

**SNMMI Board of Directors Bi-Annual Report  
Center for Molecular Imaging Innovation and Translation (CMIIT)  
2017 Annual Meeting**

**Overview:** SNMMI Councils and Centers provide professional networking and educational programs for nuclear medicine and molecular imaging professionals in respective areas, while simultaneously serving as a resource for development and implementation of the SNMMI Strategic Plan and other Society policies.

**Reporting Instructions:** *Twice a year, councils and centers are asked to submit a written report to the House of Delegates (councils) and Board of Directors (centers of excellence). These reports help the HOD and BOD to keep up-to-date on the activities of the special interest groups, while also providing an opportunity for these groups to note any challenges they are having with respect to meeting their goals.*

**Goal 1: (80% Completed)**

**Optical Imaging Task Force**

**SNMMI Strategic Plan Goals that relates to this goal:**

- Goal A: Advance the development and approval of nuclear medicine and molecular imaging technologies.
- Goal B: Facilitate and support the availability and clinical utilization of nuclear medicine and molecular imaging technologies.
- Goal E: Support and enhance the professional workforce and environment

**Current Progress:** Eva Sevick, PhD, is chair of the CMIIT Optical Imaging Task Force. This task force will help identify, promote and facilitate collaboration and education in the translation of optical technologies used in molecular imaging and nuclear medicine. Dr. Sevick organized a Continuing Education session during the SNMMI 2016 Annual Meeting entitled “First-in-Human Imaging Tracers: Fluorescent Optical Tracers”. Speakers include Drs. Miller, Harvey, and Sorger. The committee is also engaged in outreach to OSA. (Updated: January 2017)

**Next Steps:** CMIIT will continue to develop CE sessions on optical imaging for SNMMI meetings; will seek opportunities to co-sponsor optical related meetings; and develop relationships with external organizations. (Updated: January 2017)

## **Goal 2: (100% Completed)**

### **Education**

#### **SNMMI Strategic Plan Goals that relates to this goal:**

Goal E: Support and enhance the professional workforce and environment.

#### **Current Progress:**

##### CE Sessions at 2017 SNMMI MWM

- Non-Nuclear Molecular Imaging, MR and Optical
- Update on USP Activities: General Chapters and Radiopharmaceutical Monographs (sponsored with RPSC)
- Prostate Cancer Imaging and Prostate Therapy Parts I and II (sponsored with CIC and RPSC)
- Clinical Translation of Neuroendocrine Theranostics (sponsored with RPSC)
- How to Lead a Research and Clinical Molecular Imaging Program

##### CE Sessions for 2017 SNMMI Annual Meeting

- CAT4: Molecular Imaging in Neuropsychiatric Disorders and Neurodegenerative Diseases (co-sponsored with BIC)
- CE13: Translation of New Radiotracer Development: The Need for Speed (co-sponsored with CVC)
- CE22: Basic Science Summary Session One (co-sponsored with RPSC)
- CE25: Beyond MPI - New Tracers and Applications (co-sponsored with CVC)
- CE42: Board Certification for Nuclear Medicine Scientists: Its Value and Pathways to Obtain It (co-sponsored with CaIC)
- CE44: Emerging Functional Molecular PET in Oncology
- CE63: How to Lead a Research and Clinical Molecular Imaging Program
- CE86: First in Human/Early Phase PET in Oncology
- CE95: Intraoperative Detection Devices and Probes (co-sponsored with WMIS)
- CE96: Molecular Imaging of Lung Inflammation
- CE100: Standardization of Advanced PET/SPECT Data Acquisition and Analysis)

##### Emerging Technology Sessions for 2017 SNMMI Annual Meeting, Non-CE

- CMIIT Emerging Technologies: Updates on NETSpot, Axumin and a Look to the Future of 015 Water
- CMIIT Emerging Technologies: Early Career Development and Transitions in Nuclear Medicine
- CMIIT Emerging Technologies: Emerging Technologies and Techniques in Preclinical Imaging and Translation

**Next Steps:** This is an ongoing initiative, and CMIIT will continue to organize CE and non-CE sessions for the SNNMI meetings. CMIIT is also engaged in planning a joint conference with AACR for February 2018. (Updated: June 2017)

**Goal 3: (30% Completed)**

**Nanotechnology**

**SNMMI Strategic Plan Goals that relates to this goal:**

Goal E: Support and enhance the professional workforce and environment.

**Current Progress:** Dr. Cathy Cutler has agreed to lead this initiative and is speaking at the 2017 Annual Meeting in the Emerging Technologies Session with a talk entitled “Emerging Technologies and Techniques in Nanoparticle Imaging,” during the Emerging Technologies and Techniques in Preclinical Imaging session. (Updated: May 2017)

**Next Steps:** The CMIIT BOD will discuss the progress of this initiative with Dr. Cutler (a BOD member) and identify steps that need to be taken into sponsoring a meeting on nano-technology in molecular imaging of cancer. (Updated: May 2017)

**Goal 4: (60% Completed)**

**Translation and Advancement of Molecular Imaging Agents**

**SNMMI Strategic Plan Goals that relates to this goal:**

- Goal A: Advance the development and approval of nuclear medicine and molecular imaging technologies.
- Goal B: Facilitate and support the availability and clinical utilization of nuclear medicine and molecular imaging technologies.
- Goal D: Advance and promote quality, value and safety of Molecular Imaging and Nuclear Medicine.
- Goal E: Support and enhance the professional workforce and environment.

