The SNMMI Therapy Center of Excellence (Therapy CoE) aims to advance the utilization of targeted radioisotope therapy through education and collaboration with other organizations and stakeholders. Therapy CoE will be a repository of expertise and knowledge, to advise and augment organizations within SNMMI which are working on issues related to targeted radioisotope therapy.

SNMMI Value Initiative 2.0 – Engagement of Councils and Centers of Excellence

In 2018, SNMMI launched its Value Initiative – a comprehensive strategic plan to advance the crucial role of nuclear medicine and molecular imaging in patient care and science ad discovery. The next step will become SNMMI’s Value Initiative 2.0. As part of Value Initiative 2.0 SNMMI will continue to adjust our organization to the changing health care environment. Value Initiative 2.0 will also engage as many SNMMI members as possible through the work of various committees, working groups, SNMMI councils and centers of excellences and the SNMMI chapters.

As part of this inward focusing effort, councils and centers of excellence will be participating in Domain conference calls and working directly with the chairs from the six (6) domains to address the opportunities and develop strategies to meet them.

As a center of excellence, the Therapy CoE will be involved in every domain; Quality of Practice, Research and Discovery, Workforce Pipeline, Outreach, Advocacy and Organizational Strength and Stability.

Goals and Programs for FY2021

Therapy CoE intends to focus its efforts in the next couple years on initiatives which support patients maintaining access to effective therapeutics, administered by trained practitioners who are part of an integrated health care team. Issues Therapy CoE will address through educational and outreach initiatives include identifying challenges to utilization of therapeutics, education of referring physicians, and reimbursement. Additionally, Therapy CoE will promote partnerships for multicenter retrospective studies of existing therapeutic models. Specific goals and objectives include:

1. **Committee on Radioiodine Therapy (CORT)**
   a. Managing SNMMI’s participation in the second (third? I’ve lost track) Multilateral Conference on Differentiated Thyroid Cancer and thyroid disease, scheduled for March 2020
   b. Presentations at other organizationssuch as the Thyroid World Congress
   c. Conducting a survey to establish a database of facilities performing dosimetry to help determine the prescribed activity for I-131 therapies for patients with differentiated thyroid cancer.

2. **Theranostics Consensus Conference**
   The Therapy CoE is collaborating with CTN and NCI to organize it’s third two-day symposium in December 2020. Invitations will be extended to academics, clinicians, industry and regulators; the variety of stakeholders in Theranostics.

   In addition, the Therapy COE collaborated with the Quality Committee to organize a Nuts & Bolts conference held October 2019. The SNMMI Theranostics Conference included topics such as: therapies, theranostics, building your radionuclide clinical practice and more. This event was well received. The Therapy COE is working to determine whether a Virtual Meeting will be held in 2020 or whether they will hold off until 2021 for a face to face meeting.
3. **ASTRO/SNMMI Task Force on Theranostics**
   The Therapy Center will continue efforts with ASTRO on the joint Task Force. Specifically, the two working groups (care pathway/workflow and training and education requirements) will continue to meet via conference call with the goal of having draft white papers available by next spring. The SNMMI Board voted on and approved the term Nuclear Oncologist to identify the individual administering radiotherapy to patients.

4. **Theranostics Tool-Kit**
   The Therapy Center of Excellence discussed the Theranostics Tool-Kit during their retreat at the 2019 Mid-Winter Meeting. The Tool-Kit will be a web-based platform that will house all items related to theranostics, radioisotope therapy, etc. The Therapy Center and staff are working to compile a list of all the existing resources and will begin development of the site in the new year. Material from the Theranostics Conference in Las Vegas will be a great resource to add.

5. **Nuclear Medicine Global Initiative**
   The Nuclear Medicine Global Initiative (NMGI) agreed to move forward with Theranostics: an evidence-based NM value as the third topic. The new topic working group is being led by Jean-Luc Urbain, MD, PhD, CPE. The Therapy CoE has two representatives on this group and will be working to provide the SNMMI perspective.

6. **Education**
   The Therapy CoE will submit proposals and organize sessions for the SNMMI Mid-Winter and Annual meetings in 2021.

7. **Newsletter**
   The Therapy Center will launch a newsletter to highlight its activities in support of promoting Therapy and to educate the SNMMI membership on developments in Theranostics.

8. **Intern**
   The Therapy CoE will support its intern with a substantial project as he completes his term by June 2021.

**Proposed FY21 Budget and Resource Requirements**

1. **Summary of Financial Needs**
   The Therapy CoE is requesting funds from the SNMMI to support travel for SNMMI members to the Multilateral Consensus Conference ($4000) and the Theranostics Consensus Conference ($16,000). The other FY21 goals of the Therapy Center will be supported by the attached budget.

