

SCANNER

THE OFFICIAL NEWSLETTER OF THE
AMERICAN COLLEGE OF NUCLEAR MEDICINE

Focus on the Fellow: Gary Dillehay, MD, FACNM, FACR

Erin Grady, MD



Gary Dillehay,
MD, FACNM, FACR

Dr. Gary Dillehay is a very recognizable figure in Nuclear Medicine and a fellow of the College, as of 1992. You are certain to know that he is the current president of the Society of Nuclear

Medicine and Molecular Imaging. But, you may not know that he was also president of the American College of Nuclear Physicians (ACNP) prior to its merger with ACNM. If you've had the opportunity to meet him, you've no doubt been met with encouragement, a quiet strength and a large measure of humility. In this installment of the Focus on the Fellow, we will learn more about this distinguished practitioner of Nuclear Medicine.

Dr. Dillehay went to Mayo Medical School and then trained in Radiology at Northwestern Memorial Hospital in Chicago. When asked about why he became interested in Nuclear Medicine, he stated, "Nuclear Medicine was the most fun part of my radiology residency. Other rotations tended to focus only on one area of the body, but with Nuclear Medicine you got it all." He went on to complete his Nuclear Medicine residency at Northwestern. He then took his first job at Loyola University Medical Center in the Chicago area. There, Dr. Henkin was one of the physicians he worked with. Dr. Henkin would really stress aspects of practice like exemplary service to referring physicians. Dr. Dillehay recalls, "When I was in working there, our reports were typed for us. We would stay there until all the reports were done, signed and sent to the referring doctors. Nothing was delayed. That emphasis on service and other aspects of practice was important and has stayed with me." When asked about working with Dr. Dillehay, Dr. Henkin said, "Working with Gary was a

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Letter from the President

Hossein Jadvar, MD, PhD, MPH, MBA, FACNM



Hossein Jadvar, MD, PhD,
MPH, MBA, FACNM

This will be my last letter as president of the ACNM. This year passed by so fast! It is fitting to summarize how the College evolved over this period, including strides that were made and challenges that remain. At the beginning of my presidency, I focused on two major tasks: to try to stabilize the College financially and to increase our membership reach and our public image. With the extraordinary help of an actively involved board, I am glad that we have made progress on these two fronts. We now have a new three-year lower annual cost management contract, and we reduced many of our other costs through a line-by-line review of the budget.

From the revenue side, we employed several strategies to retain our current members and attract new members. We sent, to all fellows, a letter reminding them of their significant role in supporting their College through continued membership. Although it is too early to know the final outcome, we have received notes from some fellows indicating their appreciation of this reminder. After many years of no change in the membership dues and in the face of increasing costs, the board decided to increase membership dues slightly while reciting all the benefits that the College offers, which include subscription to a highly ranked peer-reviewed journal, *Clinical Nuclear Medicine*. We have also reached out to international physicians and scientists in hopes that they will consider joining the College, and all indications are that there are many who are interested in becoming College members. We are also optimistic that our member base will grow through an invitation letter to join the College sent to all the full members of the SNMMI, with the letter jointly signed by me and SNMMI President Gary Dillehay, MD, FACNM, FACR.

On other fronts, we submitted response letters to the Centers for Medicare and Medicaid Services (CMS) in relation to their decision memos for PET for solid tumors (April 2013) and for amyloid imaging in dementia (August 2013). The Nuclear Medicine Residents Organization continued their strong activities as before. The ACNM Program Committee prepared a first-rate educational program for the ACNM Annual Meeting (which is held in conjunction with the SNMMI Mid-Winter Meeting), which will take place February 6-9, 2014, in Palm Springs, California. The program

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includes our resident abstract presentations as well as a plenary session on Nuclear Medicine Past and Present and lectures on hospital emergency departments, REAC/TS, nuts and bolts of clinical research, and getting the right job under tough circumstances. One other very notable event that was realized recently (with the administrative support of the Education and Research Foundation and the SNMMI leadership) was the generous initial endowed funding of a “Best Mentor Award – in memory of Bob Lull” by Puneet Chandak, MD. We are now in the process of finalizing the candidate nomination and selection process for this new ACNM award. We have also revived this newsletter, and we hope you are finding it useful.

