feature: sign up for the upcoming short course in neuroscience getting started with med-PC®.

plus: 2 from the founder Read about one of our most popular products - Med PC®. 3 what’s new Read about our upcoming Short Course in Neuroscience at Experimental Biology 2008. 7 recent citations Check out some of the publications we’ve recently added to our citations database.
MedLines is the company newsletter of MED Associates, Inc. MedLines will keep you informed of the latest news and events at MED Associates. This newsletter is designed to be read online by navigating through the various sections. Alternatively, this print version is available.

in this issue

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As the sale of the 2,000th MED-PC® license approaches, I have been reflecting on the evolution of MED-PC®, as well as the early days of MED Associates and the origins of our overall product development process. Here is a brief background.

My first exposure to experimental psychology was during my undergraduate studies at Villanova. I had completed my tour in the Navy and was studying Electrical Engineering; one of my friends, a former shipmate, was also at Villanova working as a graduate research assistant in the psychology department. My friend was expected to maintain the Lehigh Valley Electronics (LVE) and Foringer relay instrumentation for his advisor’s experiments. Unfortunately, in the Navy he had been a gauge repairman and did not know anything about electrical instrumentation. I became involved with helping him and his advisor maintain their experimental instrumentation. We later embarked on a project to build a 38-station operant conditioning control system using relays, and I became the student supervisor for a number of students.

After undergraduate school, I went to work for a medical telemetry group at United Technologies Corporation. In addition, during this time I was a volunteer engineer in the Cardiology Research department at Hahnemann Hospital. Somewhere around 1968-1969, I left United Technologies and got back into behavioral work, taking a job at LVE. I was responsible for the physiological instrumentation that they were distributing for a Japanese company, Nihon Koden, and was also involved in their behavioral line. At the time, LVE was manufacturing a behavioral computer (PDP-8) control system called ACT. Although I was not the primary engineer for this system, I took an interest in it. I liked the way it used block diagrams to define a procedure. However, it took me another 15 years to get back into computer behavior control systems.

LVE went through a number of changes in the late 1960s. Bill Jones was a co-worker of mine at LVE, and he left and started his own company, LVB. Later, I also left LVE and began working with Bill to develop a modular behavior system and printer. Eventually I purchased LVB from Bill, and took over the manufacturing of his computer-controlled system based on the TRS-80. We later adapted it for the Apple II. We supplied canned behavioral procedures that were mainly written in assembly language, but a set of Basic statements were provided to make it simpler for the user to read inputs (i.e. from a lever) or operate an output device such as a feeder or light. Using these statements, a researcher could write their own procedures in Basic.

In the 1980s the IBM PC became available, and we developed a new interface system for it. This included the DIG-720 and DIG-721 modules, which actually can still be used today with current computers. We were also interested in developing an improved software control system for the new modules. I was aware of the SKED® system but I preferred the block-diagram approach of the ACT system. But by then the developer of ACT, Jock Millison, had disappeared, and so there was no way to get him to create a similar system for us. At that time, Tom Tatham approached us about developing a system for our IBM PC interface using the SKED® state notation syntax.

story continued on the next page
I was a little skeptical at first because I thought that the ACT approach was more organized and clearer. Tom, however, convinced me that state notation syntax was much more intuitive to experimental psychologists than a block diagram approach. Furthermore, he indicated there were hundreds of people using SKED® systems on PDP computers and they would be natural customers for our system. At that time Tom Tatham was finishing his post doc at Temple. He then started teaching and during his first summer off (1987) he put in a Herculean effort to develop the MED-PC® system. The first commercial systems were shipped in the beginning of March 1988. We published a paper on this in 1989, Tatham, T. A. and Zurn, K. R. The MED-PC experimental apparatus programming system. Behavior Research Methods, Instruments, & Computers 1989, 21 (2), 294-302. I will continue with the history in future newsletters.

Currently, at MED Associates, we continue to develop both procedures and applications relating to MED-PC®. We have up to 3 software engineers working on these projects at any given time. In addition, a good portion of our customer service engineer’s time is dedicated towards helping people to develop their own custom procedures. The MED-PC® system provides several options to researchers for running their experimental procedures, including

1. use one of our many canned procedures, which requires very little effort and no programming on the researcher’s part
2. modify (or have us modify) an existing canned procedure
3. develop a new procedure or contract us to develop it. A list of currently available canned procedures can be found at http://www.med-associates.com/software/software.htm.