2. **Resource Requirements**
   No additional staff, materials, technology, or marketing support is required beyond the usual support provided by SNMMI headquarters.
Therapy Center of Excellence
Background Overview

1. **Mission**

Therapy CoE is an organizational component within the SNMMI dedicated to all aspects of the development and utilization of Targeted Radioisotope Therapy (TRT) as an alternative to other treatments. Specifically, the new center will bring together a centralized group of all constituents within this area creating a multi-disciplinary interest group whereby industry, big pharma, physicians, scientists, government and regulatory agencies as well as other stakeholders can convene to share ideas, develop education offerings and advance the utilization of radionuclide therapy.

The Therapy Center of Excellence:
(a) Provides a forum for members with similar interests
(b) Provides expertise in TRT
(c) Fosters research and education in TRT
(d) Provides outreach to other professionals and organizations
(e) Nurtures new membership in SNMMI

2. **Therapy CoE Board of Directors**

<table>
<thead>
<tr>
<th>Officers</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>President: Dan Lee, MD</td>
<td>June 2019 – June 2021</td>
</tr>
<tr>
<td>Vice President: Neeta Pandit-Taskar, MD</td>
<td>June 2019 – June 2021</td>
</tr>
<tr>
<td>Secretary/Treasurer: Alan K. Klitzke, MD, FACM</td>
<td>June 2019 – June 2021</td>
</tr>
<tr>
<td>Immediate Past President: Dan Pryma</td>
<td>June 2019 – June 2021</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directors</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anca M. Avram, MD, FACNM</td>
<td>June 2018 – June 2021</td>
</tr>
<tr>
<td>Thomas A. Hope, MD</td>
<td>June 2018 – June 2021</td>
</tr>
<tr>
<td>Rathan M. Subramaniam, MD, PhD, MPH, FACNM</td>
<td>June 2018 – June 2021</td>
</tr>
<tr>
<td>Satoshi Minoshima, MD, PhD</td>
<td>June 2018 – June 2021</td>
</tr>
<tr>
<td>*Suzanne E. Lapi, PhD</td>
<td>June 2019 – June 2022</td>
</tr>
<tr>
<td>*Giuseppe Esposito, MD, MBA</td>
<td>June 2019 – June 2022</td>
</tr>
<tr>
<td>Michael S. Hofman, MBBS</td>
<td>June 2019 – June 2022</td>
</tr>
<tr>
<td>AJB (Sandy) McEwan, MD, FSNMMI</td>
<td>June 2019 – June 2022</td>
</tr>
<tr>
<td>Yusuf Menda, MD</td>
<td>June 2019 – June 2022</td>
</tr>
<tr>
<td>David Dick, PhD</td>
<td>July 2020 – June 2023</td>
</tr>
<tr>
<td>Pedram Heidari, MD</td>
<td>July 2020 – June 2023</td>
</tr>
<tr>
<td>Phillip Kuo, MD, PhD</td>
<td>July 2020 – June 2023</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intern (non-voting)</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ali Salavati, MD, MPH</td>
<td>June 2019 – June 2021</td>
</tr>
</tbody>
</table>

3. **Current Status**

a. **Financial**

As of June 2, 2020, the Therapy CoE has a projected FY21 revenue of $16,597. This includes $6,000 in member dues and $8,997 carryover from FY20. Projected FY21 expenses total $14,128. Revenue is generated through membership dues, which are $15 annually per member.
b. **Membership**
   As of June 2, 2020, there were 391 members in the Therapy CoE of which 331 were physicians and scientists, and 60 technologists. The annual membership counts for the past three years are shown below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Membership Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>359</td>
</tr>
<tr>
<td>2018</td>
<td>338</td>
</tr>
<tr>
<td>2017</td>
<td>328</td>
</tr>
</tbody>
</table>

c. **Member Benefits**
   Member benefits include:
   - Eligibility to vote in the Therapy COE Board of Directors elections
   - Newsletter
   - Sponsored educational symposia related to members’ interests
   - Therapy CoE E-Community
   - A $20.00 discount for Therapy CoE sponsored categorical session.

