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 BP-011-S86

RSTRIP

Contributor: Myles L. Lamson, Ph.D., MicroMath, Inc., 3690 East Fort Union Boulevard, Suite 204, Salt Lake City, UT 84121-4550.

Brief description: RSTRIP is an integrated program for polyexponential curve stripping and parameter optimization, a central application in pharmacokinetic analysis and radiologic health. RSTRIP employs new algorithms that yield fast execution times on microcomputers, and turnaround times similar to those of mainframe software for this type of problem. These algorithms employ several advanced features including an improved weighting scheme, maintenance of an internal data structure for storage of intermediate results (avoiding recalculation of common functions during recursive stripping), restriction of partitioning to those combinations of points most likely to include the optimum partitioning, and an improved technique for least squares refinement. General features include the ability to store and retrieve plots and data sets from disk media, and display file directories and subdirectories within a movable window. RSTRIP output includes a comprehensive summary of statistics related to the analysis, and graphic output is available using a built-in interactive graphics system that allows the scientist to produce publication quality plots. The user can annotate plots with captions, arrows, or curve labels or blow up certain portions of the image, then send the plot to a digital plotter or dot matrix printer for hardcopy output; laser printer capability is currently being developed. The graphics system uses a vector based representation which results in plot resolution limited only by the output

Potential users: Scientists, clinicians, technicians. <u>Fields of interest:</u> Pharmacokinetics, radiologic health.

- § This application program in the area of pharmacokinetics has been developed for IBM PC and compatibles in Pascal to run under MS-DOS. It is available on 5-1/4", dual-sided, double-density floppy diskette. Required memory is 320K.
- § Distributed by MicroMath, Inc. § The minimum hardware configuration required is one disk drive, dot matric printer or plotter. No user training is required. There is extensive external documentation (menu driven). Source code not available.
- § The package is fully operational. It has been in use at several sites for approximately 4 years (Apple version). The contributor is available for user inquiries.

NAME OF JOURNAL BIOCHEMICAL PHARMACOLOGY

PERGAMON SOFTWARE DESCRIPTION FORM

Title of software package:
It Is: []Application program []Utility []Other
Specific area (e.g. Thermodynamics, Inventory Control)
Software developed for [name of computer(s)] in [language(s)]
to run under [operating system]and is available in the following media:
[]Floppy disk/diskette. Specify: Size Density []Single-sided []Dual-sided []Magnetic tape. Specify: Size Density Character set
Distributed by:
Minimum hardware configuration required:
Required memory: User training required: []Yes []No
Documentation: []None []Minimal []Self-documenting []Extensive external documentation
Source code available: []Yes []No
Level of development: []Design complete []Coding complete []Fully operational []Collaboration would be welcomed
Is software being used currently? []Yes []No If yes, how long? If yes, how many sites?
Contributor is available for user inquiries: []Yes []No
(continued)
RETURN COMPLETED FORM TO:
Dr. David Stagg

Dr. David Stagg
Department of Pharmacology
Yale University School of Medicine
333 Cedar Street
P.O. Box 3333
New Haven, CT 06510

[This Software Description Form may be photocopied without permission]

Description of what software does [200 words]:

Potential users:
Fields 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]