

## Report on the computer software contest at the 42nd Congress of the Japan Society of Anesthesiology

Kunio Suwa, Masatsugu Echikawa, Yoshito Nakayama, Yoshinori Iwase, Takahiko Mori, Makoto Ozaki, Youichi Kondo, and Yoshifumi Tanaka

Executive Committee of the Computer Software Contest at the 42nd Congress of the Japan Society of Anesthesiology Department of Anesthesia, Faculty of Medicine, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo, 113 Japan

Key words: Free software, JSA, CD-ROM, MS-Windows

We held another computer software contest at the 42nd Congress of the Japan Society of Anesthesiology (JSA), held in Hamamatsu in April 1995. This is a brief report of the contest from the members of the executive committee. The aim and procedures have been explained in the previous four reports [1–4]. This report will be limited only to what differs from those of the previous four events.

We recruited another member (ME) to the Executive Committee, who belongs to the Department of Anesthesiology at Hamamatsu Medical School. He arranged most of the practical aspects of the contest.

## Results

We received 22 entries for the contest. The spectrum of personal computers and operating systems (OS) for which the software was intended showed a marked shift from NEC PC9801 and Macintosh to various other types of platforms/OS (Table 1). Only one program was entered solely for the NEC PC9801 series, while six were entered solely for Macintosh, including one which was translated from that originally developed for MS-DOS. Eight programs were intended for MS-Windows. Many programs and data were intended for various platforms/machines including those mentioned above plus AT-compatibles and UNIX systems. This trend was especially marked when the software receiving

Address correspondence to: K. Suwa Received for publication on May 29, 1995; accepted on June 8, 1995 prizes was considered. Out of seven, three were for MS-Windows while the remaining four were shared by PC9801, Macintosh, HP200LX, and Unix. The total number of co-workers for all these 22 programs was 64.

We received monetary donations from various sources plus one million yen worth of instruments and goods for prizes. Examples of prizes were a pulse-oximeter, a TFT-display note-type PC, four HP200LX palm-top computers, three multisession CD-ROM drives and two MIDI-sound instruments.

The grand prize was withheld again this year, because no entry reached the high standards of quality required for this prize. The authors and titles of the top five prizes for excellence, and of the two extra prizes are listed in Table 2. All entries were awarded prizes. All programs are free software although a few may be difficult to distribute for technical reasons.

We held a special lecture session by Dr. Ken Sakamura, the promoter of the TRON project, who talked on the future perspective of computers, including the concept of a computer-augumented environment. Attendance increased markedly, reaching as many as 200.

## Discussion

The number of entries remained at the same level, but the attendance increased substantially this year over the previous 4 years. We interpret this to indicate that the contest is now gaining popularity among the members of the Society as well as to an increased interest in computers in general.

The software by Dr. Enomoto may deserve special mention. It is a group of small programs developed over a span of more than a decade, to be used mostly at the bedside in the operating room. It uses a standard language (MS-BASIC), and no new technology such as

**Table 1.** The spectrum of computers and OSs for which the programs are intended

Platform	No. of entries
NEC PC9801	1
MS-DOS general	3 (+2 data)
Macintosh	6 (+2 data)
Windows	8 (+1 data)
Others (including UNIX)	3

One program is essentially a database, combined with viewers for MS-DOS, Macintosh, and Windows. Another is a pure data base to be used both on MS-DOS and on Macintosh. One piece of software in the MS-DOS general group is intended specifically for HP100/200LX.

