

# From the SNM Molecular Imaging Center of Excellence: An Open Invitation

Often the most significant leap forward that a laboratory study can take is when it can be extended to the in vivo case—a necessary and often sufficient precondition for success in the clinic. Molecular imaging is concerned with taking that leap forward, where important discoveries are translated to new diagnostic and therapeutic agents to improve patient care. The union of recent advances in hybrid imaging technology with advances in high-throughput target discovery and chemical synthesis along with the generation of increasingly relevant animal models of human disease has enabled the current explosion of molecular imaging research that is ripe for clinical translation. Optical- and ultrasound-based techniques were treated dismissively by the medical community until recently, but now clinically useful and commercially available fluorescent probes are proliferating and ultrasound bubbles can be derivatized for site-selective targeting. There is even a trend to develop multimodality/multifunctional probes for molecular imaging, anticipating the expansion in hybrid imaging technology. The ultimate goal of these efforts is to provide early detection of disease and enable rapid therapeutic decisions—on individual patients in real time.

As you may know, SNM has recognized the expanding role of molecular imaging in 21st-century patient care and acknowledged a unique ability to ensure that the medical community is well prepared to adopt these new technologies. Our “Bench to Bedside” campaign will help implement SNM’s new core purpose: To improve health care by advancing molecular imaging and therapy.

This past summer, SNM explored basic research, instrumentation, drug development, clinical issues, and educational needs at its “Shaping the Future” Molecular Imaging Summit. Participants from industry, academia, and government published their recommendations in Newsline in December. These recommendations formed

the basis of a 5-year action plan—infused with substantial corporate financial support from the campaign—that will be a priority for SNM during the coming months and years.

To bring molecular imaging from the bench to the bedside, SNM will work to raise awareness about molecular imaging and related patient care benefits, train the current workforce and help educate future generations of scientists and practitioners, expand funding available for research, foster translational research, and enhance collaboration with referring physicians and patient groups.

Molecular imaging is a multidisciplinary enterprise, and we recognize that a collaborative approach is necessary to accomplish these ambitious goals. We welcome all who share our interest. We have many important tasks ahead and would like to invite the molecular imaging community—those with expertise in optical, MR, and ultrasound imaging, in addition to nuclear modalities—to work with us. We have recently formed new task forces and are reaching out to the community for membership in those groups.

We thank Conrad Nagle, MD, editor of Newsline, for expanding the format to include a monthly update on the activities of the molecular imaging community. Check the pages of Newsline in the coming year for new developments in molecular imaging and therapy.



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