This brings me to mention again that the ACNM Annual Meeting in beautiful Palm Springs will mark the 40th anniversary of the College. We plan to celebrate this important milestone at the ACNM banquet and with commemorative pins. As I mentioned earlier, time has passed by so quickly. I would like to give my sincere thanks to all the ACNM Board of Directors members and to the SNMMI leadership and administrators for helping me during my time at the helm of the College. It was an extraordinary experience, and for that I am indebted to all of them. I also wish our next president, Twyla Bartel, DO, all the best in the coming year. Here’s to 40 years and beyond for ACNM.

ACNM REPORT FROM THE AMA

Hadyn T. Williams, MD, ACNM’s Alternate Delegate to the AMA



Hadyn T. Williams, MD

In 2013, the **American Medical Association (AMA)** House of Delegates made recommendations and undertook actions that impact nuclear medicine, imaging, the practice of medicine and medical education, including:

- Formally asking to repeal and replace the flawed **sustainable growth rate** Medicare formula and to repeal the **Independent Payment Advisory Board**.
- Issued a warning against **“inappropriate inquiries” from pharmacies** to verify the medical rationale behind prescriptions and diagnoses, calling them an unwarranted interference with the practice of medicine.
- Voted to recognize **obesity as a disease state** with multiple aspects requiring a range of interventions to advance obesity treatment and prevention.
- “The U.S. Supreme Court’s unanimous **rejection of patenting human genes** is a clear victory for patients that will expand medical discovery and preserve access to innovative diagnosis and treatment options,” AMA President Jeremy A. Lazarus, MD
- Voted to mandate a **two-year implementation period for ICD-10/11**, during which time insurers would not be allowed to deny payment based on the specificity of an ICD-10/11 diagnosis.
- Supported **federal funding of organ transplants for Medicaid** patients.
- Called for **tougher regulations on direct-to-consumer advertising** for durable medical equipment so as not to confuse patients about how to get their products.
- Directed the AMA to take several steps to look at the **maintenance of certification** process and ensure it is not burdensome to physicians.
- The Promoting Integrity in Medicare Act of 2013 (PIMA) H.R. 2914, would largely **prohibit self-referral for advanced medical imaging**, radiation therapy, and some other medical services not typically performed during a patient’s initial office visit.
 - o PIMA is supported by the eight member organizations of the Alliance for Integrity in Medicare (AIM), of which the American College of Radiology is a founding member, and by nuclear medicine, although neither the SNMMI nor the ACNM is an AIM member. http://www.acla.com/sites/default/files/AIM_08_1_13_joint%20statement.pdf
 - o The [Center for American Progress](#) agrees, as do notable bipartisan groups, including the [Bipartisan Policy Center](#), under the leadership of former Senate Majority Leaders Tom Daschle (D-S.D.) and Bill Frist (R-Tenn.), and the Moment of Truth Project, headed by Erskine Bowles and former Senator Alan Simpson (R-Wyo.). [President Obama’s proposed FY 2014 Budget](#) also recommends closing the self-referral loophole, which could save the Medicare program more than more than \$6 billion during the standard 10-year budget window. The legislation responds to self-referral abuse highlighted in the mainstream media. In November 2012, a [Bloomberg News investigative report](#) scrutinized ordeals faced by California prostate cancer patients treated by a urology clinic that owns radiation therapy equipment and found that physician self-referral led to mistreated patients and higher health care costs. [The Wall Street Journal](#), [The Washington Post](#) and [The Baltimore Sun](#) also published similar critical reports in the last three years illustrating that urology groups owning radiation therapy machines have utilization rates that rise quickly and are well above national norms for radiation treatment of prostate cancer.
 - o The bill was introduced days before publication of a new Government Accountability Office report on self-referral of medical imaging and radiation therapy services that revealed a dramatic increase in the rates of doctors ordering anatomic imaging, pathology tests and procedures when they stand to make financial gains. The report estimated that in 2010 alone, the increase resulted in \$69 million charged to Medicare and 918,000 treatments that would not have occurred had these physicians been referring patients at the same rates as physicians who do not stand to benefit financially from the referral. The GAO says these findings are evidence that self-referred services are often unnecessary and drive up Medicare spending.
 - o A comprehensive review of Medicare claims for more than 45,000 patients from 2005 through 2010 found that nearly all of the 146 percent increase in intensity-modulated radiation therapy (IMRT) for prostate cancer among urologists with an ownership interest in the treatment was due to self-referral. The *New England Journal of Medicine* Oct. 24, 2013, article, “Urologists’ Use of Intensity-Modulated Radiation Therapy for Prostate Cancer,” corroborates the increased IMRT treatment rates among self-referrers reported

