Special Report

CELEBRATING SILVER:

The Genesis of a Neuroanesthesiology Society
NAS → SNANSC → SNACC

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Key Words: History: Neuroanesthesiology—Neurosurgical Anesthesiology—Neuroanesthesiology—Neurosurgical Anesthesiology: NSA: Neuroanesthesia Society; SNANSC: Society of Neurosurgical Anesthesia and Neurological Supportive Care; SNACC: Society of Neurosurgical Anesthesia and Critical Care

The decade of the sixties was seminal for the development of neuroanesthesiology as a definitive subspecialty. During those years, standardization of techniques for measurement of CBF, CMRO₂, ICP and neurochemical moieties were introduced. The physiologic basis of cerebrovascular dynamics was being established and instrumentation design was spurred by developments in electronics and engineering. Of equal importance, research groups of anesthesiologists and neurosurgeons were coalescing in Europe and North America to examine the effects of anesthetics on cerebral blood flow and metabolism, on cerebrovascular responses of the traumatized brain, and the dynamics of intracranial hypertension—to name but a three areas of investigation. This multidisciplinary approach was spurred as neurosurgeons and anesthesiologists came to realize that they had common ground in their need to clarify essential pathophysiologic problems relating to patient care. Along with those advances, new findings in neurochemistry and the beginning of important developments in the (then) new subspecialty of neuroradiology increased the background of intellectual ferment that heralded great strides in the decade of the seventies.

This is not to say that significant advances or discoveries had not been made prior to the sixties. We are forever indebted to the works of Amussat, Sherrington, Bernard, Horsley, Macewen, Halsted, Cushing, Kety, and Schmidt, among many others. A fine review of the background to the history of neuroanesthesiology can be found in a recent work by Frost (1).

The academic purview of neuroanesthesiology was promoted in 1964 by publication of the first neuroanesthesiology textbook written in English by Professor Andrew R. Hunter from Manchester (Fig. 1) (2). This was followed in 1966 by the first Canadian book in neuroanesthesiology edited by R.G.B. Gilbert (then Chair of the Department of Anaesthesiatics at McGill University and Director of Anaesthesia at the Montreal Neurological Institute) together with Fred Brindle and Anibal Galindo (3). During this time period (1965), Dr. Allan Brown of Edinburgh and Professor Hunter founded the Neuroanesthesia Traveling Club of Great Britain and Ireland, an organization dedicated to furthering the development of the neuroanesthesiology as a recognized subspecialty. Also of interest was the formation in 1961 of a North American...
FIG. 1. Professor Andrew R. Hunter, pioneering neuroanesthesiologist, author of the first book on neuroneesthesia in English (1964), and co-founder of the Neuroanesthesia Traveling Club of Great Britain and Ireland in 1965.

FIG. 2. Maurice S. Albin, M.D., M.Sc. (Anes), one of the original organizers (1972) and founders (1973) of NAS and its 2nd President.


FIG. 4. James Harp, M.D., one of the original organizers (1972) and founder of NAS (1973).

working group called the Commission on Neuroanesthesia, sponsored by the World Federation of Neurology, and initially composed of Howard Terry (Mayo Clinic), Jack Michenfelder (Mayo Clinic), Maurice Albin (Case-Western Reserve), and chaired by R.G.B. Gilbert (McGill). A rapid development of knowledge relating to neuroanesthesiology from centers in Philadelphia, Glasgow, Rochester, Richmond, San Francisco, London, New York, Cleveland, and Montreal was soon to follow.

