

NEWS BRIEFS

Nuclear Cardiologists Form New Professional Association

A cadre of prominent cardiologists announced in February the formation of the American Society of Nuclear Cardiology, a non-profit association that will focus on setting training standards and establishing guidelines for the clinical practice of cardiovascular nuclear medicine.

The new society expects to gain 500-700 members off the bat, mostly from the U.S. Like the Society of Nuclear Medicine, the American Society of Nuclear Cardiology, or ASNC, will offer membership to physicians, scientists, and technologists.

The association hopes to launch a peer-reviewed publication in January 1994, likely to be named the *Journal of Nuclear Cardiology*. Jeffrey A. Leppo, MD, the newly elected ASNC president says "several" publishing houses have made competing bids to produce the journal, but one has not been selected. While the editorial board is yet to be finalized, Dr. Leppo says at least half of the reviewers are investigators from Europe and Japan.

Needless to say, the arrival of the ASNC has aroused more than a little concern among nuclear medicine physicians worried about "fragmentation" of the specialty.

"There is no intention to compete, splinter, or cause a schism," responds Dr. Leppo, director of nuclear cardiology, clinical director of nuclear medicine, and professor at the University of Massachusetts Medical Center in Worcester. "If mainline radiologists and nuclear medicine people feel this is a threat, then it could be one," he admits, but he says that is hardly the intention. Rather, he says, the new association was founded in part to help stimulate nuclear medicine by expanding the overall referral base for nuclear studies. Dr. Leppo says cardiologists have formed similar subspecialty groups for echocardiography

and pacemaker specialists, among others. He characterizes the ASNC as "a more natural group to develop plans inside mainline cardiology."

Top priority for the nuclear cardiologists will be influencing the development of training guidelines by groups like the American College of Cardiology and the American Heart Association. Such endeavors are where Dr. Leppo says groups like The Society of Nuclear Medicine and the Radiological Society of North America "have had difficulty in the past."

The ASNC is headquartered in Bethesda, Maryland in the same building as the American College of Cardiology, which provides some administrative staff, although Dr. Leppo says the new society is functionally and legally independent of the ACC.

While the ASNC mandate includes fostering continuing education programs and promoting basic and clinical research, the group has no plans to mount a major scientific meeting. "Between the American Heart Association, the American College of Cardiology and SNM, there isn't a lot of room for another scientific meeting," says Dr. Leppo.

Other ASNC officers confirmed in February are Vice-President Abdulmasih S. Iskandrian, MD of the Philadelphia Heart Institute, Secretary Mario S. Verani, MD of Baylor University, and Treasurer Kenneth Brown, MD of the University of Vermont. The president-elect of ASNC, Frans J. Th. Wackers, MD of Yale University, is currently president of SNM's Cardiovascular Council. ■

Cardiology Dominates U.S. Radiopharmaceutical Sales

Nuclear cardiology products, which in 1991 accounted for nearly two-thirds of the \$300 million in radiopharmaceuticals sold in the U.S., will continue to dominate the nuclear medicine market well into the 1990s, according to a recent study.

U.S. sales by radiopharmaceutical makers, estimated at \$303.2 million in 1991, should reach \$480.2 million in 1996, according to the study published by Frost & Sullivan, a New York-based market research firm. Cardiology products, including pharmacologic stress agents, blood perfusion agents, and kits for gated blood pool studies, accounted for \$198.4 million in 1991 sales. Sales of these products will total \$318.1 million in 1996, the study forecasts.

Analysts say the predictions are conservatively based on the present patient population and current treatment methods. Sales of cardiology agents in particular could be higher than expected, they say. Cardiologists, for example, might expand their use of the technetium-99m perfusion agents introduced in 1991. Already, about 20% of all cardiac perfusion studies use one or the other of the new ^{99m}Tc agents. Both agents are sometimes used as alternatives to thallium-201, which is still the major perfusion tracer for cardiac imaging.

Aside from cardiac imaging, products based on radiolabeled monoclonal antibodies will account for the largest market growth for radiopharmaceuticals, according to the study. The Food and Drug Administration has already approved a radiolabeled antibody for imaging colon and ovarian cancers, and many related products are likely to gain approval over the next three years.

Radiopharmacies have taken a significant role in the distribution chain, preparing about 64% of all doses in 1991. Manufacturers' sales to radiopharmacies amounted to \$158.5 million in 1991, compared with \$144.7 million in direct sales to hospitals and clinics. Radiopharmacies are gaining importance, the study says, as hospital labor costs rise and nuclear medicine departments face difficulties in finding skilled personnel. Radiopharmacies have also succeeded by providing conveniently prepared doses, properly calibrated and ready for injection, but charging only slightly more than a hospital would pay if buying directly from a manufacturer. ■

New Editor Set to Take the Helm at JNM



The Journal of Nuclear Medicine will have a new editor-in-chief as of July 1, 1993. The appointment of Stanley J. Goldsmith, MD was made official by the Board of Trustees of The Society of Nuclear Medicine in February.

