



INTERFACE

SOCIETY FOR TECHNOLOGY IN ANESTHESIA

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Annual STA Meeting for 1996 at the Hotel Del Coronado in San Diego a Resounding Success

Thanks to the hard work of annual meeting organizers, especially Dr. Steve Barker, Dr. Matthew Weinger and Glenda Davis, this year's STA meeting at the Hotel Del Coronado in San Diego was a memorable one. The meeting theme,

"Anesthesia in the Year 2020", succeeded in providing topics of interest to the technical anesthesia community, as well as non-technical anesthesiologists. The vision of the meeting was to imagine not only what technology can do in the near future,

but also what it should do (i.e., what is worthwhile or in today's terminology "cost effective").

Highlights of the academic program included panels led by Dr. Severinghaus, Dr. Tremper, and Dr. Benumof. Dr. John Severinghaus moderated a panel on monitoring in the year 2020. The future of CO2 monitoring, brain monitoring, and blood gas monitoring were explored by Drs. Breen, Moon and Severinghaus respectively. Dr. Gaba presented the simulator of the future. All of the speakers looked at where we have been in the past to support their contentions of where we will be in the year 2020.

Another exceptional feature of the academic program was the debate moderated by Dr. Paul Barash on "Inhalation vs. Intravenous Anesthesia". The debate featured Drs. Ted Stanley and Edmund Eager (see article this issue, page 16).

The business meeting luncheon was held in the Crown Room of the Hotel Del Coronado, a beautiful wood panelled hall. At the end of lunch, Dr. Charles Brindis, a member of the STA and concert pianist, performed Mussorgsky's "Pictures at an

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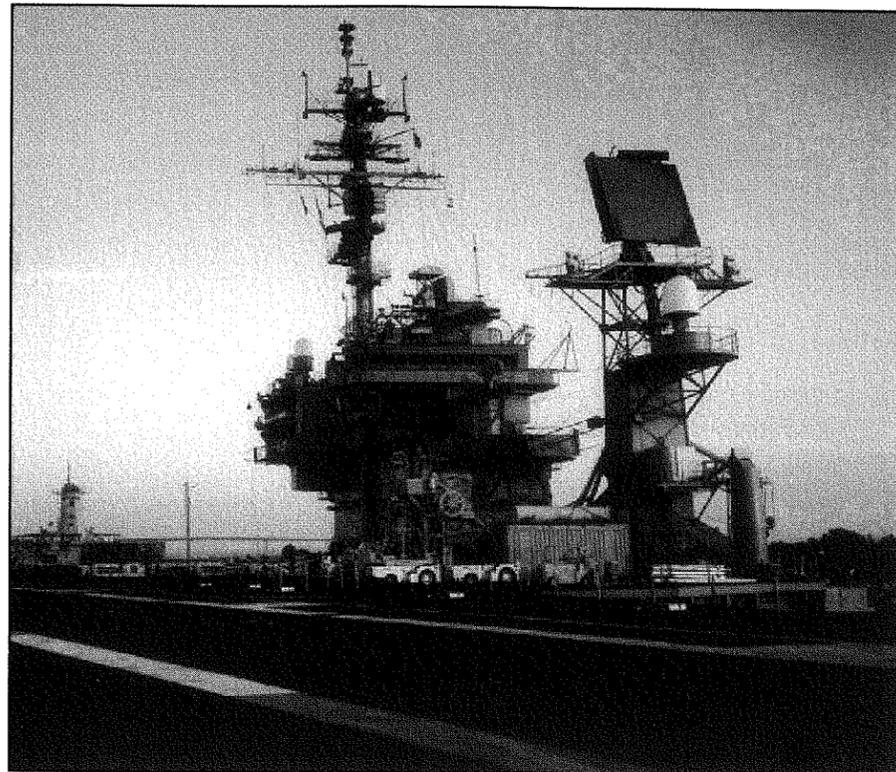
Left to Right: Dr. Eger, II; Dr. Barash; Dr. Stanley after Debate "Anesthesia 2020: Inhalation vs. IV Anesthesia - will the Debate continue?"

Photo courtesy of G. Blike, MD

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STA Meeting continued from front



The aircraft carrier U.S.S. Kitty Hawk.
Photo courtesy Dr. Leslie Rendell-Baker

Exhibition". We were all treated to a flawless performance by Charles. I felt guilty listening to such a performance while eating desert. In addition, Dr. Westenskow (the immediate past president of the STA) introduced the new STA president Dr. Ream. We were informed by Dr. Ream that due in large part to the diligence of the treasurer Dr. Jan Erhenwerth, STA is fiscally sound. This was certainly the best business meeting I could remember.

