1. Executive Summary
The Cardiovascular Council (CVC) of SNMMI works to ensure and enhance the quality and clinical utility of the use of cardiovascular nuclear medicine studies in patient care. The CVC achieves this goal via three endeavors: 1) Develop and promote methods and procedures for proper clinical application of cardiovascular radionuclide / molecular imaging; 2) Educate providers both within and outside SNMMI regarding the most up-to-date and highest quality cardiovascular nuclear medicine care, and 3) Serve as a facilitator to the basic research development of new cardiovascular imaging techniques, and in the translation and clinical application of such new techniques. Members of the CVC also work with SNMMI and other cardiac imaging organizations in the interaction between providers of nuclear cardiology services, and government and 3rd party payers with regard to quality and appropriate compensation for services. Finally, the CVC contributes to the presentation and explanation of cardiovascular nuclear imaging methods and benefits to the general public through print and other media.

2. Mission
The Cardiovascular Council is a group within The Society of Nuclear Medicine, Inc., hereafter referred to as the Society, dedicated to the interchange of scientific and medical ideas among Society members who have interest in cardiovascular imaging using radiopharmaceuticals. The overall mission of the Cardiovascular Council is to:
   a. provide a forum for members with similar interests
   b. provide expertise in the field of interest to the membership
   c. foster research and education in the field of interest
   d. provide outreach to other professionals and organizations
   e. nurture new membership into the Society
   f. serve as a resource to SNMMI Leadership

3. Leadership
   President: Thomas H. Schindler, MD, PhD
   Vice President: Robert J. Gropler, MD
   Vice-President Elect: Panithaya Chareonthaitawee, MD
   Secretary: Terrence C. Ruddy, MD
   Treasurer: Salvador Borges-Neto, MD
   Immediate Past-President: Prem Soman, MD, PhD
   Board of Directors: Daniel S. Berman, MD
   Wengen Chen, MD, PhD
   Gordon DePuey, MD
   Henry Gewirtz, MD
   Howard C. Lewin, MD, FACC, FASNC
   Saurabh Malhotra, MD, MPH
   April Mann, MBA, CNMT, NCT, RT(N)
   Edward J. Miller, MD, PhD
   Venkatesh Murthy, MD, PhD
   Raymond Taillefer, MD
   Vasken Dilsizian, MD (non-voting Past President)
   Sharmila Dorbala, MD (non-voting Past President)
4. Current Status

A. Financial

As of May 31, 2015, the CVC has a total revenue of $12,421. This includes a stipend of $1,250 from the 2015 Mid-Winter Meeting. Expenses total approximately $3,033. Revenue is generated through annual meeting membership dues, which are $20.00 per member.

B. Membership

The membership of the Cardiovascular Council consists of physicians, scientists, and technologists. It continues to be one of the largest councils of SNMMI with approximately 390 active members as of June 1, 2015.

Many members of the CVC belong to and have important leadership roles in other cardiovascular societies, including the American Society of Nuclear Cardiology (ASNC), the American College of Cardiology (ACC), the American Heart Association (AHA), the Society of Cardiovascular Computed Tomography (SCCT), the Canadian Society of Nuclear Medicine (CSNMNI), the European Association of Nuclear Medicine (EANM), and the European Society of Cardiology (ESC), among others. As a result, the CVC has a unique role to play in Cardiovascular Nuclear Medicine by providing a crucial link between clinical and specialist cardiologists, and cardiac imagers in the aforementioned societies on the one hand, and the expertise and experience of physicians, technologists and basic scientists in SNMMI on the other. Such a link is essential to advancement of applications of basic research in instrumentation, radiopharmaceutical and computer sciences, molecular biology and imaging into clinical practice, and also to enhancing cardiac clinical care provided by members of SNMMI. By this, the CVC is well positioned to play an important role in improving the evaluation and management of patients with cardiovascular diseases.

The annual CVC membership counts for the past few years are shown below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Membership Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>390</td>
</tr>
<tr>
<td>2014</td>
<td>318</td>
</tr>
<tr>
<td>2013</td>
<td>346</td>
</tr>
<tr>
<td>2012</td>
<td>455</td>
</tr>
<tr>
<td>2011</td>
<td>591</td>
</tr>
<tr>
<td>2010</td>
<td>639</td>
</tr>
</tbody>
</table>

C. Member Benefits

Newsletter: Council news and activities is circulated to the council membership in a newsletter several times a year.

