

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.