The social program and tours, which have always been an important element of STA's annual meeting were also outstanding. Field trips included a visit to one of the aircraft carriers stationed in the San Diego Bay, as well as a 3 1/2 hour tour of a nuclear submarine and its simulator training facility. Participants of the submarine tour were allowed to visit the simulator which Navy personnel use to learn

standard operating procedures for various crisis scenarios prior to assuming active duty. They were able to experience the 45° angles the simulator can achieve while simulating "diving" and "surfacing" maneuvers. In addition, participants were shown demonstrations of procedures the crew is required to perform for internal plumbing leaks, etc. The tour then moved from the simulator into the nuclear submarine, touring all the unrestricted areas.

All in all, the 6th annual meeting of the Society for Technology in Anesthesia featured tremendous academic and social programs at a beautiful location in the Hotel Del Coronado. As the Society considers selecting a limited number of sites for having the annual meeting, it would seem that this location is a contender.

- George Blike -



INTERFACE

SOCIETY FOR TECHNOLOGY IN ANESTHESIA

INTERFACE is the official newsletter of the Society for Technology in Anesthesia.

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President's Letter

Allen K. Ream
STA President

This is an exciting year for the Society. We've come a long way since our planning meeting at the 1988 American Society of Anesthesiologists (ASA) Annual Meeting, and our meeting of Charter Members during the 1989 ASA Annual Meeting. But our goals enunciated at that time still seem quite timely: a mutually supportive relationship with the ASA and the Anesthesia Patient Safety Foundation (APSF), international visibility, membership and participation by all interested parties (including clinicians, medical researchers, and engineers) and support of the application of technology to acute medical care.

I'd like to briefly review our general areas of activity, and some of our future plans.

Meetings

A major benefit of STA membership is the opportunity to meet and talk with others who have similar interests. We've settled on two basic venues, a dinner on the Sunday evening preceding the ASA Scientific Sessions, and an Annual Meeting held in January.

Our Sixth annual meeting in January, 1996, was held at the Hotel del Coronado in San Diego. The meeting was a social and scientific success – the venue was perfect for personal encounters, and the program was so enticing and intensive that we all appreciated the breaks and recovery time. The topic: "Anesthesia in the Year 2020" led to both firm and interesting prophecies about the directions of technology and professional development, and to some fascinating speculation. (See article, page 1.)

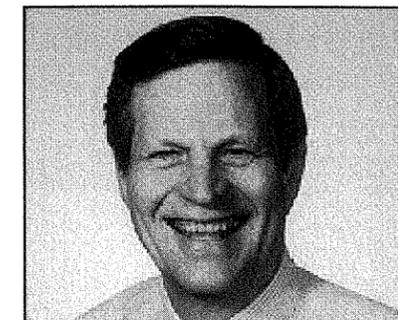
Our fall dinner, at the ASA, promises to be well worth attending. The speaker will discuss the relationship of technology to forensic medi-

cine, and is uniquely qualified to share some fascinating experiences. We also host one of the ASA breakfasts each year, this year on Monday. The topic "The Web, the Internet and You" promises to draw a large audience. If past experience is a guide, it's best to register for this breakfast when you first receive your registration materials. (See announcement, page 17.)

Our next annual meeting renews the observation that each meeting seems stronger, better, and on a new topic of direct interest. The theme will be "Invention, Creativity and Technology", and will follow the evolution of products from idea to widespread use. Experts will be present to ensure that the entire audience is able to participate in this process. The meeting will be in Fort Lauderdale, a good venue which will help us keep costs down while the quality stays high, and will permit some fascinating and professionally stimulating tours of nearby facilities. Do plan to come!

The Internet

A growing element in anesthesia practice is the emphasis on more immediate communication. Through the Internet site maintained by Keith Ruskin at Yale, society communication has increased by orders of magnitude. Interest was intense at his last workshop in San Diego, and I understand that it will be repeated at the



STA President, Allen K. Ream, M.D.

next meeting. STA members form a significant portion of the ASA Committee on Electronic Communication and Information Technology (EMIT). Our interests are rapidly spreading to the general world of medicine. The article in this issue on Japanese activity is a sample of recent developments (See article, page 15).