In May of 1972, Thomas W. Langfitt (Professor and Chief of the Division of Neurosurgery at the University of Pennsylvania) was a visiting Professor at the University of Pittsburgh. During that sojourn he and I had many conversations concerning the need to form some type of organization for neuroanesthesiologists working closely with neurosurgeons (Figs. 2, 3). On returning to Philadelphia, he spoke with James E. Harp (Department of Anesthesiology, University of Pennsylvania—Fig. 4) about our conversations and this resulted in a letter of June 6, 1972, and
FIG. 5. Letter from James Harp to Maurice Albin concerning formation of a neuroanesthesia group.

my reply of June 14, 1972 (Fig. 5, 6). Doctor Harp and I remained in contact during the remainder of 1972, and we collated a mailing list of individuals in the United States and Canada who might be interested in joining such a group. We decided that the perfect location for a preliminary meeting would be Philadelphia, in conjunction with the Sixth International Cerebral Blood Flow Symposium. We were also pleased to have Harvey Shapiro (University of Pennsylvania) join our neuroanesthesiology crusade (Fig. 7). The Philadelphia CBF venue was very important since many interested anesthesiologists and neurosurgeons were in attendances. A specimen letter from our committee, announcing the meeting and the suggested goals, can be seen in Figs. 8 and 9.

Hosted by Drs. Thomas Langfitt and Harry Wollman (Department of Anesthesiology, University of Pennsylvania — Fig. 10), the first organizational meeting took place on June 15, 1973, at the Marriott Motor Hotel in Philadelphia. It was attended by 36 anesthesiologists and 4 neurosurgeons (Fig. 11). We named our group the Neurosurgical Anesthesia Society (NAS); a brief portion of the bylaws can be seen in Figure 12. One important outcome of this meeting was Dr. Langfitt’s willingness to include NAS in the programs of the Harvey Cushing Society (subsequently named the American Association of Neurologic Surgeons).
THE GENESIS OF A NEUROANESTHESIOLOGY SOCIETY

Maurice S. Albin, M.D., M.Sc.
Department of Anesthesiology
University of Pittsburgh School of Medicine
Pittsburgh, PA 15213

Dear Maurice,

This will serve as a final reminder of the preliminary organizational meeting of the Neurosurgical Anesthesia Society to be held in Philadelphia next month in conjunction with the Sixth International Cerebral Blood Flow Symposium.

The meeting will take place at 3:00 p.m., June 15, 1973 in the Board room of the Marriott Motor Hotel, Philadelphia, headquarters for the C.B.F. symposium.

We again enclose a tentative agenda for this meeting and a statement of proposed goals for the society. The structure and character of the society will be determined at the June meeting. The few of us who have worked to organize this meeting do wish to present you with a flat accomplishment.

We look forward to seeing you in June.

Sincerely yours,

Maurice S. Albin
Maurice S. Albin, M.D., M.Sc.
James R. Harp
James R. Harp, M.D.
Harvey M. Shapiro
Harvey M. Shapiro, M.D.

MEMBERS OF THE
"NEUROSURGICAL ANESTHESIOLOGY SOCIETY"
(June 15, 1973)