**Current Progress:** CMIIT has made progress on the organization of Continuing Education Sessions and Emerging Technology Sessions at the AM along with the Industry Partner’s Circle which all have emphasized the translation of Molecular Imaging Agents. In addition, CMIIT has partnered with WMIS to co-sponsor translation-related educational sessions at the AM (Intraoperative Detection Devices and Probes) and the WMIS meeting in Pennsylvania in September. (Updated: May 2017)

**Next Steps:** The CMIIT BOD will discuss these topics at an upcoming conference call. Final approval of the revised Translational Research Curriculum white paper by the CMIIT BOD will be sought, and the white paper will then be submitted for SNMMI approval. After approval by the SNMMI, a manuscript for publication will be submitted. (Updated: May 2017)

## Goal 5: (50% Completed)

### Preclinical Imaging

#### SNMMI Strategic Plan Goals that relates to this goal:

- Goal A: Advance the development and approval of nuclear medicine and molecular imaging technologies.
- Goal D: Advance and promote quality, value and safety of Molecular Imaging and Nuclear Medicine.
- Goal E: Support and enhance the professional workforce and environment.

#### Current Progress:

- The Preclinical Task Force has reviewed the modules as identified for the “Preclinical Imaging in Small Laboratory Animals” – PRIMA workshop hosted by Bernd Pichler, PhD. The PRIMA modules are being used to expand education, and the task force is pursuing using these modules.
- The task force recently published guidance on QC methods for preclinical imaging equipment designed to provide the simplest possible acceptable QC routines to aid in improved adoption of QC in preclinical imaging. (Osborne, D.R., Kuntner, C., Berr, S. et al. Mol Imaging Biol (2016). doi:10.1007/s11307-016-1012-3) (Updated: January 2017)

#### Next Steps:

- EANM has reviewed our work and would like to work on joint guidelines for preclinical PET/CT QC. They would like to use our publication listed above as a framework and foundation. We will be working with SNMMI leadership to develop the necessary agreements to develop this joint guidance work. As of May 2017, EANM has experienced delays due to lab installations at a primary European lab, and will resume when that work is complete.
- Task Force Membership:
  - The task force is in the process of assessing current members and their areas of expertise. Following the collection of that data, we will actively begin recruiting new member from different areas of preclinical imaging than previously considered. These may include radiochemists, lab managers and technicians. The intent is to bring in a wider range of expertise to drive new guidance that not only impacts high level individuals within imaging labs, but also may have an impact on day to day lab operations.
  - We have also assessed adding term limits to the task force chair position so that new members can have an opportunity to lead and bring new ideas and directions to the group. Terms for new chairs will be 3 years. The task force agreed that the current chair would retain their role for one more year before rotating leadership.
- Industry/Academic Collaborations Guidance – The task force has decided a key project will be to develop guidance for the preclinical community to assist industry and academic preclinical users in their collaborations development. Often industry and academia have different expectations for collaborations performance. This guidance

will help provide key differences in points of view that may assist readers in understanding the differing perspectives.

- The task force sent out a survey last year that went out to industry and academic individuals to assess issues they have experienced in setting up industry/academic collaborations. The responses are being used to determine where to focus our guidance document.
- SNMMI Preclinical non-CE session: The task force has organized the session entitled Emerging Technologies and Techniques in Preclinical Imaging and Translation, which will be held on Monday, June 12 during the SNMMI Annual Meeting. (Updated May 2017)

**Goal 6: (80% Completed)**

**Industry Partners Circle**

**SNMMI Strategic Plan Goals that relates to this goal:**

- Goal A: Advance the development and approval of nuclear medicine and molecular imaging technologies.
- Goal B: Facilitate and support the availability and clinical utilization of nuclear medicine and molecular imaging technologies.
- Goal C: Increase appropriate utilization of Radionuclide Therapy.
- Goal D: Advance and promote quality, value and safety of Molecular Imaging and Nuclear Medicine.
- Goal E: Support and enhance the professional workforce and environment.

**Current Progress:** CMIIT sponsored the Industry Partners Circle (IPC) just prior to the Mid-Winter Meeting on Wednesday, January 27, 2016. Approximately ten industry partners attended representing an array of large and small companies. Including our BOD and staff, approximately twenty-five people participated in the IPC. The IPC was centered around five questions that impact the future of molecular imaging and therapeutics. Each question was assigned to industry representatives and BOD members to lead the discussion that was subsequently opened up to the rest of the panel for more input. These discussions lasted approximately 45 minutes and resulted in an outstanding change of ideas. CMIIT prepared a summary article, and is seeking opportunities to publish the article, such that it can help guide SNMMI and its membership on steps that can be taken to help move molecular imaging forward. (Updated: January 2017)

**Next Steps:** Publish IPC report in an appropriate journal. Plan for 2018 IPC to take place in January/February 2018 (Updated: May 2017)

**Goal 7: (50% Completed)**

**Increase CMIIT Membership**

**SNMMI Strategic Plan Goals that relates to this goal:**

Goal E: Support and enhance the professional workforce and environment.

**Current Progress:** Kayvan Keshari was appointed as the new Chair of the CMIIT Membership Task Force. The CMIIT Membership Task Force also discussed improvements to the CMIIT website and Neil Petry has been appointed as the new Chair of this task force. We have recently added free membership for trainees. The CMIIT Membership Task Force also discussed the importance of outreach efforts to other Councils and Centers. Currently, both the RPSC President and CVC President are ex-officio members of the CMIIT BOD and that the CMIIT Operating Procedures state that the President of CMIIT can appoint up to four council representatives to sit on the CMIIT BOD. Suggestions were made to have representatives from the Brain Imaging Council, the Nuclear Oncology Council, the Clinical Trials Network, and the Young Professional Council as ex-officio, non-voting members of the CMIIT BOD. (Updated: May 2017)

**Next Steps:** The current CMIIT BOD will decide which Councils to add to the CMIIT BOD as nonvoting members at the Annual Meeting. (Updated: May 2017)