The Journal of Clinical Monitoring (JCM)

As noted below, your STA officers have shared a strong concern over the costs of membership. One of the results was to experiment by offering membership without the discounted subscription to our official Journal. However, this past year demonstrated that JCM is widely viewed as one of the particular benefits of membership. Nearly every regular member selected the option of receiving the Journal. As discussed in more detail elsewhere in this issue, the publisher has changed this year, to Kluwer, located in the Netherlands. We're excited about this new relationship; they have made a strong commitment to the Journal, and

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**"...basic approach
is to try to keep
activity self
supporting, and
gradually to
develop a more
formal budgeting
structure."**

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STA's obvious support has strengthened their resolve to help us with a preferred cost structure. We're also planning to include STA membership information in JCM. The new, broadened name of the Journal is also an indication of the expectation of involving a wider audience. We're very gratified by all of this; the Journal's reception to date is extraordinary (i.e., given JCM's relatively small circulation). I am proud to have it so closely associated with STA. (See article, page 13).

We have experienced difficulties with subscription support with our prior publisher, and are eager to put this behind us. We ask that any of you who have unresolved problems contact Glenda at the business office: she and I (and a number of others) are committed to making it right now and in the future.

Newsletter

We're continuing to experiment with the frequency of publication of this newsletter. It is an effective form of communication, but expensive. We're quite interested to learn if the increased frequency of publication of JCM offers new opportunities while helping us stretch our resources. Jeff Feldman, as our first newsletter editor has done an outstanding job, and George Blike, in stepping into this role has already shown he will bring some wonderful new ideas. Give us your help and your comments.

Expenses

As many of you are aware, we have just come through a difficult period. The Society began without an endowment, moving from a manager who could provide only basic services to our association with Phenix, a professional organization whose only role was to manage professional societies. The failure of this organization was a surprise to all their clients; and severely injured several. Our early concern, our departure just before the failure,

and the support of our members has left us fully solvent. We've now moved to our own office, with Glenda Davis as our manager, and with closer supervision by STA Officers. This means more work for us, but also an extraordinarily efficient cost structure. And it keeps us close to what is actually happening.

We remain intensely interested, in these difficult economic times, in providing the most effective service possible for the dues that you pay. We welcome suggestions from the membership as to priorities, and ways of improving our performance. *Our basic approach is to try to keep each activity self supporting, and gradually to develop a more formal budgeting structure.* In particular for the Annual Meeting, we hope this change will help each new leader deal quickly and effectively with economic issues so that their main focus can be on the goals of the Society.

Our support from Corporate members has been extraordinary for our size, and has been a great help.

Membership

A hallmark of this Society has been the extraordinary level of participation by members and associates. I remain astounded at the annual meeting; attendance consistently comes close to the total number of members. This is

A hallmark of this Society has been the extraordinary level of participation by members and associates.

due to both our high membership interest and the active participation of others, a number of whom go on to become involved for the longer term.

From the beginning we have encouraged the active participation in STA by all of its members. There is no waiting period, or need for seniority. You can check the committee structure with Glenda to see where you can be involved; or contact me directly, We're willing and anxious to put you to work! Many hands make light work, we're involved in a tremendous number of activities, and the personal contact with other STA members is one of the greatest benefits of this society!

An exciting development is the recent interest, surely supported by difficult economic times, in affiliating with other Societies. This holds great promise because of the efficiencies of a single organization. Three of our past presidents, Drs. Smith, Gravenstein and Westenskow are actively involved in reviewing the opportunities. We're in the information gathering stage at present, and the Board of Directors has made clear their concern that the focus and momentum of the Society not be diminished if such actions occur- a view that I fully share.

Charlotte Bell is Chair of the Membership Committee, and is working hard to improve communication and recruiting. If each of us brings one new member to the Society this year, our leverage (and meeting interest) will be substantially enhanced. Share your experiences and encourage others who have similar interests!

In the end, the goals of the Society are three: to promote the appropriate application of technology to medical care, to facilitate contact between those who share this interest, and to ensure a very enjoyable process. We welcome you, encourage you, and look forward to hearing from you! ♦

- Allen K. Ream -

JCM Continues to Improve

It has been more than ten years since the first issue of the Journal of Clinical Monitoring (JCM) was published. During that time, JCM has earned many successes, including early inclusion in Index Medicus, an excellent citation index, recognition as the official journal of The Society for Technology in Anesthesia (STA) and an international reputation as a high-quality resource for publications about the role of technology in clinical practice. JCM continues to evolve with many changes taking place that position the journal for continued growth and success in the future.

