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-017-S88   CARDIOLAB

Contributor: Dr. I. Hughes, PIDATA, Leeds, United Kingdom

Brief description: CARDIOLAB costs less than a single dog yet can be used
repeatedly to simulate the chart recorder outputs of experiments on
anaesthetized (normal or reserpinized) animals and pithed animals. The
simulated heart rate and blood pressure traces can be made on almost any
printer. The program allows "administration" of many agonist and antagonist
drugs. CARDIOLAB can also mimic stimulation of vagal and sympathetic cardiac
nerves. Effects of blockers "wear off" at a rate corresponding to their
$t_{1/2}$. "Overdoses" with agonists or blockers will "kill" the preparation.
Responses are subject to "biological variation" and are influenced by cardiac
compensatory reflexes if appropriate. Tachyphylaxis is seen with relevant
agonists. CARDIOLAB simulates the slow deterioration of a preparation which
may "die" unexpectedly after six hours of "preparation time" (responses each
take about 10s to be printed but represent about 3 minutes of "preparation
time"). CARDIOLAB can provide "unknown" drugs for characterization by
students.

Potential users: Students.
Fields of interest: Physiology/pharmacology/medical.

§ This application program in the area of pharmacology/physiology/medical
  has been developed for IBM PC, Apple II, BBC B. It is available on 5-1/4",
  double-sided, double-density floppy diskette. Required memory is 128K
  (IBM PC), 48K (Apple II).
§ Distributed by Elsevier-Biosoft.
§ The minimum hardware configuration required is a printer. No user
  training is required. There is extensive external documentation. Source
  code is available.
§ The package is fully operational. The publisher is available for user
  inquiries.

Software package EJCCO-018-S88   ENZFITTER

Contributor: Dr. R.J. Leatherbarrow, Imperial College of Science and Technology, London, United Kingdom

Brief description: ENZFITTER fits two sets of experimental data by non-linear regression (Marquart algorithm) to one of several different equations provided. If the equation required is not on the list provided, you can add your own with the easy-to-use integrated equation editor. The results are presented in tabular and graphic form, with a presentation quality screen-dump facility available for Epsom-compatible printers and the HP laserjet. Extra sets of data and transformed/derivative plots of the same data can be shown on screen at the same time. You can draw one graph text to another for comparison. To distinguish data sets, you can select a variety of symbols, semicontinuous lines and add your own labels (including some Greek alphabet characters). ENZFITTER can be set up to perform weighting (removal of outlying data) and to run in batch mode (performing several analyses automatically, without user intervention). All results can be sent to a printer. The program provides sophisticated entry and editing facilities for data and it will also read ASCII files. ENZFITTER is presented in menu form, with windows and context-sensitive help. It supports Hercules, color and enhanced graphics cards.

Potential users: Scientists.
Fields of interest: Enzyme kinetics/chemistry/biochemistry.

§ This application program in the area of non-linear regression has been developed for IBM PC in Turbo Pascal to run under DOS 2.0+. It is available on 5-1/4", dual-sided, double-density floppy diskette. Required memory is 384K.
§ Distributed by Elsevier-Biosoft.
§ 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 60+ sites for approximately 1 month. The publisher is available for user inquiries.

Software package EJCCO-019-S88   DR. MEMORY

Contributor: Charles B. Owen, M.D., Clinical Resource Systems, 148 South Bowlen, Suite 699, Beaumont, TX 77707

Brief description: DR. MEMORY is a patient tracking and quality assurance system for hospital emergency departments. Using color-coded status screens, patient data is displayed throughout the department. Displays indicate physician, time in department, and time for response to lab and x-ray orders. By tracking the patient from registration to discharge, DR. MEMORY provides for extensive data collection for quality assurance, analysis, time-motion studies and history. Transcription module included.

Potential users: Hospital emergency department.
Fields of interest: ER care, patient tracking.

