Cardiovascular Molecular Imaging Think Tank

NMMI and the American Society of Nuclear Cardiology organized a focused meeting of experts for a "Cardiovascular Molecular Imaging Think Tank: Devising Strategies to Bridge the Translational Divide," on April 16 and 17 at the American College of Cardiology Heart House in Washington, DC. Organizers of the meeting invited individuals with diverse scientific, clinical, industry, and research funding perspectives on the development of cardiovascular molecular imaging to discuss ways to enhance and accelerate translation of new discoveries to the clinic. Key stakeholders at the meeting included experts in preclinical development of clinical cardiovascular imaging and associated techniques, leading clinical practitioners, individuals with expertise in development and regulation of new cardiovascular pharmaceuticals and devices, and senior NIH staff with interests in cardiovascular molecular imaging.

Program Committee cochairs for the meeting were Robert J. Gropler, MD, from the Mallinckrodt Institute of Radiology at Washington University School of Medicine (St. Louis, MO); Mehran M. Sadeghi, MD, from Yale University School of Medicine (New Haven, CT); and James E. Udelson, MD, from Tufts University School of Medicine (Boston, MA). In preliminary planning for the event, the cochairs and others on the program committee identified challenges associated with gaps in collaborative communication between experts in molecular imaging and cardiovascular practitioners. In addition to exploring specific barriers to advancement, the group wanted to look at areas in current patient management in which

existing or emerging molecular imaging techniques can provide new and beneficial solutions that may be implemented relatively quickly. One goal of the meeting was to identify optimal ways for investigators, industry, and funding agencies to focus on clinically relevant problems and areas in which the impact of molecular imaging can make significant near-term contributions. Such a "think tank" coalition also was envisioned as having the potential to advocate for molecular imaging in the larger medical and regulatory communities.

The meeting opened with general considerations from industry, regulatory, and reimbursement perspectives, followed by a series of core lectures and panel discussions. One group of core lectures, moderated by Jeffrey J. Goldberger, MD (Northwestern Memorial Hospital; Chicago, IL), and Albert J. Sinusas, MD (Yale School of Medicine; New Haven, CT), centered on arrhythmias; another, moderated by Udelson and Gropler, on heart failure and valvular disease; and the third, moderated by Jonathan R. Lindner, MD (Oregon Health & Science University; Portland) and Sadeghi, on valvular disease and thrombosis. Afternoon breakout sessions discussed and elaborated on the themes of these cores. Activities on the second day included review and synthesis of breakout discussions, followed by general discussions, recommendations, and plans for follow-up. Recommendations included ways to enhance research funding, overcome regulatory hurdles, and ensure adequate clinical reimbursement. The group plans to publish a white paper summarizing discussions and findings later in 2015.



Think tank attendees. Left to right, top row: Mathias Nahrendorf, MD; David E. Sosnovik; Zahi A. Fayad, PhD; Prem Soman, MD, PhD; Robert Beanlands, MD; Marcelo F. Di Carli, MD; Barry A. Siegel, MD; Ahmed A. Tawakol, MD; Albert J. Sinusas, MD; Denis Buxton, PhD; Brian Abbott, MD; Rafel Dwaine Rieves, MD; Farouc Jaffer, MD, PhD; Frank M. Bengel, MD; Brian Davidson, MD; John M. Canty, Jr., MD. Middle row: Jason S. Lewis, PhD; Simona Ben-Haim, MD, DSc; Pamela K. Woodard, MD; Narasimhan Danthi, PhD; Ronald G. Schwartz, MD; Floradeliza S. Villanueva, MD; Arshed Ali Quyyumi, MD; Therese Kitt, MD; Milton Pressler, MD; Peter Caravan, PhD; Kim Allan Williams, Sr., MD; Mehran M. Sadeghi, MD; Eugene Chung, MD; Vasken Dilsizian, MD. Front row: Robert J. Gropler, MD; Christina Liu, PhD; Antonio Sastre, PhD; James E. Udelson, MD; Mark I. Travin, MD; Alfred E. Buxton, MD; Jonathan R. Lindner, MD; Jeffrey J. Goldberger, MD; Blase Carabello, MD; Victor A. Ferrari, MD;

Simon Robinson, PhD; Stephanie Thorn, PhD; Sharmila Dorbala, MD; Venkatesh Murthy, MD; Helina Kassahun, MD; Gregory Lanza, MD.