The most visible changes are to the format and content of the Journal. First, although the initials "JCM" will remain on the cover, the name of the journal has been expanded to include the subtitle: "The International Journal for Technology in Anesthesia Practice." This new title is intended to reflect the broad scope of the journal on technology in general and its focus on clinical practice. The editorial board has been busy planning for the future and has doubled efforts to

...the name of the journal has been expanded to include the subtitle: "The International Journal for Technology in Anesthesia Practice."

ensure that the content of the journal appeals to all clinical practitioners. In addition to original research articles, subsections have been added to include more clinical and educational topics. Case reports and clinical controversies will continue to be part of the Clinical subsection. New formats for this section will include a republication of Internet discussions of clinical topics, discussions of how to use technology to solve clinical problems, and topics devoted to cost/benefit analysis. In the area of education, there is now a section on simulators and training devices, historical articles by inventors of technology, and a very important new section in which computer technology will be explained in a straightforward fashion for the uninitiated. Articles in each of these areas will be introduced over the next several months. The editors are most interested in feedback about the content of these articles and also wish to encourage all potential authors to submit articles for consideration.

Another change is that the Journal has been acquired by Kluwer Academic Publishers, an international company based in the Netherlands. We are all excited about this new relationship. Kluwer will make it easier to service subscribers on both sides of the Atlantic and is committed to maintaining the same standards that have helped JCM to achieve the stature it currently enjoys. Although there have been some delays in publication with the transition between publishers, the bi-annual publication will continue on schedule. The new publisher is also committed to solving the subscription problems that plagued us with our prior publisher. Glenda Davis at the STA office is working with the publisher to solve problems she has been informed

...subsections have been added to include more clinical and educational topics.

about. Anyone with subscription questions or problems, please contact Glenda by telephone at (352) 846-1298 or by e-mail at davis.anest2@wpo.health.ufl.edu. Kluwer also maintains a subscription service e-mail address to which these inquiries may also be directed (services@wkap.nl).

This is an exciting time for the editors and readers of the Journal of Clinical Monitoring. We anticipate continued growth and the ability to enhance the content of the journal with much that is of interest to the practicing clinician. To those authors, reviewers, and subscribers who have participated in the growth of JCM, the editors wish to express their gratitude. We encourage submissions in any area in which technology in the broadest sense has an impact on clinical care. STA is a cornerstone of the JCM subscriber base, so the future of both the society and the Journal are intimately linked. Any comments regarding how the Journal can best support the goals of the society are appreciated. ♦

- Jeffrey M. Feldman, MD
Associate Editor,
Journal of Clinical Monitoring

International News

13th Annual Meeting of JSTAI Utilizes Internet for its Preparation

The Internet was used for the preparation of the 13th Annual Meeting of the Japanese Society for Technology in Anesthesia and Intensive Care (JSTAI) held from December 1-2, 1995 in Tokyo at Schoen Bach Sabo Hall (organized by Dr. Kunio Suwa of the University of Tokyo). The details of the planned meeting had been publicized on the Internet through DASnet, a Japanese version of GASnet, both in Japanese and English and the abstracts were mostly submitted by E-mail. The homepage featured a color poster designed electronically by Dr. Tetsuhiko Tejima of Tokyo University. The abstracts for the meeting were all available on the Internet and could be down-loaded (all are in Japanese except one in Russian). The traditional "abstract book" of the meeting was not mailed to the participants before the meeting nor handed out at the time of the meeting. The only types of abstracts available at the meeting were via diskette (sold at about one dollar) and miniature paper copies of the abstracts (sold at about ten dollars). This reduced the cost of the meeting from the printing and mailing of the abstract book.

Two symposiums were held, one entitled "Let's make simulators" chaired by Dr. M. Ozaki of Tokyo Women's Medical College, and the other on "Internet for Anesthesiologists" chaired by Dr. Y. Tanaka of Kyoto Prefectural University of Medicine. The symposiums were prepared through the Internet and all members of the society could see what was going on during the preparation of the symposiums.

Twenty-nine free papers were presented in two rooms simultaneously, and about half of the speakers used a computer based screen. Selected papers presented were: "Development of a navigator which enables the conventional anesthesia monitoring device to anticipate hazards during anesthesia" by Dr. M Nakao of Chugoku Electric Power Company Hospital; "Publication in CD-ROM form of the lectures delivered at the annual meeting of the Japan Society of Anesthesiologists" by Dr. T. Kato of Hamamatsu University; "Communication in the operating suite by use of LAN and the telephone line" by Dr. M Takashina of Osaka University; "A web site for the transmission of information at the time of great disasters" by M Koshiji of Ehime University; "Management of anesthesia record using Macintosh's Paper Port System and a portable scanner" by Dr. T Hama of Yurigaoka Hospital; "Evaluation of the input error of the database for anesthesia record" by Dr. O Uchida of the National Cardiovascular Center; "Gas monitoring by use of Engstrom ELSA" by Dr. H. Kayama of Tokai University; and "Comparison of cardiac output measurement by the lithium dilution method vs. thermodilution method" by Dr. K Morita of Hamamatsu University.