**Table 2.** The authors and titles of the winners of the top five prizes and of two extra prizes

Grand Prize: Withheld

Prizes for Excellence (in alphabetical order of the first authors)

N. Enomoto et al., Dept Anesth, National Sagamihara Hospital.

Clinical anaesthesia program (PC-9801)

O. Nagata, Dept Anesth, Tokyo Municipal Geriatric Institute.

Software for testing nonparametric multifactorial comparison (Macintosh)

M. Ozaki et al., Dept Anesth, Tokyo Women's Medical College.

Electronic book: Drugs for the anesthesiologist (HP100/200LX)

Y. Sho et al., Dept Anesth, Faculty of Medicine, Chiba University.

Computer program for preoperative evaluation of breathing during sleep (Windows)

O. Uchida et al., Dept Anesthesiology, National Cardiovascular Center.

An interactive computer program using multimedia: a preoperative explanation of anesthetic practice to surgical patients (Windows)

Extra prizes:

Prize for Humor

T. Takeda., Dept Anesth, Fukui Prefectural Hospital. An application for invitation to anesthesia (Windows)

Prize for Ideas

S. Hagihira et al., Dept Anesth, Osaka University. An application of Mosaic for an electronic textbook (Various platforms/OSs)

The names in parentheses indicate computer/operating system (OS). English titles are by the program authors.

GUI or video data. With its high quality and wide applicability, it is an impressive achievement and a useful program.

The size of programs has again grown markedly over previous years. It is now common to use visual and auditory data, which can increase the size of data to the order of 100 megabytes. We have been discussing the possibility of making a CD-ROM for distributing these

programs. It has been delayed for both technical and economic reasons. It appears that even a single CD-ROM may not have the capacity to incorporate the many programs provided.

It has already been arranged that both the 43rd (1996) and the 44th (1997) Congresses of the JSA are to hold a similar software contest. While we had no programs entered from abroad this year, we at least received one program in English aiming at international use, to be used on AT-compatibles. The same policy shall be maintained for the coming years. The English version of the OS for both Macintosh and MS-Windows will be available if we receive entries which require them.

For the contest, we maintain a policy that all programs entered must be distributed as free software with all the supporting documentation available to the users. Under this condition, we welcome entries from abroad to the contest. The authors of the software are free to revise and to distribute them independently, even via commercial routes.

Acknowledgments. We wish to acknowledge President Kazuyuki Ikeda and the Executive staff of the 42nd Congress of the Japan Society of Anesthesiology for making it possible to hold this contest. We also wish to gratefully acknowledge the following companies who made generous donations and supplied prizes for the contest. Their Japanese names were translated into English somewhat arbitrarily by the authors.

Sponsoring companies (in alphabetical order): Baxter, Ltd.; Ciba-Corning Diagnostics, Inc.; Dainabot Pharmaceutical Company, Inc.; Fuji R-C, Inc.; Kayaku Pharmaceutical Company, Inc.; Kyoudou Oxygen Company, Inc.; Nihon Kohden Corporation, Ltd.; Nikken Chemical Company, Inc.; Nissan Chemical Industries, Inc.; Plat-home, Inc.; Radiometer Trading K.K.; Ricoh Co, Inc.; Yokogawa-Hewlett-Packard, Inc.

## References

- Suwa K, Miyasaka K, Tanaka Y, Ozaki M, Mori T, Iwase Y, Nishi S (1991) Report on the Computer Software Contest at the 38th Congress of the Japan Society of Anesthesiology. J Anesth 5:441– 444
- Suwa K, Watanabe R, Iwase Y, Mori T, Ozaki M, Tanaka Y, Miyasaka K (1993) Report on the computer software contest at the 39th Congress of the Japan Society of Anesthesiology. J Anesth 7:124-126
- Suwa K, Harada K, Watanabe R, Iwase Y, Mori T, Ozaki M, Tanaka Y, Miyasaka K (1994) Report on the computer software contest at the 40th Congress of the Japan Society of Anesthesiology. J Anesth 8:250-251
- Suwa K, Uchida T, Nakayama Y, Watanabe R, Iwase Y, Mori T, Ozaki M, Kondo Y, Tanaka Y (1994) Report on the computer software contest at the 41st Congress of the Japan Society of Anesthesiology. J Anesth 8:508-509