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Government Relations Corner

Erin Grady, MD, CCD



Erin Grady, MD, CCD

Despite all the gridlock in Washington these days, there are still a striking number of issues being considered there that can impact us wherever we practice. In this issue, we'll review a few of them.

1) CMS Final Rule

This year, thanks to the government shutdown, the final rule was delayed. Hospitals generally are scrambling to implement the changes in coding/billing between November and January 1st, so this has had the potential to be even more of an ordeal than in past years. No new codes have been issued for Nuclear Medicine this year.

The rule finalizes changes to the quality reporting initiatives that are associated with the Physician Quality Reporting System (PQRS). Per the Affordable Care Act, there will be continued, phased-in implementation of the physician value-based payment modifier (Value Modifier). This will potentially change payments to certain physician groups based on the quality and cost of care they give to Medicare fee-for-service beneficiaries. Modifications to the "Physician Compare" tool on the Medicare website are also discussed. To view the final rule, click [here](#) for physician fee schedule and [here](#) for the hospital outpatient prospective payment system (HOPPS).

2) SGR

What is it? The SGR stands for the Sustainable Growth Rate. Since 1997, when it was voted on as part of the balanced budget act, it has been used by CMS to control healthcare spending. There are several components that are used to calculate the SGR including GDP data, change in physician fee services and changes in expenditures related to regulations.

At the end of 2013, the President signed into law a bipartisan agreement which prevents the scheduled payment reduction for physicians and other practitioners who treat Medicare patients from taking effect on January 1, 2014. The law, known as the Pathway for SGR (Sustainable Growth Rate) Reform, provides a three-month patch to the SGR formula, with a 0.5% payment update for Medicare services through March 31, 2014, for claims with dates of service on or after January 1, 2014, through March 31, 2014. This 3-months patch is hoped to give Congress the time to repeal the SGR. For most of the past year, the House and Senate have both been working on bipartisan legislation that may replace the SGR. For more on this, click [here](#). We'll keep you posted on any additional developments.

3) How ACA May Affect Academic Nuclear Medicine/Radiology?

The Patient Protection and Affordable Care Act (ACA) has the potential to alter the practice of academic practice. Many more patients are likely to be entering the healthcare arena and needing care, but more emphasis is being put on appropriate utilization and cost containment. As we move forward in this era of quality, a few things will be key: dependable high level service to patients and referring physicians, knowledge of appropriate use criteria (and potentially involvement with their production), working together with our colleagues as consultants, directly communicating with patients (and putting a face on who's reading their scan), understanding reimbursement changes and closely following informatics that will be used to follow things such as safety, radiation dose or feedback from patients. Education of referring doctors and patients will also add value to our practices. Many of us should point our efforts toward comparative effectiveness research and cost-effectiveness research.