Webpage: The council page on the SNMMI webpage is restructured to provide professional information, scientific updates, information about CME opportunities, and other information relevant to the field of cardiovascular imaging.

Continuing Education: The CVC organizes scientific and continuing education sessions of the mid-winter meeting and annual scientific meeting of the SNMMI. These activities are for the members of the council and for the SNMMI membership at large. The CVC also organizes educational programs in collaboration with other SNMMI councils, centers and chapters.

A. Education
As part of its mission, the CVC organizes scientific and continuing education sessions at the Mid-Winter Meeting and the Annual Meeting of the Society. The CVC also supports additional programs on specialized topics, such as cardiac PET/CT, CV Molecular Imaging and Cost Effectiveness Research.

SNMMI Mid-Winter Meeting 2015, San Antonio, TX: The CVC sponsored two continuing education sessions at the 2015 SNMMI Mid-Winter Meeting. One session was dedicated to cardiac PET and the other to cardiac molecular imaging. Both sessions were well attended.

SNMMI Annual Meeting 2015, Baltimore, MD: The CVC played a major role in the 2015 Annual Meeting by sponsoring a total of ten educational sessions including one categorical session co-sponsored with the Correlative Imaging Council (CIC), two boot camp sessions for trainees, seven continuing education sessions encompassing a variety of topics including SPECT, PET, RVG and molecular imaging techniques.

B. CVC Organization Structure
In June 2014, the CVC BOD voted to endorse the creation of a new position on the CVC Board of Directors for Editor of the newsletter. This position is a non-voting position that will be appointed by the President of the CVC and will be for a period of 1 year.

In June 2015, the CVC BOD voted and approved the motion to add two international positions on the CVC Board of Directors for the 2016-2017 elections. The two international members would not reside in North America. Note: It was later determined in order to comply with SNMMI policy for changing council operating procedures, this resolution will need to be formally written and approved by the CVC Board of Directors, the CVC membership, the Committee on Councils and Centers, and the House of Delegates. Upon approval, the CVC will include these two, new international Board positions in the next CVC Board of Director’s elections. A conference call was held on July 31, 2015 with Thomas H. Schindler, MD, CVC President, and Robert J. Gropler, MD, CVC President-elect, who agreed with this process and suggested the two new positions to be for a three-year term with full voting rights.

C. Newsletter
The CVC provided informative and interesting newsletters for the council membership in 2014-2015.

D. Board Meetings
Cardiovascular Council Board of Directors meetings were held during the midwinter and annual meetings in January and June 2015, in order to discuss ongoing activities of the council.

E. Awards
The winner of the 2015 CVC Hermann L. Blumgart Award was Robert J. Gropler, MD who gave his presentation entitled, “Cardiovascular Nuclear Medicine at the Vanguard of Precision Medicine in Cardiovascular Disease” at the 2015 Annual Meeting in Baltimore, MD.

Numerous cardiovascular oral abstract and poster presentations. The CVC again organized and conducted its Young Investigator Award competition. The following are the winners of the 2015 CVC YIA Awards:

<table>
<thead>
<tr>
<th>Basic Science</th>
<th>Clinical Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junaid Afzal – 1st Place</td>
<td>Christoph Rischpler – 1st Place</td>
</tr>
<tr>
<td>Rudolf Werner – 2nd Place</td>
<td>Seung-Pyo Lee – 2nd Place</td>
</tr>
<tr>
<td>Yunan Yang – 3rd Place</td>
<td>Axel Van Der Gucht – 3rd Place</td>
</tr>
</tbody>
</table>
In addition, six travel grants and three poster grants were awarded during the CVC Business Meeting at the 2015 SNMMI Annual Meeting.

F. The CVC Internship Program
Wengen Chen, MD, PhD was the CVC Intern from 2013-2015. Dr. Chen completed several projects, a few of which include, reviewing abstracts for the 2014 and 2015 SNMMI annual meetings as well as presenting at the 2014 annual meeting on the subject of “FDG PET/CT imaging for cardiac device and prosthesis valve infection.” Dr. Chen was invited to speak on the same subject at the Chinese Society of Nuclear Medicine meeting in November 2015. Dr. Chen authored three original manuscripts, two case reports and 1 review article since June 2013 and also submitted two grants under the supervision of his mentor, Vasken Dilsizian, MD. Dr. Chen continues his funded research at the University of Maryland.