M. Albin, M.D.
Pittsburgh, PA
J. Harp, M.D.
Philadelphia, PA
L. R. Orkin, M.D.
New York, N.Y.
S. C. Alexander, M.D.
Madison, WI
H. Helrich, M.D.
Baltimore, MD
A. Schwartz, M.D.
Philadelphia, PA
D. P. Becker, M.D.
Richmond, VA
E. M. Kane, M.D.
Philadelphia, PA
M. M. Shapiro, M.D.
Philadelphia, PA
R. Bergland, M.D.
Hershey, PA
L. M. Kitahata, M.D., Ph.D.
New Haven, CT
H. H. Sloman, M.D.
Calverton, MD
V. L. Isom, M.D.
Los Angeles, CA
H. J. Kusnich, M.D.
New York, N.Y.
G. F. Biddle, M.W.
Sherbrooke, PQ
V. E. Lamb, M.D.
Chicago, IL
E. A. Krumel, M.D.
Chicago, IL
T. U. Langfitt, M.D.
Philadelphia, PA
R. C. Carroll, M.D.
Pittsburgh, PA
G. F. Larson, Jr., M.D.
San Francisco, CA
J. G. Fischer, M.D.
Cleveland, OH
J. D. Levit, M.D.
Philadelphia, PA
A. Galindo, M.D.
Seattle, WA
J. D. M. Marshall, M.D.
Toronto, ON
J. T. Lang, M.D.
Montreal, PQ
A. C. G. Garrett, M.D.
Baltimore, MD
D. Trop, M.D.
Montréal, PQ
R. C. Carroll, M.D.
Montreal, CANADA
B. E. White, M.D.
Winnipeg, MB
J. S. Gilbert, M.D.
Montreal, CANADA
R. J. Wollman, M.D.
Cleveland, OH
R. C. Gilbert, M.D.
Montreal, CANADA
R. R. White, M.D.
Cleveland, OH
T. S. Gilbert, M.D.
Durham, NC
M. J. Matijasek, M.D.
Baltimore, MD
J. H. Messick, Jr., M.D.
Rochester, MI
T. J. O'Sullivan, M.D.
Baltimore, MD
J. D. M. Mitten, M.D.
Rochester, MI
J. G. O'Sullivan, M.D.
Rochester, MI
A. Yankel, M.D.
Hershey, PA

FIG. 10. Harry Wollman, M.D., one of the founding members of NAS and a host of the 1973 organizational meeting in Philadelphia.

SUGGESTED GOALS

1. To identify and discuss clinical problems.
2. To identify neuroanesthesia teaching goals and methods.
3. To discuss ongoing research in neuroanesthesia and possible clinical significance of findings.
4. To identify new questions and suggest means for approaching these. To organize interdepartmental collaborative studies on various investigative problems in clinical neurosurgical anesthesia.
5. To provide timely reviews of information currently at hand in special areas.
6. To provide opportunity for social contact by people of common interest.
7. To seek representation and establishment of a section of neurosurgical anesthesia within the American Association of Neurologic Surgery and the American Society of Anesthesiologists.
8. To stimulate interest in neuroanesthesia among junior faculty in many smaller academic departments where no such interest now exists.

FIG. 9. The suggested goals for the proposed Neuroanesthesia Society.

FIG. 8. Specimen letter concerning the preliminary organizational meeting of the Neurosurgical Anesthesia Society. This letter was sent out to anesthesiologists and neurosurgeons thought to be interested in the organization.

FIG. 11. Charter members of the Neurosurgical Anesthesia Society at its meeting on June 15, 1973. Four neurosurgeons were present including Becker, Bergland, Langfitt, and White.
This allowed our members to interact with neurosurgeons through panel discussions and workshops and through the presentation of papers on subjects related to our two specialties. An example of the participation of our membership is shown in the flyer for the 1975 meeting (Fig. 13).

After the first organizational meeting on June 15, 1973, an ad hoc committee of members Shapiro, Harp, and I sent a letter to all program directors in anesthesiology and neurological surgery concerning the formation of the Neurosurgical Anesthesia Society. The letter emphasized that this new group would be multidisciplinary, with an open membership (Fig. 14). It also mentioned that the first organized meeting of the Society would take place on October 7, 1973, in San Francisco, since the ASA was to meet there that year. In addition to Drs. Harp, Shapiro, and I, the ad hoc committee also included Drs. Alan Smith (San Francisco), Stephen Wyte (Denver), Brian Marshall (Toronto), John Wade (Winnipeg), and Anibal Galindo (Seattle). We contacted all individuals whom we thought would have
THE GENESIS OF A NEUROANESTHESIOLOGY SOCIETY

UNIVERSITY of PENNSYLVANIA
PHILADELPHIA 1973
Department of Anesthesia
940 Spruce Street
June 15, 1973

Maurice S. Albin, M.D., M.Sc.
Department of Anesthesia
University of Pittsburgh School of Medicine
Pittsburgh, Pennsylvania 15213

Dear Maurice,

I have enclosed the following:
1. Minutes of the first organizational committee meeting of the Neurosurgical Anesthesia Society.
2. Sample sheet for Annual Dues of the Society.
3. A mailing list of the members.