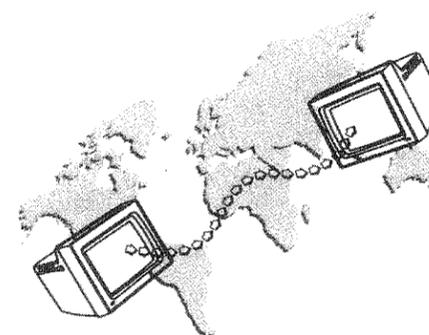
On the evening of December 1, 1995 a party was held for all the participants in which MIDI music was played and a quiz program took place. The goal was to name the title of the music played by the computer, consisting mostly of popular music, which was in sharp contrast with the

Mozart's divertimento for strings played at last year's party. The next meeting will be in Kitakyushu from December 6-7, 1996 organized by Dr. Akio Shigematsu (Professor and Chairman of the Department of Anesthesiology, University of Occupational and Environmental Health).

The last major news from JSTAI, our former president, Dr. Kumio Suwa's book "Personal computer - the way I use it" has been the best seller in non-fiction category in many book shops in Japan. It has sold nearly 400,000 copies so far and has been featured in newspapers, magazines and TV programs. This may be the record for a book written by an anesthesiologist in Japan, and the event has made the general public aware of the works of anesthesiologist and the technology involved in anesthesia. ♦

- Haosuke Sugai

SIGnatures



This month the signature column is provided by Dr. Y. Iwase, the organizer of DasNet, the Japanese version of Gasnet, on the current status of anesthesia activities on the W.W.W. in Japan.

The Current Status of Internet Resources in Anesthesia and Intensive Care, A Japanese Perspective

This brief report of W.W.W. activities was largely organized by myself and members of the JSTAI (Japanese Society for Technology in Anesthesia and Intensive Care).

The history of telecommunication in Japan began in the USA in 1978 when Ward Christensen, a computer nerd living in Chicago, invented the Bulletin Board System (BBS) and XMODEM file transfer protocol. Within a few years, both creations came to represent the basic infrastructure for personal telecommunication. By 1985 in Japan, some forums for Anesthesia and Intensive Care were opened as BBSs. In 1989, "Ether-net" in AMS/PC-net was introduced. This forum anchored by Dr. K. Suwa (Tokyo Univ.) was the most popular and important discussion forum for Japanese anesthesiologists until the "Internet days".

Since 1993, the Internet has become widely available to those who were interested in using it. Until then, especially in Japan, the Internet had been a sanctuary for a limited number of academic users. Today, a huge number of people access the Internet via numerous commercial providers. Many Japanese

anesthesiologists access the Internet via academic or commercial routes. In December 1995, a symposium entitled "Internet for Anesthesiologists" chaired by Dr. Y. Tanaka (Kyoto Prefectural University) was held at the 13th Annual Meeting of JSTAI in Tokyo.

Because Japanese is the common language here, a Japanese interface is required in our computer. The Japanese character set requires a two byte code and uses several encoding schemes (Shift JIS, old JIS and EUC Kanji code, etc.). In personal computers such as MS-Windows and Macintosh, Shift-JIS character encoding is common. However, in the UNIX workstation, EUC encoding is used. Therefore, character code translation had been a major problem in Internet communication, even with personal e-mail, until recently. Now, the "proxy" and "delegate" functions have solved this problem completely.

Internet resources in anesthesia and intensive care: What follows is a summary of internet information resources in anesthesia and intensive care in Japan, which seems to be growing daily.

1) **Mailing lists:** There are two major mailing lists; one for anesthesia and the other for intensive care. Dr. Hagihara (Osaka Univ.) and his colleagues are the administrators of the mailing list for Anesthesia (using a format similar to the "Anesthesiology Discussion Group" which Dr. Keith Ruskin (Yale Univ.) supervises). Dr. Hashimoto's group (Kyoto Pref. Univ.) runs a mailing list for Intensive Care, as well as a homepage.