"It's very gratifying and exciting to be selected," says Dr. Goldsmith, who is clinical director of the nuclear medicine service at Memorial Sloan Kettering Cancer Center in New York. Without revealing any specifics of his plans for the Journal, other than to say he has "several ideas" and would welcome suggestions, Dr. Goldsmith says, "I do not intend a radical restructuring."

"The initial challenge is to maintain the high standards that Bill Strauss has set," Dr. Goldsmith says. "We'll use that as a platform to build further."

H. William Strauss, MD, editor-in-chief since 1989, implemented many well received changes to the Journal, including editorials reflecting diverse views on scientific articles. He recently became vice-president of diagnostic drug discovery for Bristol-Myers Squibb Co., in Princeton, New Jersey.

As of July 1, 1993 all manuscripts and correspondence should be mailed to Stanley J. Goldsmith, MD, Offices of the Journal of Nuclear Medicine, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Until then, editorial correspondence will continue to be accepted by the Journal's Charlestown office (listed in "Information to Authors"). ■

DOE Funds Neutron Capture CRADA

The U.S. Department of Energy is funding a cooperative research and development agreement between a private company and the Brookhaven National

Laboratory to promote the development of new methods for making boron compounds for neutron capture therapy. The experimental cancer treatment, under development since the 1950s, involves neutron bombardment of stable boron isotopes taken up by inoperable glioblastomas and other tumors.

The cooperative research agreement will help pay for research on cheaper manufacturing methods to make p-boronophenylalanine, or BPA, one of the most promising compounds for neutron capture therapy.

At \$185 per gram, the amount needed for a single treatment would cost about \$7000. The DOE's Office of Energy Research is providing \$50,000, and the company, Boron Biologicals, Inc., of Raleigh, North Carolina, has pledged at least twice that much to Brookhaven scientists for developing a quicker, easier synthesis for BPA to bring down the cost of the compound. In return, Boron Biologicals will gain patent rights to the process.

The agreement also provides funding for testing other amino acids and formulations for delivering the compounds, such as enclosing them in liposomes.

Neutron capture therapy is theoretically straightforward: Inject a biological molecule tagged with the stable isotope boron-10 that localizes in tumors, then bombard the tumor with a beam of low energy, or thermal, neutrons. Under a blast of neutron radiation, boron nuclei undergo fission to daughter isotopes and release highly energetic alpha particles (and some gamma particles). The short-range alpha radiation destroys tumor cells, leaving most adjacent tissues unscathed.

Such elegant designs have, however, endured criticism from naysayers who argue that the expensive therapy, which requires a nuclear reactor, is unlikely to prove practical. At least some of the criticism stems from resentment over Congress's continued earmarking of non-peer reviewed funds for the program. Funding for boron neutron capture therapy comprises over a fifth of the Ener-

gy Department's current \$36 million budget for medical applications research.

Advocates say the research is nearing fruition and offers hope to patients with otherwise inoperable brain cancers. Investigators have overcome many of the difficulties producing neutron beams that penetrate living tissue without releasing their lethal energy before reaching deeply situated tumors. Perfecting the boron compounds remains a challenge. The amino acid analogue BPA, which neutron capture investigators first tested in 1959, has emerged as one likely to accumulate in adequate concentrations inside tumors.

"Work has gone very well in animal trials with BPA," says Jeffrey Coderre, PhD, a scientist in the medical department at Brookhaven. Tests in humans of safety and distribution of BPA are underway. The next step is to subject human cancer patients to neutron beams from a small nuclear reactor at Brookhaven. Dr. Coderre expects to begin treating patients afflicted with ocular melanoma or glioblastoma in 12 to 18 months.

Scientists with Boron Biologicals are developing boron analogues of other amino acids, peptides, and nucleic acids for possible use as anti-viral agents, osteoporosis drugs, and analgesics. The company's primary customers, however, remain the researchers developing neutron capture therapy at Brookhaven, the Idaho National Engineering Laboratory, and the Tufts University/New England Medical Center with the Massachusetts Institute of Technology. ■

OHCP's Health Care Policy Bulletin Available

Copies of the first issue of The Society of Nuclear Medicine's *Health Care Policy Bulletin* were mailed to all SNM members in January. Those interested in receiving further issues of the newsletter should write to Sheryl Stern, Office of Health Care Policy, P.O. Box 123, Elmwood Park, New Jersey 07407.