A number of interesting articles with a similar theme have been written recently. If you're interested, they are listed here: *Acad Radiol* 2013; 20:1511-1520, *J Am Coll Radiol* 2013;10:708-712 and *Acad Radiol* 2013; 20:1063-1068.

4) FDA News

If you haven't heard already, regadenoson (Lexiscan) and adenosine (Adenoscan) have been put on an [FDA watchlist](#) due to potential for myocardial infarction and death. The FDA points out that, "the listing of a drug and a potential safety issue on this Web site does not mean that FDA is suggesting prescribers should not prescribe the drug or that patients taking the drug should stop taking the medication."

Gallium-68 (DOTA0-Phel-Tyr3) octreotide (Ga-68 DOTATOC) has been designated as an orphan drug by the U.S. Food and Drug Administration. An orphan drug designation means that the drug has proven safe and effective and would be used in diagnosis, treatment or prevention of a relatively rare disorder. This is likely the first step towards approval. Fewer subjects will be needed for trials for approval from the FDA and applications fees will be waived. This also opens the door for FDA grant funding. The SNMMI is responsible for aiding in this designation, in association with its Clinical Trials Network. You can read more [here](#).

The second PET -amyloid imaging agent, F-18 flutemetamol (Vizamyl), was approved by the FDA in late October. Reimbursement for these agents continues to be a challenge. CMS offers more information [here](#).

Have You Renewed Your Membership?

www.acnmonline.org

The ACNM needs YOU! If you haven't done so already, please renew your membership. Memberships end annually at December 31. Don't forget all the benefits of membership (you're reading one right now). Some of the others include:

- *Clinical Nuclear Medicine* – Official Journal of the ACNM
- Fellowship Program
- Mentorship Program
- *Scanner* Newsletter
- American Medical Association representation
- Reduced registration rate for the combined ACNM Annual Meeting and SNMMI Mid-Winter Meeting
- Continued monitoring of all congressional and regulatory actions that may affect nuclear medicine issues
- The Nuclear Medicine Residents Organization
- Leadership Programs for Nuclear Medicine Professionals
- Online Membership Directory
- Networking Opportunities
- Professional and Public Information Programs

Challenge Case

Raphaella Da Silva, M.D., Division of Nuclear Medicine; Hong Y. Ma, M.D., Department of Radiology; Kwang J. Chun, M.D., Montefiore Medical Center; Renee M. Moadel, M.D. M.Sc., Albert Einstein College of Medicine; and Leonard M. Freeman, M.D., Bronx, New York

History: A 12-year-old male with extensive birth defects (spina bifida, severe levoscoliosis, hydrocephalus and mental retardation) presented with sepsis. The patient has a history of recurrent urinary tract infections.

Figure 1: Tc-99m DMSA anterior planar image. Arrow indicates the injection site in the patient's contracted left arm. Radiograph is given for anatomic correlation.



The patient also had a renal ultrasound, which was performed 2 days prior to the DMSA scan. The right kidney was seen and normal in size and echogenicity, measuring 8.5 cm in length. There was mild fullness without gross hydronephrosis. The left kidney was not visualized, and the patient's mother stated the patient had an atrophic left kidney.

What is your diagnosis?

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(Focus on the Fellow. Continued from page 1.)

pleasure. His quiet demeanor and competence helped center our practice. He embodies everything one would want in an academic physician. He has a gift for teaching, implements the best practices and is dedicated to patient service."