For those who wish to get the most flexibility out of the system, or jump-start their MED-PC® skills, we began offering introductory and advanced MED-PC® programming workshops a few years ago. Typically these have been offered during the summer at our laboratory in Vermont, and in the fall to coincide with the Society for Neuroscience conference. This year, we will have our first MED-PC® training workshop held in conjunction with the annual Experimental Biology meeting. In addition, we have held short courses on specific topics such as self-administration, fear conditioning, and startle. These workshops and courses give researchers background in an area and provide supervised experience, with the goal of the participant being able to run a procedure on their own by the end of the course. The development of these courses is pretty exciting for us. It is still a relatively new endeavor and we feel it is a great benefit and opportunity for our customers and their research. MED Associates Inc.’s goal is to help researchers; now we can provide not only the tools and equipment for research, but also an opportunity to gain some of the necessary skills in a concise manner so researchers can move forward with their ‘real’ work.

The success of MED-PC® is evident by the hundred of articles published using it. See our citation section (http://www.med-associates.com/citations/citations.htm) or the current citations at the end of this newsletter.

Sincerely,

Karl R. Zurn, M.E.E
what’s new

Our first issue of MedLines for 2008 will be an abbreviated format. This is in an effort to bring you the most pertinent information about upcoming events at Med Associates. Future issues will pick up our popular columns such as In Your Lab, In Our Lab, and Product Particulars.

The spring season will be busy for our sales and marketing staff. We will be attending many events. If you plan on attending any of the following conferences, please pay us a visit at our booths.

Catamount Research and Development to Present Poster at EB 2008

Dr. Herrera’s lab at Med Associates/Catamount Research & Development will have a poster in the Exercise, Oxidative Stress, and Endothelial Function Section under the program of the American Physiological Society. This poster details some of our work on measuring running activity in various strains of mice using our state-of-the-art wireless running wheels that we announced at the Annual Meeting of the Society for Neuroscience this past November. The poster will be presented by our lab technician, Brendan Hare, B.S.

Abstract Number: 8666
Abstract Title: Strain- and Wheel Type-Dependent Variations in Running Wheel Activity in Mice
First Author: Brendan Hare
Poster Session Title: Exercise, Oxidative Stress, and Endothelial Function
Day of Poster: Wednesday April 9, 2008
Program Number: 1235.1
Poster Board Number: E318
Poster Time: 12:45 PM – 3:00 PM
Location: San Diego Convention Center, Exhibit Hall

upcoming conferences

Eastern Psychological Association (EPA)
March 13 through March 16, 2008
Boston Park Plaza Hotel

Society of Toxicology Annual Meeting and ToxExpo (SOT)
March 16 through March 20, 2008
Washington State Convention and Trade Center, Booth# 1940

Experimental Biology 2008 (EB 2008/FASEB)
April 5 through April 9, 2008
San Diego Convention Center, Booth# 1240
Experimental Biology 2008
This year’s annual EB meeting is one you don’t want to miss. We would especially like to congratulate the American Society for Pharmacology and Experimental Therapeutics (ASPET) on their 100th Anniversary Celebration. We look forward to the exciting program ASPET is putting together for this special event.

Annual Meeting for BPS
Med Associates will once again provide support for the annual meeting of the Behavioral Pharmacology Society (BPS) held in conjunction with EB2008 in San Diego. We look forward to seeing many of you at EB/BPS.
Med Associates Short Courses in Neuroscience 2008
Kicks Off at Experimental Biology 2008

Our successful annual Short Courses in Neuroscience series kicks off this year with a workshop at the EB 2008 meeting in San Diego. This workshop is titled: “Introduction to Med Associates Operant Conditioning System – Getting Started With MED PC®”. It will be held on Monday April 7, 2008 in the Marina A/B Room at the Hilton San Diego Gaslamp Quarter Hotel, conveniently located near the San Diego Convention Center. The workshop will run from 9:00 AM to approximately 3:30 PM with a break for lunch (not provided) at 12:00 PM. Contact our sales department for registration information. Attendance is limited so register early to reserve your space.


Monday, April 7, 2008

9:00 - 9:15 Welcome

9:15 - 10:30 Overview of the Med Associates Interface System for Operant Conditioning

10:30 - 10:45 Coffee break

10:45 - 12:00 Getting Started with Med PC® – Using MEDLAB 8

12:00 - 1:00 Lunch (Lunch will not be provided)

1:00 - 2:15 Introduction to Programming with MED-PC® using MED-State Notation®

2:15 - 2:30 Coffee break

2:30 - 3:30 Practice Programming; Bring your own programs to work on and get help from Med Associates staff

3:30 Closing
Is your paper here?

Check out some of the publications we’ve recently added to our citations database. These citations get added as we notice publications appearing in press, or when users send in their published papers directly to us.

Our extensive listing of publications citing the use of Med Associate research instrumentation is updated regularly. Check it out on our website at our citations page (http://www.med-associates.com/citations/citations.htm).

If you do not see your citations in our database, feel free to send them in to us at: citations@med-associates.com.


Did you miss an issue?

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