A Message from the President
Susan E. Sharp, MD - PIC President

On behalf of the Pediatric Imaging Council Board, it is my pleasure to welcome you to this edition of our newsletter. The purpose of this newsletter is to summarize recent council events and highlight current and upcoming council activities.

The mission of the Pediatric Imaging Council is to:

- Provide a forum for members to exchange ideas, concepts, techniques and practices related to pediatric nuclear medicine
- Provide expertise in pediatric nuclear medicine to the SNMMI membership
- Foster research and education in pediatric nuclear medicine
- Provide outreach to other professionals and organizations
- Encourage SNMMI membership and Pediatric Imaging Council membership in the pediatric nuclear medicine community
- Serve as a resource to the SNMMI leadership

The Pediatric Imaging Council Board invites your participation as we strive to fulfill this mission. If you are interested in becoming more involved with the council, please contact me (susan.sharp@cchmc.org) or any board member listed on this newsletter. We look forward to another productive year and hope to see you at upcoming council events.

Susan E. Sharp, MD
President, Pediatric Imaging Council

A Busy Meeting in St. Louis
Annual Meeting Summary

Members of the Pediatric Imaging Council had a busy and productive time at the 60th annual meeting of the Society of Nuclear Medicine and Molecular Imaging in St. Louis. The Council sponsored an all-day categorical course entitled “Dose Reduction in Nuclear Medicine and Hybrid Imaging”. Twelve lectures presented by speakers from a variety of disciplines provided a wide range of perspectives on radiation dose reduction. The course addressed a current “hot” topic and was attended by a large and very engaged audience.

The Council also sponsored three Continuing Education (CE) sessions, which covered a broad range of topics. These CE sessions included “Pediatric Hybrid Imaging”, with leading edge lectures on SPECT/CT and PET/MR in pediatrics, and “Radiation Safety in Pediatric High-Dose I-131 MIBG and Radioiodine Therapies”. A third CE session was the ever-popular “Read with the Experts” session. All were well-attended.

This year, there were two scientific sessions focused on pediatric nuclear medicine. This reflected the large number of high-quality pediatric-focused abstracts that had been submitted for consideration by the scientific program committee. Fourteen speakers presented research findings on a wide variety of pediatric nuclear medicine topics. In addition, there were many scientific posters and educational exhibits that addressed topics in pediatric nuclear medicine.

The many sessions sponsored by the Pediatric Imaging Council gave nuclear medicine physicians, scientists, and technologists an opportunity to share their research, update each other on the practice of pediatric nuclear medicine, and get together with old friends and new col-
Pediatric Imaging Council Membership

Annual SNMMI membership renewal notices will soon be sent out. Return yours promptly to maintain your membership in the SNMMI. While you’re at it, don’t forget to renew (or start) your membership in the Pediatric Imaging Council. The Pediatric Imaging Council supports pediatric-specific educational sessions at the Mid-Winter and Annual Meetings of the SNMMI and has been a leader in efforts to decrease and harmonize radiopharmaceutical doses for children. Pediatric nuclear medicine is a small, but collegial, segment of the nuclear medicine community, and the Pediatric Imaging Council provides a venue for sharing with colleagues, advancing the field, and supporting the practice of pediatric nuclear medicine.

Majd-Gilday Young Investigator Award

At the SNMMI Annual Meeting in St. Louis, a highlight of the pediatric scientific sessions was the presentation “Basal ganglia inflammation in children with neuropsychiatric symptoms” by Dr. Ajay Kumar and colleagues of the Wayne State University School of Medicine. For his work, Dr. Kumar was awarded the Majd-Gilday Young Investigator Award of the Pediatric Imaging Council. This award is named in honor of Drs. Massoud Majd and David Gilday, who, during their long careers, have fostered the careers of many young investigators in pediatric nuclear medicine. Congratulations to Ajay, and may this be the start of a long and productive career in nuclear medicine!

Pediatric Imaging Council Plans for Upcoming SNMMI Meetings

The Pediatric Imaging Council is making plans for educational sessions at future meetings of the SNMMI.

The SNMMI Mid-Winter Meeting is held in conjunction with the American College of Nuclear Medicine meeting, and the 2015 meeting will be held January 22-25, 2015 in San Antonio, TX. The Pediatric Imaging Council will be collaborating with the General Nuclear Medicine Council to sponsor a continuing education session on “Altered Biodistribution of Radiopharmaceuticals: Unexpected and Incidental Findings in Children and Adults”. Also, members of the Pediatric Imaging Council will be participating in the ACNM meeting, including a Read with the Experts session on “Challenging Cases in Pediatric Nuclear Medicine”. Both sessions promise to be stimulating and educational, especially for those of us with an interest in pediatric applications of nuclear medicine.

Through the summer, the Council has been working to arrange educational sessions for the 2015 SNMMI Annual Meeting, which will be held June 6-10 in Baltimore, MD. The on-line abstract submission deadline for the 2015 annual meeting will be in January 2015. Remember, it is never too early to start planning your abstract submissions!

New members and all meeting attendees are always welcome to attend any of the educational activities sponsored by the Pediatric Imaging Council.