Today, Dr. Dillehay works as a Professor of Radiology at Northwestern Memorial Hospital. When asked about where he derives his career satisfaction he said, "Two things. Teaching is first, being with the residents and seeing their excitement. They may slow things down a bit, but seeing their enthusiasm is great. Second is my involvement with organized medicine groups...the Society [of Nuclear Medicine and Molecular Imaging], AMA, JRCNMT and the ACNM." He is also involved in a number of other organizations including RSNA, Illinois State Medical Society, Chicago Medical Society, the SNMMI Central Chapter, AUR and ACR. He has just recently completed his term as a member of the ABNM Board. He is also a longtime chair of the Coding and Reimbursement Committee of the SNMMI; his efforts there have been invaluable in maintaining the level of reimbursement we see today. Dr. Dillehay is also quite well published, a co-author of two books, several book chapters and numerous journal articles. He has also authored numerous abstracts and scientific exhibits. This article cannot hope to describe his influence on the practice of Nuclear Medicine, but

suffice it to say that he is a very dedicated, busy and productive gentleman.

In 2002-2003, Dr. Dillehay was president of the ACNP. We also discussed how he became involved with the ACNP, "Bob Henkin introduced me to this organization and taught me that being involved is very important. I found my experience with ACNP to be very helpful. There was a lot of emphasis on practice issues." He went on to say that his experiences as president of ACNP continue to help him today, "There was a day-long media training. You could really practice getting grilled. That was very helpful."

"People need to understand that ACNM is important. It gives us another seat at the table at AMA and more input at the RUC when reimbursement decisions are made. This along with having another voice in Washington [D.C.] makes this organization one we should belong to," he said. Dr. Dillehay mentioned that focusing on practice issues could help to set ACNM apart. "This was very helpful when it was done before. Do something that people can't get anywhere else," he said. He also brainstormed that the ACNM might consider doing an independent spring meeting linked with a congressional visit.

In closing, he said, "We need to get people involved and get them excited, especially for those starting out. Nuclear Medicine is a fun specialty."

Nuclear Medicine Guidelines: Gallbladder Ejection Fraction

Herbert A. Klein, MD, PhD



Herbert A. Klein, MD, PhD

We are pleased to again present this series of articles by Herb A. Klein, MD, PhD, from the Division of Nuclear Medicine Department of Radiology, University of Pittsburgh School of Medicine, Pittsburgh, PA, discussing guidelines in nuclear medicine.

As the fourth and last of a series on nuclear medicine guidelines, this article will discuss a recent practice guideline for gallbladder ejection fraction (GBEF) (1-3).

Measurement of GBEF in patients with upper abdominal pain begins with standard dynamic anterior imaging of the abdomen for 1 hour after intravenous injection of a hepatobiliary agent such as Tc-99m mebrofenin. If the gallbladder has filled, sincalide (Kinevac), the active C-terminal octapeptide of cholecystikinin (CCK), is administered to measure the GBEF. If it is abnormally low, the patient may have relief of symptoms after a cholecystectomy. The GBEF is the difference between maximum and minimum background-corrected gallbladder counts divided by the maximum, expressed as a percentage. As with gastric emptying, recent eating, caffeine and alcohol may interfere, as may certain medications such as opiates. Variables in the conduct of the procedure have included the weight-adjusted dose of sincalide, the infusion duration and the length of time over which imaging is conducted. We are also left with the question of the normal GBEF limit.

The answers to those questions appear in the SNMMI guideline (1), as the “method of choice,” and are confirmed, with elaboration, in a subsequently published consensus report by DiBaise et al. (2,3), which, it would seem, deserves to be accorded comparable authority. As explained in a brief note in the *Journal of Nuclear Medicine* (4), it was the result of an initiative by the General Clinical Nuclear Medicine Council of SNMMI. Two of its authors were members of the task force of the SNMMI guideline.

This endeavor shares several features with gastric emptying: interdisciplinary collaboration, which in this instance entailed a panel of 12 members whose specialties included a commendably broad spectrum—gastroenterology, surgery, primary care, nuclear medicine and nuclear medicine technology; the objective of establishing a uniform procedure; and normal ranges determined through the study of healthy volunteers.