6. Goals and Programs for 2015-2016
The Cardiovascular Council (CVC) continues to assure and enhance the quality and clinical utility of the use of cardiovascular nuclear medicine studies in patient care by contributing to Goals A, B, D, and E of the SNMMI Strategic Plan. Programs planned include:

   The CVC has submitted proposals for the following two educational sessions and is awaiting approval:
   - Contemporary Use of Cardiac PET and SPECT
   - Emerging and Established Roles of Imaging in Heart Failure

b. **Organization of Scientific and CME Program for 2016 SNMMI Annual Meeting** in San Diego, CA (June 10-14, 2016). As in prior years, the CVC is prepared to organize a Saturday Categorical Seminar and multiple CME sessions on cardiovascular nuclear imaging. A recipient for the Hermann Blumgart Award will be selected by the Award Committee, and will be presented in the Blumgart session at the meeting. Oral and poster sessions will be composed by the CVC members of the scientific program committee and the CVC vice chair, sub-chairs for clinical and basic sciences, and the sub-chair for the YIA. Also, the CVC will again hold its cardiovascular Young Investigator Award Competition, for which the 6 best abstracts will be selected as finalists. The Council will give a $500 award to the best cardiovascular technologist abstract.

c. **Promote Closer Relationship with ASNC**
   In recent years, several joint efforts have been completed with ASNC. This past year, the CVC joined representatives of ASNC and other organizations to organize the NIH Think Tank meeting on clinical translational issues in cardiac molecular imaging, held in the spring of 2015 (see letter “f” below).

   There is ongoing dialog between the leadership of the ASNC and the CVC on prevailing issues of mutual interest. The CVC would like to organize a shared board review course for the board certification for the CBNC during the 2016 SNMMI annual meeting, if ASNC finds that of interest and suitable. The SNMMI and ASNC want to work together on PET guidelines and perhaps on SPECT too. Thomas H. Schindler, CVC President, will attend a meeting with ASNC representatives at the end of June 2015 to discuss this collaborative effort.

d. **Promote closer working relationship with other councils, centers and chapters of SNMMI.** The CVC recognizes that an open interaction among councils and other structures is a key component of integration within SNMMI. The CVC can only benefit from exchange of ideas, experiences, and expertise, and likewise it is expected that other SNMMI structures will benefit from close interaction with CVC.

   The CVC has worked with and will continue to work with the PET Center of Excellence and the Center for Molecular Imaging Innovation and Translation on both educational and
research projects. Designated CVC BOD members will continue to serve as primary contacts of the CVC for both Centers and will offer to participate and provide input at meetings of each Center’s leadership.

The CVC hosted a joint categorical session with the Correlative Imaging Council (CIC) at the 2015 SNMMI annual meeting in Baltimore, MD and plans to further expand its interaction with other SNMMI councils. This will include communication and potential joint educational efforts with the Correlative Imaging Council, the Radiopharmaceutical Sciences Council, the Computer and Instrumentation Council and the Nuclear Oncology Council.

The CVC will establish communication with regional chapters of the SNMMI. A Board member of the CVC will be a designated contact person for chapters. This contact is established to assist chapters in establishing regional educational activities in cardiovascular nuclear imaging. The CVC will offer assistance with speaker recruitment and program design. The CVC expects to benefit from such activities by improved outreach to the membership and support of a new initiative to identify support for education, training and research in comparative effectiveness research by expanding contact of the CVC with the Educational Research Foundation, the PET Center of Excellence, the Center for Molecular Imaging Innovation and Translation, and the Clinical Trials Network.

Our ability to strengthen relationships is a key to our success and survival as a modality. We are fortunate to have a Council of dedicated professionals who understand the need for sustained Outreach. Our relationships with ASNC, ACC and AHA have been bolstered through the efforts of the members of the CVC; in addition to other important touch points inside and outside the SNMMI. Here are examples of the ongoing activities:

- The CVC has been consulted on issues of importance to the field this year; in particular issues with FDA actions on radiopharmaceuticals, and the development of imaging guidelines that involve hybrid applications or multiple modalities
- Dr. Ron Schwartz, a CVC Past President, is supported by Dr.’s DiCarli, Hachamovitch and Jain on the ACCF/AHA/PCPI/NCQA working group.