§ This application program in the area of patient tracking has been developed for 80386-based PC's in C to run under UNIX, XENIX. Required memory is 4MB (included in system).
§ Distributed by Clinical Resource Systems, Inc.
§ User training is required. Source code not available.
§ The package is fully operational. It is currently in use at 1 site. The contributor is available for user inquiries.

Software package EJCCO-020-S88   CONSULTA

Contributor: Felipe A. Vidal, Imdiamex Espana S.L., P.O. Box 62.022, 28080 Madrid, Spain

Brief description: CONSULTA keeps track of your active and inactive patients--their medical diagnoses and treatments. It provides many management and control features: improves office efficiency and control, increases cash flow, enhances office management, improves patient care, and enriches the job of your office staff. CONSULTA performs equally well in practices both large and small (from clinics to one-doctor offices) and for different specialists.

Potential users: M.D.'s, clinics and offices.

§ This application program in the area of medical management has been developed for IBM PC and compatibles to run under MS-DOS ver. 2.2 and higher. It is available on 5-1/4", dual-sided, double-density floppy diskette. Required memory is 512K.
§ The minimum hardware configuration required is one floppy disk drive and one hard disk. No user training is required. Source code not available.
§ The package is complete and fully operational. The contributor is available for user inquiries.

Software package EJCCO-021-S88   TESTGEN

Contributor: Dr. Marcy F. Petrini, Pulmonary Division, University of Mississippi Medical Center, Jackson, MS 39216-4505

Brief description: TESTGEN is a test generator which can also quiz students. It allows multiple choice, true and false, and flex questions to be entered via the keyboard or from an already existing ASCII file; questions can be added, edited, and deleted without leaving a "hole." The program is protected by a password, without which a student can access only the portion of the software that quizzes. The program generates exams by choosing unique questions randomly; exams can be stored, appended, edited and printed from within the program or can be stored in ASCII files for manipulation outside the program. In the quizzing section, questions are posed, also randomly and uniquely; the student has two chances to answer correctly (except, of course, for the true and false questions); if both answers are wrong, the correct answer is provided. The student is timed for each individual question and for the entire session. At the end, the student is given a score of the first-time correct answers and has the chance to be retested on the missed questions. The printscreen feature of the PC is disabled so the students cannot obtain in writing the entire database of questions.

Potential users: Teachers and students.
Fields of interest: Many.

§ This application program in the area of teaching/testing has been developed for IBM PC's and compatibles in Turbo Pascal to run under DOS. It is available on 3-1/2" and 5-1/4 ", dual-sided, double-density floppy diskettes. Required memory is 64K.
§ Distributed by contributor.
§ No user training is required. There is minimal self-documentation. Source code not available.
§ The package is fully operational. It has been in use by various faculty members and first-year medical students at UMMC for approximately 2-1/2 years. The contributor is available for user inquiries.

Software package EJCCO-022-S88   bibIX

Contributor: R.P.L. Rodgers, School of Pharmacy, UCSF, Box 1204, Laurel
Heights Campus, Suite 102, 3333 California Street, San Francisco, CA 94118

Brief description: The *bibIX* suite is a collection of twelve C programs
and Bourne shell command scripts which allow the user to either acquire
bibliographic data from an online service or to make entries manually; data
is entered into a local ASCII database. The local database may then be used
for searches, or entries may be automatically extracted and inserted into
formatted documents. Journal titles and their formal ANSI abbreviations may
be viewed, and full titles automatically abbreviated. *The bibIX* suite
includes a preprocessor for the powerful *n/troff* family of computer
phototypesetting programs, and will therefore be primarily of interest to
users of these UNIX-based systems (the current release emphasizes formatting
capabilities more than local database searching capabilities). The *bibIX*
package is much more flexible and reliable than the earlier *refer* and
bib programs introduced for UNIX. Citation and reference styles
encompass almost all scholarly publications and new style templates can be
written by following instructions in the comprehensive *bibIX* manual.
Users are encouraged to submit customized formatting templates for inclusion
in a shared library. The current release is for BSD 4.X UNIX; we would be
interested in talking to users thinking of converting the programs for use
under AT&T UNIX. Disk space requirements (2MB) are much reduced if the
large journal title/abbreviation database is not installed.