I would appreciate your comments on these.

Sincerely yours,

Harvey M. Shapiro, M.D.
Assistant Professor

WD/PH

Encl

FIG. 15. Letter from Harvey Shapiro (acting secretary) concerning the members of the NAS, annual dues form, and mailing list.

interest in NAS and invited them to attend. Our San Francisco contact at that time was Alan L. Smith (UCSF), who handled local arrangements as well as the dinner (which was an outrageous sum of $7.50 per head!) (Fig. 15). Annual dues at the 1973 meeting were $15.00 and this fee remained in effect for several years.

The meeting was important because it implemented a definitive organizational structure. The Neurosurgical Anesthesia Society was changed to the Society of Neurosurgical Anesthesia and Neurological Supportive Care (SNANSOC) since it was felt that the new name would be more open, allowing for more disciplines to enter the organization and the name also more clearly defined our group aims. At this meeting, which was attended by more than 45 professionals, a constitution and bylaws were adopted and officers were elected. The officers were John D. Michenfelder, (Rochester, Minnesota) President (Fig. 16); Maurice Albin (Pittsburgh), President-Elect; Brian Marshall (Toronto), Vice-President; and Harvey Shapiro (Philadelphia) Secretary-Treasurer. A program committee was chosen for the Annual Conference and Meeting to take place on October 11, 1974, in Washington, D.C., prior to the annual ASA meeting. The program (Fig. 17) was

FIG. 16. John Michenfelder, M.D., 1st President and a founder (1973) of NAS.
enhanced by active participation of neurosurgeons—a hallmark of our organization since its inception. In fact, six of our Presidents have been neurosurgeons. I know of no other society in anesthesiology with this type of collaborative effort taking place on both sides of the table. The meeting fee (including luncheon and the educational materials) cost $15 for members and $20 for non-members. This successful meeting was attended by 150 registrants. Of particular note was the effort of Aaron Gissen (Boston) who developed protocols/questionnaires concerning anesthesia-neurosurgical problems and practices (Fig. 19).

The programs of the 1975 (Chicago) and 1976 (San Francisco) meetings (Figs. 20,21) illustrate the development, inclusiveness and intellectual depth of our undertaking. A review of the topics in both programs demonstrates the wide variety of our members’ concerns relating to clinical, basic science, and educational objectives. The international aspect of our interests was evidenced by the number of European participants. A sense of déjà vu is elicited by the title of the first topic for discussion at the 1976 meeting—“Pharmacologic Protection against Brain Injury.” Starting with the 1974 meeting, the scientific programs consisted of free papers covering experimental studies or clinical protocols. Eleven papers were presented at our 1976 meeting (Fig. 22). 1975-76 dues were $15.00, meeting registration was $25.00 for members, $30.00 for non-members, and the dinner cost had doubled to $15.00.

Neuroanesthesiology was formally recognized by the ASA as a subspecialty in 1976 while James E. Cottrell
served as Chair of the ASA Subspecialty Committee. By the end of 1976, organizational aspects had stabilized and we could boast more than 160 members from institutions in the United States, Canada, and Mexico. Our membership now included anesthetists, neurosurgeons, neurorologists, engineers, and neuroscientists. We had established a newsletter (Fig. 23), and our meetings were being reported in Anesthesiology. Anesthetists and neurosurgeons throughout the United States and Canada interested in neuroanesthesiology had been contacted, and SNANSC participated actively in panels and presentations at the American Association of Neurological Surgeons (Fig. 24). The educational component of our Society expanded in 1974 with guidelines developed by Aaron Gissen for the management of induced hypotension, carotid endarterectomy, and air embolism. Concomitantly, in 1975, James E. Cottrill was developing questions for a survey of the number and types of cases carried out by anesthesiology residents during their first two years of clinical training as well as the nature of neuroanesthesiology and surgical practices. Preliminary information in this area was presented during our 1976 meeting by Drs. Cottrill (New York), Harp (Philadelphia) and Jannetta (Pittsburgh). An educational subcommittee was organized to develop a bibliography pertinent to our research, clinical, and educational practices. We were in constant contact with our European colleagues and plans were made to meet with our British counterparts (Fig. 25). Those plans came to fruition during a joint meeting in Williamsburg, Virginia in 1979. A combined meeting was held a few years later in London, England. We had also developed a relationship with ASA vis-a-vis the role of subspecialty groups within the organization; sponsored and arranged the neuroanesthesia breakfast panel at the ASA; and achieved representation on the ASA Refresher Course committee.