Pediatric Radiopharmaceutical Dose Guidelines

At the recent 2014 annual meeting, one repeated theme was the timeliness and utility of the recent harmonized guidelines for administered activities of radiopharmaceuticals in children. Over the past five years, many members of the Pediatric Imaging Council have been instrumental in efforts to standardize and reduce administered activities in children. In 2010, under the leadership of Drs. Michael Gilfand, Meg Parisi, and Ted Treves, the first North American Consensus Guidelines on Administered Radiopharmaceutical Activities were developed and published (J Nucl Med 2011;52:318-322). These, for the first time in North America, provided consensus recommendations for the administered activities for twelve of the most commonly performed pediatric nuclear medicine procedures and were widely promulgated in collaboration with the Image Gently campaign and Society for Pediatric Radiology. In parallel, the European Association of Nuclear Medicine also had longstanding pre-existing guidelines (the EANM Paediatric Dosage Card). Recently, under the leadership of Drs. Ted Treves and Michael Lassmann, a trans-Atlantic collaborative effort has worked to harmonize these two guidelines (Eur J Nucl Med Mol Imaging 2014;41:1036-1041). The new guidelines are being distributed in a variety of ways. For example, check out the new, revised “Go with the Guidelines!” poster that can be found inside the front cover of the August issue of the Journal of Nuclear Medicine. The poster also is on the SNMMI website and will be included in the next issue of the Journal of Nuclear Medicine Technology. New web-based tools can be found on the SNMMI website (see the article in this newsletter). These harmonized guidelines will better support the practice of pediatric nuclear medicine and further enhance the care of children needing nuclear medicine studies.

Pediatric Imaging Council Intern

Dr. Neha Kwatra recently finished the first year of her two year term as the Pediatric Imaging Council Intern. As a trainee in the Harvard Joint Program in Nuclear Medicine, Dr. Kwatra was assigned Dr. Ted Treves as her scientific advisor and mentor. During the past year, she has been busy with a number of activities, most notably working with the Image Gently campaign. During the PIC Business meeting at the annual meeting of the SNMMI, Dr. Kwatra gave a brief overview of her activities.

As the intern of the Pediatric Imaging Council, my major accomplishment for the past year was an extensive revision of the nuclear medicine section of the Image Gently website. Building upon the past success of the nuclear medicine portion of the image website, it was felt important to modernize, expand and restructure it, with special emphasis on the needs of parents and referring providers. To accomplish
this, I first developed draft documents under supervision of my designated mentor Dr. Ted Treves. The updated content was then reviewed and approved by a pediatric radiologist Dr. Marilyn Goske (Image Gently), physicists Dr. Frederic Fahey and Dr. Adam Alessio, and members of the board of the Pediatric Imaging Council. The new material was finally uploaded on the website in May 2014 by Ms Karen Schmitt. Several changes were made; some of the more notable ones include:

- The reading level of the parents’ sections was modified (~8th grade) for ease of comprehension.

- A new power point presentation for parents to equip them with information about radiation in nuclear medicine was uploaded.

- A new power point presentation on appropriateness of use and radiation dose and risks was prepared for the referring providers.

- A new FAQ’s section was added.

- A new comprehensive nuclear medicine procedure checklist for imaging specialists was prepared.

- Links to the new “pediatric injected activity” and “nuclear medicine radiation dose” tools on the Society of Nuclear Medicine and Molecular Imaging (SNMMI) website were added.

- Posters of the 2014 Updated North American Consensus Guidelines for Pediatric administered Radiopharmaceutical activities were uploaded.

This project was presented as a digital educational poster at the SNMMI annual meeting at St. Louis in June 2014 (Updating and expanding the nuclear medicine section of the Image Gently website J. Nucl. Med. Meeting abstracts, May 2014; 55: 1320).

Besides working on the image gently website, I also completed a retrospective study that evaluated the role of hepatobiliary cholangiography in adolescents with chronic acalculous cholecystitis. The results of this study were also presented at the SNMMI annual meeting in June 2014 (Chronic acalculous cholecystitis in children with biliary symptoms: Usefulness of hepatobiliary cholescitigraphy J. Nucl. Med. Meeting Abstracts, May 2014; 55: 365).

During the upcoming year, I plan to continue to work to increase understanding and awareness of pediatric nuclear medicine and to contribute to efforts to optimize the use of nuclear medicine procedures in children.

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New Web-based Tools for Pediatric Nuclear Medicine

Where do you get reliable information if a parent or referring physician has questions about radiation exposure from a pediatric nuclear medicine study? How do you confirm that your practice is following the most current guidelines for administered activities of radiopharmaceuticals? Now, as part of efforts to encourage standardization and reduction in radiopharmaceutical administered activities, two new web-based tools have been added to the SNMMI website. The Pediatric Injected Activity Tool provides the recommended weight-based administered activities for fifteen pediatric nuclear medicine procedures. The Nuclear Medicine Radiation Dose Tool permits radiation dose to be estimated for a wide variety of radiopharmaceuticals at nearly all diagnostic doses. Both tools are easily accessible from the Clinical Practice/Dose Optimization page of the SNMMI website. There also are short-cuts for each (snmmi.org/pedactivitytool and snmmi.org/dosetool). For real convenience, both are fully functional on your smart phone or tablet. Kudos to Adam Alessio, PhD and collaborators for developing these very useful tools.

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Pediatric Imaging Council Intern Applications

The term of the current Pediatric Imaging Council intern Dr. Neha Kwatra will be coming to an end in June 2015. The Council soon will be soliciting applications from individuals who wish to be considered to serve as the PIC Intern. This is a two year commitment (July 2015- June 2017). The SNMMI Internship Program was established in 2008 with the aim “To identify and train future leaders of SNMMI in the structure, governance, and operations of the organization; to prepare individuals for progressive levels of responsibility; to ensure effective leadership that advances the mission and goals of the organization”. More information and details on the application process will be released in late 2014. Trainees and junior faculty with a strong interest in pediatric nuclear medicine will be encouraged to apply.