Potential users: Users of the UNIX text formatters.

§ This application program in the area of bibliographic/text formatting has
  been developed in C, Bourne shell, to run under BSD 4.X (Berkeley) UNIX.
  It is available on 1/2" and 1/4", 1600bpi density, ASCII/tar format
  magnetic tape. Required memory varies.
§ Distributed (on a sliding scale) by Campus Software Office, University of
  California/Berkeley.
§ The minimum hardware configuration required is a 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 12 sites for
  approximately 3 years. The contributor is available for user inquiries.

Software package EJCCO-023-S88   ECOGEN

Contributors: M.C. Ruiz-De-Villa, J. Ocana, Dep. Estadistica, F. de
Biologia, U. de Barcelona, Diagonal 645, 08028 Barcelona, Spain

Brief description: The ECOGEN language is an extension of the Pascal
language oriented to discrete event digital simulation especially in
evolutionary ecology and population genetics. It is useful for those with
a knowledge of Pascal and implied on the study of discrete event models.
As an extension of Pascal language it consists of some types, procedures,
functions and sentences especially designed to facilitate the simulation
of the model. In the current implementation, a preprocessor translates
the user program (written in ECOGEN) to a program codified in Pascal. In
a second step, the Pascal compiler creates the executable code. To write
a program with ECOGEN, the user must specify the following parts:

  1. The definition of the entities of the model and the description of
      their characteristics.

  2. The procedures associated to each event, describing all the actions
      implied in its execution.

3. The initial conditions of the simulation run.

4. Some control parameters, as the length (in time units) and the number of replicates.

In the standard implementation, the language returns some brief results, usually not sufficient for the majority of models. Users interested in having more detailed results should write adequate procedures.

Potential users: Investigators and students of the abovementioned courses.
Fields of interest: Discrete event simulation in biology.

§ This application program in the area of simulation has been developed for IBM 3083 or 4341 in Pacsal VS to run under VM/CMS. It is available on 1600bpi, EBCDIC character set magnetic tape. Required memory is 1MB.
§ Distributed by Dep. Estadistica, U. Barcelona.
§ User training is required. There is extensive external documentation. Source code is available.
§ The package is fully operational. The contributor would welcome collaboration. It has been in use at 1 sites for approximately 1 year. The contributor is available for user inquiries.

Software package EJCCO-024-S88   CLINISOFT

Contributors: Dr. Uday Donda, Institute for Research in Reproduction, Jehangir Merwanji Street, Parel, Bombay 400 012, India; Mr. Surash Nagwekar, M/s Heramb Systems and Software, 3, Vishram APT L.B. Shastri Marg, Thane 400 602, India

Brief description: The main menu of this interlinked system displays the requirement of a standard clinical biochemistry laboratory viz daily jobs, reports, file maintenance. The first option shows eight choices like ENTER tests to be carried out, PRINT work distribution report, test results, summary reports, etc. The system has at present 78 perfectly coded, commonly estimated biochemical tests and five standard test profiles appearing on the revolving screen to facilitate quick entry of tests requested. Workstation distribution report is automatically generated and printed with respect to test codes, technologists code and specimen identity number. Completed test results are entered in the space on request forms retrieved on the screen and reports are printed automatically. Flag for abnormal results appears on the printout which is linked with disease codes as GUIDES. Incomplete results are indicated and are kept in abeyance until completion. This elaborate, versatile and modifiable system has information storage capacity for nearly 1000 patients at one time. Add/change/delete facility for each patient and test exists. For the same patient, three consecutive reports can be serially printed. Space provided for entering and storing additional remarks under each report. Daily or weekly summary reports for test codes/technologists codes can be generated.