e. **Further Implementation of the CVC Internship Program.**
   James Thackeray, PhD, is a highly accomplished post doctoral fellow and the new CVC intern for 2015-2017. Dr. Gropler is the CVC mentor who will work with Dr. Thackeray on selected intern projects.

f. **Facilitate communication and development of Outreach initiatives.**
The CVC joined representatives of AHA, ACC, ASNC, SCCT, SCMRA, ASE, HRS, HFSA, NIH and industry representation in a successful Think Tank Meeting, co-sponsored by the SNMMI and the American Society of Nuclear Cardiology (ASNC) that took place on April 16-17, 2015 at the ACC Heart House in Washington, DC. The goal of the meeting was devise strategies to bridge the translational divide that hinders the exportation of advances in preclinical cardiovascular molecular imaging to the clinic. The meeting focused on identifying gaps in the current practice of Cardiovascular imaging medicine that may be addressed by existing or emerging molecular imaging tools. Efforts were aimed at devising solutions and recommendations for facilitating clinical translation. The meeting was organized into short lectures combined with panel discussions followed by breakout sessions on selected topics. A summary of the conclusions and recommendations from the meeting will be published in a white paper later this year with plans to have it published in a cardiovascular journal. The Think Tank was chaired by BOD members Dr. Mehran Sadeghi and Dr. Robert Gropler, and by Dr. James Udelson from ASNC.

The CVC was represented by Past-President, Vasken Dilsizian, MD, at an American College of Cardiology (ACC) Think Tank meeting in April 2015 on the “Future of Cardiovascular Imaging” to discuss and develop a pathway for training multimodality imaging specialists.
Dr. Dilsizian also continues to serve as the Nuclear Cardiologist for the Nuclear Regulatory Commission (NRC) Advisory Committee on the Medical Uses of Isotopes (ACMUI) for a four-year term starting March 1, 2014. CVC Immediate Past-President, Prem Soman, MD, PhD, continues to serve as Chair of the American College of Cardiology Imaging Council (ACC) and as a member of executive council of the ASNC.

While the relationship with ASNC is considered highest priority due to the significant overlap of interests, there are other medical societies active in the field of cardiac imaging (such as ACC, AHA, AMI/SMI, SCCT, SCMR). Those may have infrastructure and experience that can benefit SNMMI, such as with regard to issues of practice guidelines, credentialing, interaction with 3rd party payers, etc. The CVC will seek to establish more formal relationships with these societies. Methods to do this include meeting and communicating with the leadership of these societies on common issues and concerns, and working to elect CVC Board of Directors Members who also have positions within these societies.

g. **Promote Cardiovascular Molecular Imaging within the Scientific community.**
The CVC was invited to host a joint session with ASNC at the 2015 national meeting of the Heart Rhythm Society. A proposal was submitted but not selected into the final program.

h. **Work for education of outside medical community and the general public on benefits of nuclear medicine, nuclear cardiology and cardiovascular molecular imaging**
As members of SNMMI, members of the Cardiovascular Council know that patient imaging using radiotracers offers tremendous benefit to patients in terms of accurate diagnoses, highly effective prognosis/risk stratification, and in guiding appropriate patient management. Additionally, novel molecular imaging techniques hold promise to play a key role for a future personalization of medicine. The CVC will continue to strive to be a leader in effectively communicating the benefits of our techniques to physicians and health care providers less familiar with the benefit of nuclear medicine, as well as providing patient fact sheets to the general public at large (including 3rd party payer and governmental agencies).

i. **Increase Membership and Communications**

- Continue to work on increasing membership and participation in the Cardiovascular Council especially to international members. In June 2015, the CVC BOD voted and approved the motion to add two international positions on the CVC Board of Directors for the 2016-2017 elections. The two international members would not reside in North America and they would be non-voting members of the board.

- Continue to provide professional and educational information through Council newsletters and the webpage. The CVC has modified its newsletters to 2-3 pages in order to get information out to the membership in a timely manner.

- Identify and develop potential leaders and define and incentivize priorities in cost effectiveness research in cardiovascular nuclear medicine in the current critical era of enhanced competition and reduced reimbursement for cardiac imagines services

7. **Budget and Resource Requirements**

a. **Summary of Financial Needs**
The attached FY2016 budget summarizes the total resources needed to support the goals set forth in the business plan.

b. **Resource Requirements**
Ongoing SNMMI staff support, materials, technology and marketing support.