According to DiBaise et al (2,3), GBEF “is commonly performed to evaluate patients with upper abdominal pain thought to be biliary in origin who have an ultrasonographically normal appearing gallbladder.” The details of the procedure are as follows: The GBEF phase of the study is performed with placement of the camera in the 35-40 degree left anterior oblique (LAO) projection, to ensure minimal overlap of the gallbladder with small intestine, and with infusion of 0.02 µg/kg of sincalide continuously over 60 minutes via infusion pump (longer than has often been the case in the past) with simultaneous dynamic imaging. An abnormal GBEF is less than 38%.

Various past protocols have entailed different time periods of sincalide infusion from as few as three to as many as 60 minutes. The data acquisition period has also varied. The choices of the guideline were based on minimizing variability of normal results based on the smallest coefficient of variation in a comparison of protocols (5). The lower limit of normal is based on the value at the first percentile of the normal group.

If the gallbladder has not filled within the initial hour, it is recommended that the finding be reported as abnormal, potentially consistent with either acute or chronic cholecystitis depending upon the clinical presentation.

Contraindications to sincalide are known allergic reaction, intestinal obstruction and pregnancy.

It is advised that hospitalized patients or acutely ill patients are at risk of false positives because of their acute illness and/or medications. Diabetes, celiac disease and irritable bowel syndrome may cause false positives.

It is suggested that a report include whether the sincalide resulted in gastrointestinal symptoms during the test, but it is also noted that such symptoms should not be considered to be of reliable diagnostic significance.

As for the question of identifying the condition that is diagnosed by an abnormally low GBEF, various terms have been used in the past: gallbladder dyskinesia, chronic acalculous gallbladder dysfunction, acalculous biliary disease, chronic acalculous cholecystitis and biliary dyskinesia. To prevent confusion, the authors have proposed the catch-all term “functional gallbladder disorder.”

In contradistinction to the patients with ultrasonographically normal gallbladders, the possible utility of GBEF in determining whether a patient with abdominal pain and gallstones will benefit from cholecystectomy has been considered in the past (6). The new report makes a guarded statement: “There is no evidence that GBEF measurement adds to clinical judgment alone in predicting the surgical outcome of patients with cholelithiasis, as when symptoms are atypical or ambiguous.”

Regarding the more usual situation in which this study is performed in the absence of gallstones, the report gives much attention to the appropriateness of indications, in terms of the detailed character of the pain. The preferred criteria, called “Rome III,” have been explained by Bejar et al (7).

DiBaise et al (2,3) recommend that a report of a positive result be qualified with “a statement...such as ‘In the appropriate clinical setting, this is consistent with functional gallbladder disorder’ leaving the final interpretation to the ordering clinician who is most familiar with the patient involved...”

That qualification reminds us that the likelihood of a positive result being valid and indicating a benefit from cholecystectomy depends on pretest probability. This point was discussed in the second article of this series, as it applied to ventilation/perfusion imaging, and it evokes once

