



Foundation FOCUS

A QUARTERLY PUBLICATION OF THE RADIOLOGICAL SOCIETY OF NORTH AMERICA RESEARCH & EDUCATION FOUNDATION

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for Funding Radiology's Future®*

Innovation Begins When Grant Season Opens

Traditionally, spring marks a time of fresh starts and new beginnings. At the RSNA R&E Foundation, spring marks the beginning of grant season—a time of great potential for new innovations in radiologic research and education.

Grant season is an exciting time for the Foundation as inspired investigators and educators continue to submit R&E grant applications in record numbers. Now more than ever, young and seasoned investigators are reaching out to the R&E Foundation to support their projects.

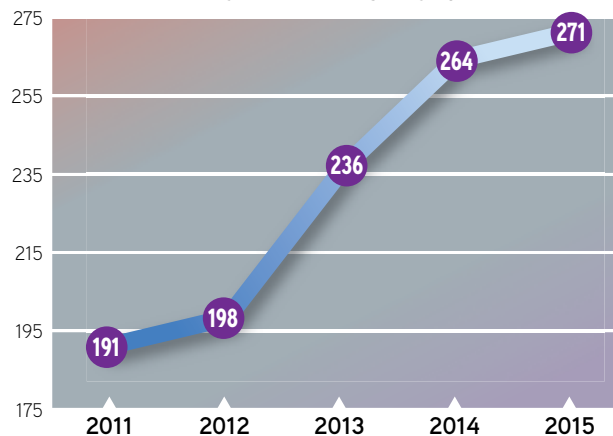
To keep pace with the increase in grant applications and to maintain the quality of the grant review process, the R&E Foundation Grant Program Committee restructured the Radiology Research Study Section into two new smaller sections. These two new NIH-modeled bodies—the Research Faculty Grant Study Section and the Research Trainee Grant Study Section—are charged with reviewing Scholar/Seed grant applications and Resident/Fellow grant applications, respectively. The study sections began their work earlier this year and met to review applications in March.

This new targeted review process allows for additional review time and enhanced discussions, meeting the challenge of review-

ing the ever-increasing number of applications. R&E grant reviewers provide essential feedback to all applicants, aimed at improving their research approach and grant writing skills.

Both Radiology Research Study Sections, as well as the Education Study Section and the Radiation Oncology Study Section, met in March to score the grant applications. The Medical Student Grant Review Panel has also completed its work. Final funding decisions are made by the R&E Foundation Board of Trustees, and grant recipients will be announced this summer.

GRANT APPLICATIONS



THE COMMITMENT CONTINUES.

View full list of
Centennial Pathfinders at
RSNA.org/Campaign

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Leadership Spotlight

When the Radiology Research Study Section members convened to review the 2015 grant applications, they were guided through the process by **Vincent B. Ho, M.D., M.B.A.**, vice-chair of the Radiology Research Faculty Grant Study Section and **Steven C. Horii, M.D.**, chair of the Radiology Research Trainee Grant Study Section. Drs. Ho and Horii each have more than ten years of experience as a grant reviewer for the RSNA and bring a wealth of knowledge and expertise to the NIH-modeled grant review process.

Their experience equips Drs. Ho and Horii with unique perspective and insight that benefits investigators seeking funding during all stages of their careers.

R&E: *What is one piece of advice you would share with applicants?*

Dr. Ho: Find others to collaborate with; any research effort will be improved by fostering a highly functioning research team. Research often requires much more than one investigator. Moreover, research is more fun as a “team sport.” