

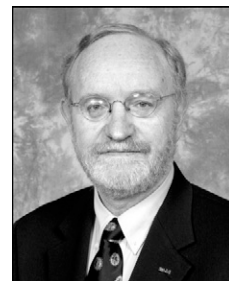
MI at the Mid-Winter Meeting

At SNM's Mid-Winter Educational Symposium, held February 14–18 in Newport Beach, CA, 2 educational sessions focused on molecular imaging.

The SNM Radiopharmaceutical Sciences Council, in collaboration with the Molecular Imaging Center of Excellence, sponsored a program titled “New Radiopharmaceuticals for Molecular Imaging.” Organized by Henry F. VanBrocklin, PhD, of the University of California–San Francisco, the program highlighted the breadth of molecular imaging radiopharmaceuticals now available or in the pipeline. In this program, Robert Mach, PhD, of Washington University (St. Louis, MO) discussed the challenges that radiochemists face in the design of receptor-binding agents for the brain. He presented an update on areas of current interest, including radiopharmaceuticals for imaging the dopaminergic system, Alzheimer disease pathophysiology, and neuroinflammation, a topic of increasing interest because of its possible role in several neurologic disorders. Carolyn Anderson, PhD, also of Washington University, reviewed applications of molecular imaging in oncology, including

cellular proliferation, hypoxia, tumor receptors, and angiogenesis. The wide variety of pathophysiologic mechanisms in the heart that are targets for imaging was emphasized by Jeanne Link, PhD, of the University of Washington (Seattle), in her talk on new radiopharmaceuticals in cardiology. In the final lecture, Dr. VanBrocklin described the advantages offered by the exploratory Investigational New Drug mechanism in facilitating the initial use of new radiopharmaceuticals in humans.

Under the leadership of Paul Kinahan, PhD, the SNM Computer and Instrumentation Council organized “New Instrumentation for Molecular Imaging.” Suleman Surti, PhD, from the University of Pennsylvania (Philadelphia), explained the principles of time-of-flight PET imaging and the reasons for the recent resurgence of interest in this



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MAINTENANCE OF CERTIFICATION

Participating in MOC

The American Board of Nuclear Medicine (ABNM) is asked increasingly by state medical licensing boards, credentialing committees, and payers whether individual diplomates are participating in maintenance of certification (MOC). The ABNM expects that diplomates of all medical boards will be continuously involved in the MOC process. Each diplomate has annual milestones and should work at a steady rate toward fulfillment of all MOC requirements by the end of each 10-year cycle. The ABNM has developed a set of objective criteria to be used to determine each diplomate's MOC status based on the milestones he or she has met. For example, any diplomate who is more than 3 years behind in payment of his or her annual MOC fee will no longer be classified as participating in MOC.

Additional criteria are: *Part I:* Update/confirmation of contact information, practice profile, and unrestricted medical licenses is required annually. *Part II:* continuing medical education (CME) and self-assessment module (SAM) requirements should be met annually but cannot be more than 5 years behind. *Part III:* MOC examination must be passed every 10 years. Failure to pass the exam will result in nonparticipation status. *Part IV:* Participation in 1 or more Practice Performance

Acceptance (PPA) activities must be documented. Diplomates who are 3 or more years behind in meeting annual milestones for Part IV will be considered as not participating.

In order to take the MOC examination, diplomates will have to be up to date on all MOC requirements. The dates on which diplomates with lifetime certificates are required to take the MOC examination and details of CME and SAM requirements can be found in the ABNM MOC Frequently Asked Questions brochure posted on the ABNM Web site at www.abnm.org/MOC_FAQ_Brochure.pdf. Details of the annual milestones for Part IV, PPA, can also be found in the latest issue of the ABNM newsletter, which is available on the Web site at www.abnm.org/docs/Winter_2008_tracer.pdf.



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family history of alcohol abuse was made for all 44 participants. Quantitative autoradiography was used to measure specific binding to 5-HT_{2A} ³H-ketanserin receptors in the prefrontal cortex. 5-HT_{2A} binding was found to decrease with age across all subjects, and no overall differences

were identified in receptor binding between the alcoholic and control groups. However, those with a family history of alcoholism ($n = 23$), whether alcoholics or controls, had lower 5-HT_{2A} binding throughout the prefrontal cortex than those without ($n = 21$). These and other findings led

the authors to conclude that lower 5-HT_{2A} receptor binding in the prefrontal cortex of individuals with a family history of alcoholism “suggests a genetic predisposition to alcoholism.”

Alcohol: Clinical and Experimental Research

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technique, including new detector materials and improved lesion detectability in heavier patients. Compensation for respiratory motion is a major concern in PET/CT, because of the different acquisition times for the fast CT and slower PET components of the procedure. Sadek Nehmeh, PhD, from Memorial Sloan–Kettering Cancer Center (New York, NY), described various approaches to dealing with resulting image artifacts. Tinsu Pan, PhD, of the M.D. Anderson Cancer Center (Houston, TX), discussed the effects of advances in CT technology on PET/CT and also described methods to

correct for motion in cardiac and tumor imaging. An emerging technology for molecular imaging is the combination of PET and MR imaging into a single system capable of simultaneous imaging. Ciprian Catana, PhD, of Harvard Medical School (Boston, MA), discussed the challenges in designing these systems and showed promising results in systems for small animal studies and for clinical imaging in humans.

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