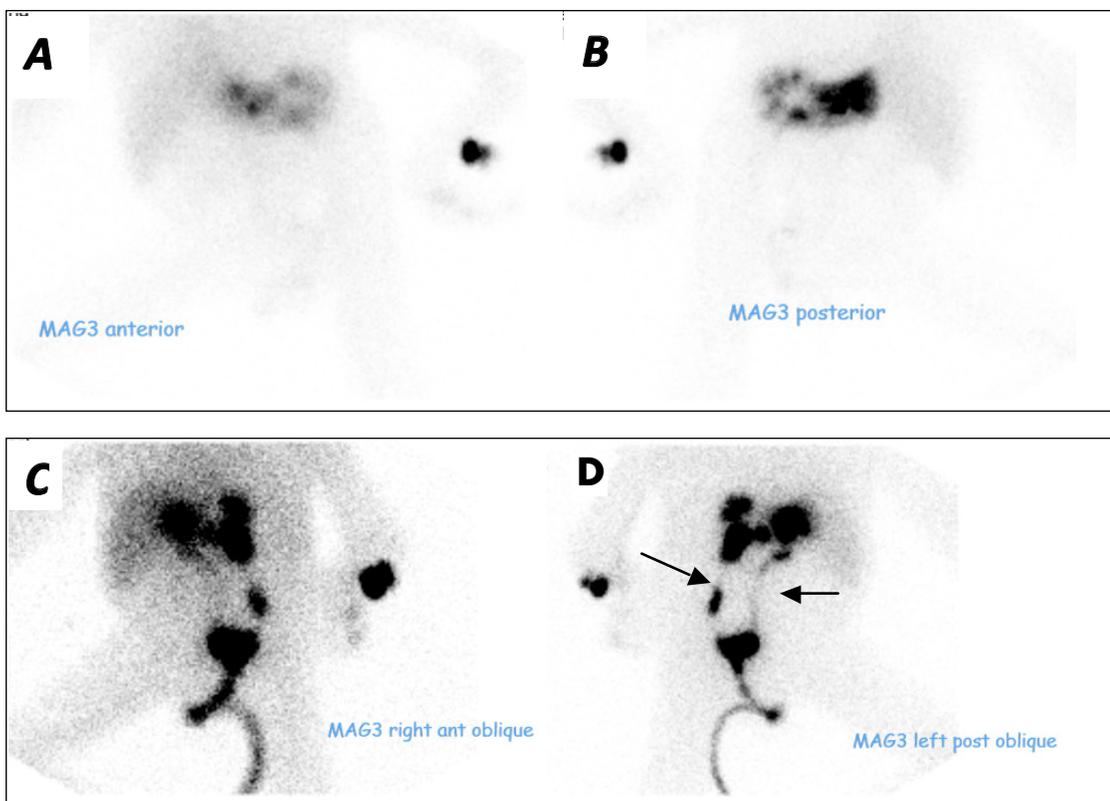
(Continued on page 7. See *Gallbladder*.)

(Challenge Case. Continued from page 4.)

Answer and Discussion:

Figure 1: A large, irregular area of midabdominal uptake appeared to correspond to a dilated stomach seen on an accompanying radiograph of the chest and abdomen. It was felt that this may very possibly represent free Tc-99m pertechnetate resulting from poor labeling. The absence of thyroid activity was felt to possibly be related to the patient taking iodide containing medication. Levoscoliosis is noted on x-ray.

Figure 2: (A) Anterior and (B) posterior follow-up study with Tc-99m MAG-3 shows midabdominal activity in a similar configuration to the DMSA study. Delayed imaging (C) RAO and (D) LPO show filling of calyces and two ureters are visualized (arrows). This clearly establishes the diagnosis of crossed, fused renal ectopia. The right crossed, fused renal ectopic kidney simulated a right kidney on ultrasound due to severe levoscoliosis.



Let us know your opinion!



As part of the “new and improved” ACNM, we would like to make this newsletter a useful resource for you. We hope to keep you abreast of the news that matters to you, including things like upcoming events and items available for public comment, which could affect the future of our specialty.

We welcome ideas for topics you would like to see in the newsletter. Likewise, if you have any clinical questions you would like us to forward to an expert or letters to the editor of the ACNM Scanner Newsletter, please send us your inquiries.

Additionally, if you’re a member and have an exciting accomplishment to highlight or share with the rest of the nuclear medicine community, please send us your announcement.

Please send your inquiries or announcements to Erin Grady, MD, the ACNM Scanner Newsletter Editor, at egrady@christianacare.org. We will do our best to be a valuable resource for you.