2) **WWW homepages:** About 15 homepages have been built in Japan. Many of them provide English pages in addition to Japanese. Most of them are focused on general topics. Dr. H. Kikuchi (Toho Univ.) keeps a homepage for malignant hyperthermia both in English and Japanese. This site is quite useful if you encounter an MH susceptible patient. Dr. Echikawa (Hamamatsu Univ. School of Medicine) keeps a homepage for JSTAI (JSTAI W.W.W. Server) and provides executable software to be browsed. His ftp site provides much of the software which was presented in a "Software Contest" at the annual meet-

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Brief Listing of Internet Mailing Lists

Listserver	Subscribe Command	Command Address	Message Address
Anesthesiology Discussion Group	subscribe anesthesiology Your Name	listproc@ gasnet.med.yale.edu	anesthesiology@ gasnet.med.yale.edu
American Society of Anesthesiologist	subscribe ASA Your Name	listproc@ gasnet.med.yale.edu	
STA Mailing List	subscribe STA Your Name	listproc@ gasnet.med.yale.edu	sta@ gasnet.med.yale.edu
STA Mailing List	subscribe ACCRI-L Your Name	listserv@ uabdpd.dpo.uba.edu	
Pediatric Pain Mailing List	subscribe pediatric- pain	mailserv@ac.dal.ca	pediatric- pain@ac.dal.ca

(Very) Brief Listing of Internet Resources

Internet Resource	UR
WWW Virtual Libra: Anesthesiology	http://gasnet.med.yale.edu/index.html
Anesthesiology and Critical Care Resources on the Internet	http://www.eur.nl/FGG/ANEST/wright
Catalog of Electronic Journals	http://www.edoc.com/ejournal
Erasmus University Department of Anaesthesia	http://www.eur.nl/FGG/ANEST
GASNet Anesthesiology	http://gasnet.med.yale.edu
World Societies for Technology in Anesthesia	http://gasnet.med.yale.edu/wsta
University of Alabama at Birmingham Anesthesiology Gopher	gopher://gopher.anes.uab.edu
University of Queensland Anesthesia Web Server	http://www.uq.oz.au/anaesth/home.html

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ing of Japan Society of Anesthesiology. My group is keeping the DASnet homepage, which attempts to distribute anesthesia information resources.

3) **Miscellaneous resources:** A hyper-textbook in anesthesia on the W.W.W. server is available by Dr. Ichihashi (Nagoya Univ.). This textbook was written by Dr. K. Suwa. This HTML resource is downloadable and executable using browser software such as Netscape.

4) **Annual meeting information:** Program information and abstracts for JSTAI were available this year via DASnet and JSTAI W.W.W. server. It was one of the first attempts to use the Internet to provide meeting information in a medical field in Japan. Many of the JSTAI members downloaded and utilized the material.

5) **Collaboration on the Internet:** Since September 1994 in Japan, Dr. Iwase and others have collaborated with Dr. Ruskin and Dr. Doyle to provide ESIA as a Japanese Edition, with an independent editorial board.

6) **Proposal for an Anesthesia Internet Society:** As a result of these efforts on the Internet, all the anesthesiology members who have collaborated have a feeling of "reliability" in human relationship, despite wide cultural differences. Paradoxically, however, development of the Internet interferes with our real time communication because of information overload. This is a common and serious problem. We can solve this problem through collaboration. One of the current solutions proposed by this ad hoc collaborative group is to build as many "mirror sites" for anesthesia internet resources as possible. This same group is working to develop SATA (Society for Advanced Telecommunications in Anesthesiology). This society is still a vision; the leaders of this movement believe that such a society will play an important and useful role in the near future.

Advances in telecommunication are coming fast and furious. Our communicating environment will continue to improve, ultimately providing a better 21st century for us to communicate in. ♦

Yoshinori Iwase, M.D., Assistant Professor
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"The Great Debate of '96; IV vs. Inhalation Anesthesia

Demonstrating dazzling intellectual brilliance combined with the humorous give and take of debate, Dr. Theodore Stanley and Edmond I. Eger, II treated the audience to an engaging academic sparring match on "Anesthesia 2020: Inhalation versus intravenous anesthesia; Will the debate continue?". During his opening statement, Ted Stanley highlighted the advantages of IV anesthesia to clinical care. He proposed that the reduction in the anesthetic morbidity and mortality rate is directly related to the increased use of IV agents. He stated that modern IV anesthetics have a very high therapeutic index (TI). For example, the soon to be released opioid, remifentanyl has a TI of 33,000, which is the highest by far of any drug in the anesthesiologist's armamentarium. He continued by stating that it is "almost impossible to overdose a patient with an IV agent". Compared to the "toxic effects" of inhalation agents, the use of IV agents is even more clinically appealing.