Potential users: Clinical biochemists,
Fields of interest: Medical research scientists, health care, epidemiology, drug trials, medical research.

§ This application program in the area of clinical biochemistry/medical research has been developed for IBM and compatibles in COBOL to run under MS-DOS. It is available on 5-1/4", dual-sided, double-density floppy diskettes. Required memory is 640K.
§ Distributed by M/s Heramb Systems.
§ The minimum hardware configuration required is 80 column printer. No user training is required. It is self-documenting. Source code is available.
§ The package is fully operational. It has been in use at 4 sites for approximately one month. The contributor is available for user inquiries.

Software package EJCCO-025-S88   AssayZap

Contributor: P.L. Taylor, West Markam, East Lothian, Scotland

Brief description: AssayZap not only offers the familiar regression fit to the logistic equation for calculating RIAs, ELISAs and IRMAs, but also includes a unique interactive visual curve fitting technique which permits all standard curves to be fitted, whatever their shape. Least squares minimization routines for two-parameter log-logit fitting, plus unweighted and weighted four-parameter fit are included. AssayZap maintains a record of all previous assays processed, and permits the current standard curve to be compared with this and if necessary adjusted. Large assays (up to 2000 samples) can be handled, and each assay may include up to four standard curves. Assay drift may be compensated for by interpolation of results between the standard curves. AssayZap conforms completely to the conventions of the Macintosh interface, making full use of the mouse, windows and pull-down menus and, despite its power, is extremely easy to use. It was designed to integrate with a Macintosh-based laboratory data processing system, and includes communication routines which permit the Macintosh to be connected directly to data sources. All data and results may be printed, stored on disk or passed on to other programs for further processing.

Potential users: Laboratory.
Fields of interest: Clinical, immunology, etc.

§ This assay calculator program has been developed for the Apple Macintosh. It is available on 3-1/2" floppy diskette. Required memory is 512K.
§ Distributed by Biosoft.
§ No user training is required. There is extensive external documentation. Source code not available.
§ The package is fully operational. It will be available in February, 1988. The Publisher is available for user inquiries.

Software package EJCCO-026-S87   Chromatography Software for the HP-1000-A Series Computer

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

Brief description: Multi-user, multi-tasking system for chromatography acquisition and report generation on up to 30 instruments simultaneously. Extensive use of graphics aid the analyst in quickly developing methods. Multi-level calibration, various curve fits, full reprocessing capabilities are standard. Subtraction, comparison, and difference of spectra are some of the standard graphics features.

Potential users: Pharmaceutical QA and R&D.
Fields of interest: Analytical chemistry.

§ This application program in the area of chromatography has been developed for HP 1000-A Series A600/900 in Pascal to run under RTEA. It is available on 1/4', CS80 protocol character set magnetic tape. Required memory is 1MB.
§ Distributed by Nelson Analytical, Inc.
§ The minimum hardware configuration required is hard disk, graphics. User training is required. There is extensive external documentation. Some source code is available.
§ The package is fully operational. It has been in use at 50+ sites for approximately 3 years. The contributor is available for user inquiries.

JOURNAL NAME ____EUROPEAN JOURNAL OF CANCER & CLINICAL ONCOLOGY_____

P 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 [ ] No

Documentation: [ ] None [ ] Minimal [ ] Self-documenting
                [ ]Extensive external documentation

Source code available: [ ] Yes   [ ] No

Stage of development: [ ] Design complete   [ ] Coding complete
                       [ ] Fully operational   [ ] Collaboration welcomed

Is program in use? [ ] Yes   How long? _____ How many sites? _____
                    [ ] No

Is the contributor available for user inquiries: [ ] Yes   [ ] No

Distributed by: _____

  Cost of program: _____

  Demonstration disk available? [ ] Yes   Cost: _____
                                 [ ] No

                                                          (continued)

RETURN COMPLETED FORM TO:

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

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

[This Software Description Form may be photocopied without permission]