The first U.S.A. textbook in neuroanesthesiology (4), now in its third edition (5), was published in 1980. By 1982 (our tenth anniversary), we had experienced considerable growth in membership and the participants obviously enjoyed the meeting (Fig. 26). This celebration was shaded.
owed by the death of Brian M. Marshall (Toronto), one of our founding members and President from 1976-77; we dedicated this meeting in his memory. At our 1986 meeting, SNANSC became the Society of Neurosurgical Anesthesia and Critical Care (SNACC) in order to recognize the importance of critical care medicine to patients with severe neurological dysfunction.

FIG. 22. The eleven free papers presented at the 1976 scientific session.

1989 saw the launch of the Journal of Neurosurgical Anesthesiology (JNA) with James E. Cottrell serving as Editor, John Hartung as Associate Editor, and Roberta Halpom as JNA's Editorial Office Manager (Figs. 27-29). This journal has since become the voice of SNACC, as well as that of the Association de Neuro-Anesthésiologie et Réanimation de langue Française, the Wissenschaftlicher Arbeits-
FIG. 28. John Hartung, Ph.D., Associate Editor of the Journal of Neurosurgical Anesthesiology since its inception.

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Volume 1, Number 1, March 1989

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Journal of Neurosurgical Anesthesiology (ISSN 0888-3999) is published quarterly in March, June, September, and December by Raven Press Ltd., 1183 Avenue of the Americas, New York, N.Y. 10036, U.S.A. Second class postage paid at New York, N.Y., and at additional mailing offices.

Subscriptions are for Volume 1, 1989. Personal subscriptions: $210 in U.S.; $230 elsewhere; institutional subscriptions $450 in U.S.; $470 elsewhere. Air delivery is included for European and Mediterranean countries; for air service elsewhere add $31. Payment should accompany all orders. Please include postmark mailing label with all change of address requests.

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FIG. 29. Table of Contents of Vol. 1, No. 1, of JNA.

FIG. 30. Listing of the Presidents of NAS, SNANSC, and SNACC.

FIG. 31. M. Jane Matjasko, M.D., founding member of NAS and the 10th President.
neuroanesthesiology, by the ability of our subspecialty to attract many of the best and brightest in our specialty, and by the capacity of our present leaders to point the way to the future. We have always been fortunate to have superb leadership, as scanning the list of past Society Presidents indicates (Fig. 30). We were also cognizant of the capabilities of our female members long before the term “glass ceiling” was coined, with Jane Matjasko, Philippa Newfield, Elizabeth Frost, Judith Donegan, and Betty Grundy (Figs. 31-34) each making substantial contributions.

Dozens of individuals have been responsible for the health and vigor of our neuroanesthesiology organization and space limitations do not allow for a more in-depth narration of their contributions. These individuals helped in various ways such as organizing meetings, serving on committees, reviewing the literature concerning neuroanesthesiology, judging abstracts, and performing the many thankless tasks that make our organization function—one can only salute them and thank them for their efforts.

We look forward to celebrating our thirtieth anniversary in 2002!

References