In response, Ted Eger proposed that inhalation agents because they are more easily titrated, and do not require metabolism to terminate their action, are responsible for the safety of modern anesthesia. He emphasized that there is a large degree of inter-patient variability in response to IV anesthetics, which is not seen with volatile anesthetics. This is further compounded by a lack of correlation between serum concentrations and therapeutic effects of the IV drugs. One of the major liabilities associated with the use of IV anesthetics is the lack of knowledge of depth of the

anesthetic (ie., the anesthesiologist is unable to titrate the IV drug to a reliable end-point, which is why intra-operative recall appears to be more common with total IV anesthesia than with an inhalation anesthetic). He reminded us that the agents used for reversal, may in themselves be associated with highly undesirable side effects. In addition, the use of IV infusion pumps adds to complexity and costs; both of which are problematic in today's healthcare environment.

Dr. Stanley countered by declaring that bispectral EEG holds the promise of being a clinically useful means of estimating anesthetic depth (the end-point for the titration of drug) with IV agents. He felt the future belongs to the IV group because newer agents can be "tailored" to the receptor site. Thus, making them more specific and devoid of significant side effects. As an example, other than respiratory depression the synthetic opioids are devoid of clinically important effects on core organ function.

During the panel discussion, both combatants agreed that most likely the general anesthetic of the foreseeable future will combine both inhalation and intravenous components. In the end, Drs. Stanley and Eger both educated and entertained the STA audience with a delightful debate. ♦

- Paul Barash -

Editor's Note: Dr. Barash should also be recognized for coordinating and moderating this debate, which he does so well.

STA Activities at the ASA this Year

The annual banquet of the Society for Technology in Anesthesia will be held this year on Sunday, October 20, 1996 in the Cabaret Room of The Westin Canal Place overlooking the Mississippi River. The hotel is on the edge of the French Quarter located beside the river and less than five minutes walk from the Hilton Hotel. The guest speaker that night is **Cyril H. Wecht, M.D., J.D.** and the title to his presentation is "The Technology of Forensics". Dr. Wecht is currently the Chairman of the Department of Pathology and President of the Medical Staff at St. Francis Central Hospital in Pittsburgh. He is the Coroner for Allegheny County (Pittsburgh). He is also an adjunct professor at the University of Pittsburgh Schools of Medicine, Dental Medicine, and Graduate School of Public Health, and at Duquesne University Schools of Law, Pharmacy, and Health Sciences. Dr. Wecht has served as President of the American College of Legal Medicine and the American Academy of Forensic Sciences and is also active as a medical-legal consultant, author, and lecturer.

The Society for Technology in Anesthesia Breakfast Panel will be held on Monday, October 21, 1996 at the Hilton Hotel, and we anticipate excellent attendance (book your tickets early when you register for the ASA meeting). Once again Dr. Grogono has prepared an exciting and very timely pro-

gram this year. The topic chosen for the panel is *The Web, The Internet, and You*. Arrangements are being made for the whole presentation to employ "on-line" demonstrations to enhance each speaker's work. There are three speakers on the panel and each has been assigned two topics. **The members of the panel are: Tom P. Engle, M.D.** from Loma Linda University Medical Center (*Introduction to WWW and Top Ten Sites*); **Keith J. Ruskin, M.D.** from Yale University School of Medicine (*Medical Publication & the Internet and Run Your Own Server*); and **Stanley Stead, M.D.** from the University of California at Los Angeles (*Web Browsers Today & Tomorrow and New Technology – the Bleeding Edge*). **Dr. Alan W. Grogono** from Tulane School of Medicine is the Moderator. Drs. Ruskin and Engel are known for their innovation and hard work creating the well know web Site: GASNet; and Dr. Stead for originating the first server for the ASA.

Preceding the Breakfast Panel there will be the annual award presentation for the best paper on a technological subject introduced by **Allen K. Ream, M.D.**, President of the Society for Technology in Anesthesia. The presentation will be made by **Robert I. Chilcoat, Ph.D.**, Chairman of the STA Research Committee. ♦

Society for Technology in Anesthesia Seventh Annual Meeting January 16-18, 1997 Fort Lauderdale, Florida

The Society for Technology in Anesthesia (STA) solicits participation at its Annual Meeting, January 1997, at the Fort Lauderdale Marriott Marina. This is the premier U.S. Meeting for the advancement of anesthesia technology, providing a forum for the interaction of physicians, researchers, educators, and industrial leaders who will shape the future of technology in our specialty.