4. **Accomplishments for FY2020**
   During the past year the Therapy Center of Excellence was active in educational activities and outreach to the broader medical community. The highlights of the Center’s activities are listed below:

a. **Therapy Summit Meeting**
   In conjunction with the 2020 SNMMI Mid-Winter Meeting, the Therapy Center of Excellence held a ½ day summit focusing on an overview of the current state of therapy, SNMMI current activities as related to therapy, activities from the Quality Committee and SPC, the future direction of therapy and the development of SNMMI’s plan moving forward. These activities have resulted in several break out groups, identifying the top areas in therapy that need to be addressed: coding and reimbursement, dosimetry, accreditation, and education for both practicing physicians and ones in training.

b. **2020 Mid-Winter Meeting Educational Activities**
   Co-sponsoring with the Clinical Trials Network, Correlative Imaging Council, PET Center of Excellence the Therapy Center of Excellence held a session titled, *Prostate Cancer Theranostics* during the 2020 SNMMI Mid-Winter Meeting. This session aims to educate the audience about the clinical applications of theranostics in prostate cancer. Topics included prostate cancer management in the context of other systemic therapies, clinical trial validation of PSMA PET and PSMA therapy, practical aspects of PSMA imaging and therapy from a technologist perspective, and a patient's perspective of prostate theranostics.

c. **Multilateral Conference**
   Therapy Center’s Committee on Radioiodine Therapy (CORT), chaired by Katherine Zukotynski, BASc, MD, PhD, FRCPC led the SNMMI in driving forward the collaboration with and participating in the Multilateral Conference on Differentiated Thyroid Cancer that was to be held in Martinique in March 2020. Representatives of SNMMI, the European Association of Nuclear Medicine (EANM), the European Thyroid Association (ETA) and American Thyroid Association (ATA) were to discuss issues related to the care of patients with thyroid cancer, with focus on radioactive iodine (RAI) therapy.

   Due to COVID19, the face to face meeting was cancelled. Debate and discussion, moderated by Laszló Hegedűs, MD, did continue via email and teleconference, as they addressed formalizing dialogue and activities among the four societies, indications and optimal prescribed activity for RAI adjuvant therapy, and definition and classification of radioiodine refractory thyroid cancer. The group synthesized the proceedings into what are being called the “Martinique Principles,”
which consist of the major points that the attendees agreed upon and define terminology and outline areas of controversy and goals for future study.

d. ASTRO/SNMMI Task Force on Theranostics
In 2019, SNMMI partnered with American Society for Radiation Oncology (ASTRO) to form a joint task force. John Buatti, MD, Chair of the ASTRO Task Group on Theranostics, reached out to Dr. Satoshi Minoshima regarding the formation of a collaborative working group with SNMMI to strategize on theranostics. The first conference call was held in March and the group agreed on the following next steps:
1. Create a sub-group focused on developing the care pathway/workflow.
2. Create a sub-group focused on training and education requirements.
3. Contact AAPM to see if we can collaborate on their existing individual’s dosimetry task force. (It was suspected that both ASTRO and SNMMI already have individuals serving on the task force who are members of both organizations.)
4. Organize a leadership meeting during the SNMMI Annual Meeting in June.
5. Organize a 90-minute CE session at the SNMMI annual meeting on individual dosimetry.
6. ASTRO is organizing a ½ day session at the ASTRO Annual Meeting on theranostics.

Collaboration with ASTRO will assist SNMMI in defining optimal training and experience requirements beyond radiation sciences such as clinical competence in oncology as well as NRC regulations; and in developing guidelines on how and when to do dosimetry.

In addition, based on the discussions and conclusions of these two working groups, the Therapy Center will work to gain the formal board approval from both ASTRO and SNMMI and disseminate this important information to not only the nuclear medicine and molecular imaging community, but to all those involved in this area.

e. Educational Sessions at the 2020 SNMMI Annual Meeting (prior to the meeting going virtual)
   - CAT: Clinical Issues Effecting Diagnosis and Management of Differentiated Thyroid Cancer (CORT)
   - CAT: Targeted Molecular Imaging and Radiotheranostics of Prostate Cancer
   - CE: Joint ASTRO/SNMMI Session on Theranostics
   - CE: Prostate Cancer Theranostics: Applications of Molecular Targeted Radiotherapy (virtual edition)
   - Radiopharmaceutical Targeted Therapies in Pediatric Cancers
   - Saul Hertz, Award Symposium: Frontiers of I131 Therapy in Differentiated Thyroid Cancer
   - CE: Current Concepts and Controversies in radioactive iodine theranostics (CORT)

f. Saul Hertz Award
The 2020 awardee was Douglas Van Nostrand, MD whose presentation entitled “Frontiers of I131 Therapy in Differentiated Thyroid Cancer.

g. Young Investigator Awards
These awards are funded by the Education and Research Foundation for Nuclear Medicine and Molecular Imaging. The 2020 Therapy CoE YIA winners are:

1st Place – Edward O’Neill, PhD
2nd Place – Reinier Hernandez, PhD
3rd Place – Diane S. Abou, PhD