- in the GAO August 2013 report, “Medicare: Higher Use of Costly Prostate Cancer Treatment by Providers Who Self-Refer Warrants Scrutiny.”
- o However, 32 national medical groups—including the **American Medical Association**, the American College of Surgeons, the American Urological Association, the American College of Cardiology, the American College of Nuclear Cardiology—wrote a letter to all members of Congress **opposing the legislation** within days of its introduction and vowed to “implement an aggressive legislative effort to oppose” PIMA. http://www.asnc.org/content_15547.cfm
 - o These organizations’ opposition results in PIMA having virtually no chance of passing or being implemented.
- **Awarded** 11 medical schools \$11 million in **grants to Accelerate Change in Medical Education**:
 - o **Indiana University School of Medicine**: create a virtual health care system (vHS) and teaching electronic medical record (tEMR) to teach clinical decision making and ensure competencies in system, team and population-based health care skills.
 - o **Mayo Medical School**: create an innovative educational model based on the science of health care delivery to prepare students to practice within patient-centered, community-oriented, science-driven collaborative care teams that deliver high-value care.
 - o **NYU School of Medicine**: create the “NYU Integrated Care Coordination and Analysis Curriculum,” a flexible three-year, individualized, technology-enabled curriculum to improve care coordination and quality improvement.
 - o **Oregon Health & Science University School of Medicine**: develop and implement a learner-centered, competency-based curriculum that enables medical students to advance through individualized learning plans as they meet predetermined milestones.
 - o **Penn State College of Medicine**: collaborate with Penn State Hershey Health System leaders to design educational experiences that align medical education with health system needs.
 - o **The Brody School of Medicine at East Carolina University**: implement a new comprehensive core curriculum in patient safety for all medical students.
- o **The Warren Alpert Medical School of Brown University**: establish a dual MD-MS degree program in primary care and population health.
 - o **University of California–Davis School of Medicine**: create a three-year, competency-based medical school pathway, the Accelerated Competency-based Education in Primary Care Program, simultaneously accepting students into local primary care residencies (for a net total of six years of training).
 - o **University of California–San Francisco School of Medicine**: “Bridges to High Quality Health Care Curriculum” seeks to create the “collaboratively expert physician,” one who embraces the responsibility to work within interprofessional teams to continuously improve the safety, quality and value of health care.
 - o **University of Michigan Medical School**: create a curriculum that includes a two-year foundational “trunk” consisting of integrated scientific and clinical experiences.
 - o **Vanderbilt University School of Medicine**: embed students in the healthcare workplace, become team members at a single clinical site for the duration of their undergraduate medical education.

The 2014 AMA House of Delegates Meeting is June 7-11, 2014, at the Hyatt Regency Chicago, Chicago, IL. We attend as representatives from the ACNM to the AMA Section Council on Radiology, the AMA Specialty and Service Society, and the AMA House of Delegates. Please contact us with nuclear medicine issues needing to be addressed with the AMA.

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more the importance of the theorem of Rev. Thomas Bayes (1701-1761) (8), who likely had no idea how influential his concepts would be.

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Calendar of Events

- **SPIE BiOS 2014**

San Francisco, California
Feb 1, 2014 - Feb 6, 2014

- **SNMMI 2014 Mid-Winter Meeting**

Palm Springs, California
Feb 6, 2014 - Feb 9, 2014

- **SPIE Medical Imaging 2014**

San Diego, California
Feb 15, 2014 - Feb 20, 2014

- **3rd Tübingen PET/MR Workshop**

Tübingen, Germany
Feb 17, 2014 - Feb 21, 2014

- **Northern California 2014 Chapter Meeting**

Pleasanton, California
Feb 27, 2014

- **SNMMI Southwestern Chapter - 59th Annual Meeting**

New Orleans, Louisiana
Mar 7, 2014 - Mar 9, 2014

- **SNMMI Central Chapter - 2014 Spring Meeting**

Ann Arbor, Michigan
Mar 15, 2014 - Mar 16, 2014

- **2014 PNW Spring Meeting**

Portland, Oregon
Mar 15, 2014 - Mar 16, 2014

- **SNMMI Greater New York Chapter - 43rd Annual Spring Symposium**

Atlantic City, New Jersey
Apr 4, 2014 - Apr 5, 2014
VOICE: 12

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