The theme for the Seventh Annual meeting will be "Invention, Creativity, and Technology in Anesthesia". This year's meeting integrates anesthesiology with industry in panels and workshops to explore the creation of new equipment and technology. Panels will feature product evolution from the creative concept to funded product, with inventors, venture capitalists, and patent attorneys; mortality and morbidity from new products with a medical examiner's perspective on inventions gone awry; and the impact of standards and quality control on the creative process, development, and safety. Workshops will provide members the opportunity to generate ideas for a new product, follow its growth through inception, performance to industry standards, quality control and improvement, governmental approval, and marketing.

You are invited to submit an abstract regarding any of the above topics or other areas of technology in anesthesia. Research abstracts will be presented in either oral or

poster/discussion form, or as a scientific demonstration. If you wish to be considered for a Scientific Demonstration, please check the appropriate box on your Instruction Form. All accepted abstracts will be published in the Journal of Clinical Monitoring – The International Journal of Technology in Anesthesia (which is an Index Medicus publication) in the November issue.

In the 8'x10' space provided for each scientific exhibit, which will be displayed throughout the meeting, a table and electrical outlet will be provided. This will be a unique opportunity for you to discuss your exhibit with the experts in the field of technology. A large number of technical exhibitors will be participating.

Plan now to present your work at this exciting and educational meeting! The deadline for receipt of abstracts is September 1, 1996. STA members will receive a mailing of abstract submission materials this month. Non-STA members wishing to participate can obtain an abstract packet by contacting:

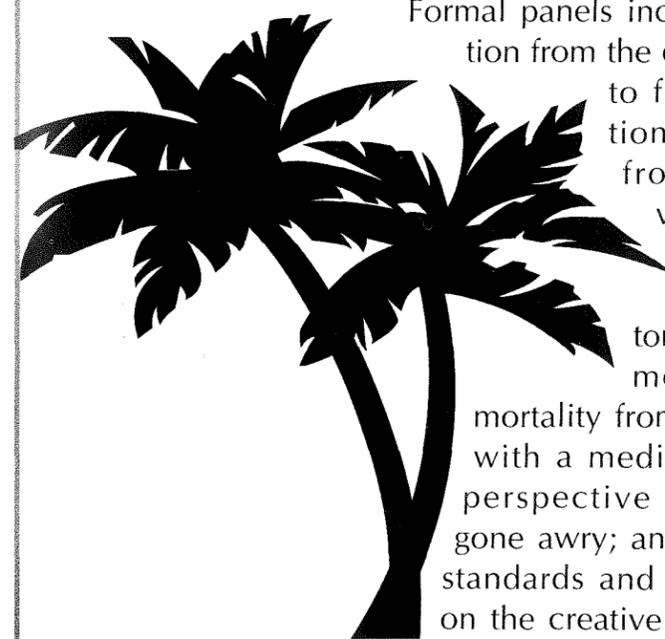
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STA 1997 ANNUAL MEETING

This year's meeting integrates the know-how of clinical anesthesiologists and biomedical engineers with the resources of industry in workshops and panels to explore the creation of new equipment and technology.

During the workshop series, members will generate ideas for a new product and follow growth through inception, performance to industry standards, quality control and improvement, government approval, and marketing. Prizes await the team with the most successful stock offering on the final day.



Formal panels include the evolution from the creative concept to funded production with speakers from academia, venture capital firms, and successful inventors; unanticipated morbidity and mortality from new products with a medical examiner's perspective on inventions gone awry; and the impact of standards and quality control on the creative process, development and safety.

Abstract sessions and a "Create your own "CD-Rom" workshop are also part of the program. For a change of pace, field trips introduce you to the National Hurricane Center, Bertram Yacht Company, or Heico Jet Avion. A dinner cruise with an STA Talent Show rounds out the meeting program.

INVENTION, CREATIVITY & TECHNOLOGY

Fort Lauderdale Marina Marriott • Fort Lauderdale FL
January 16-18, 1997

COMPUTERS IN ANESTHESIA XVII

Sponsored by:
The Society for Computers in Anesthesiology (SCIA)

October 23-26, 1996
New Orleans, Louisiana

For more information Contact:
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International Symposium on Decision Support In Anaesthesia and Intensive Care

The meeting will be held in:
Mainz, Germany
September 25-28, 1996

The symposium is based on meetings of the following societies:

ESCTAIC:
European Society for Computing and Technology in Anesthesia and Intensive Care (7th Annual Meeting)

SCCPMA:
Society for Computing in Critical Care, Pulmonary Medicine and Anesthesia (17th Annual Meeting)

Guest society:
STA: Society for Technology in Anesthesia

Come to know the regional specialties of Mainz: the people, the historical sites, the Rhine river, entertainment in romantic guest houses and the famous wine...

For further information, to get included in the congress-E-mail/Smal-list, to get registered preliminary.

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