. It is available on 5-1/4", dual-sided, double-density floppy diskette. Required memory is 256K.
- § Distributed by I.S.I.
- § The minimum hardware configuration required is two floppy disk drives or hard disk. No user training is required. There is extensive external documentation. Source code not available.
- § The package is fully operational. It has been in use at thousands of sites for approximately 3-1/2 years. The contributor is available for user inquiries.

Software package EJCCO-036-S87

RLAB II

Contributor: Barry Giordano, Nelson Analytical, Inc., 205 Robin Road, Paramus, NJ 07652

Brief description: Based on RBase System V relational database. RLAB is a fully functional Laboratory Information Management System (LIMS). Status reporting, sample tracking, summary reporting, ad hoc inquiries are standard. Forms and reports easily changed through RBase's Reports and Forms Express. Automatic entry of chromatography results from Nelson chromatography software is standard. RLAB is supported on IBM Token-Ring and PC Networks.

Potential users: Testing labs, pharmaceutical QA and R&D.

Fields of interest: Analytical chemistry.

- § This application program in the area of analytical labs has been developed for IBM PC/XT and compatibles in RBase System V language to run under DOS 2.2 or later. It is available on 5-1/4", dual-sided, high-density, floppy diskette. Required memory is 640K.
- § Distributed by Nelson Analytical, Inc.
- § The minimum hardware configuration required is hard disk. User training is required. There is extensive external documentation. Source code is available.
- § The package is fully operational. It has been in use at 50+ sites for approximately one year. The contributor is available for user inquiries.

JOURNAL NAME EUROPEAN JOURNAL OF CANCER & CLINICAL ONCOLOGYP E R G A M O N P R E S S
SOFTWARE DESCRIPTION FORM

Title of software program: _____

Type of program: ☐ Application ☐ Utility ☐ Other _____Category: _____ (ie. Psychological assessment,
statistics, thermodynamics, etc.)

Developed for (name of computer/s): _____

in (language/s): _____

to run under (operating system): _____

available on: ☐ Floppy disk/diskette. Specify:Size _____ Density _____ ☐ Single-sided ☐ Dual-sided☐ Magnetic tape. Specify:

Size _____ Density _____ Character set _____

Hardware required: _____

Memory required: _____ User training required: ☐ Yes ☐ NoDocumentation: ☐ None ☐ Minimal ☐ Self-documenting
☐ Extensive external documentationSource code available: ☐ Yes ☐ NoStage of development: ☐ Design complete ☐ Coding complete
☐ Fully operational ☐ Collaboration welcomedIs program in use? ☐ Yes ☐ No How long? _____ How many sites? _____Is the contributor available for user inquiries: ☐ Yes ☐ No

Distributed by: _____

Cost of program: _____

Demonstration disk available? ☐ Yes ☐ No Cost: _____

(continued)

RETURN COMPLETED FORM TO:

Professor H. Tagnon
Institut Jules Bordet
Centre des Tumeurs
1 rue Heger-Bordet
B-1000 Bruxelles, Belgium

[This Software Description Form may be photocopied without permission]

Description of what software does [maximum: 200 words]:

Potential users: _____

Field/s of interest: _____

#

Name of contributor: _____

Institution: _____

Address: _____

Telephone number: _____

#

Reference No. [Assigned by Journal Editor] _____

[The information below is not for publication.]

Would you like to have your program:

Reviewed? [] Yes [] No [] Not at this time
Marketed and distributed? [] Yes [] No [] Not at this time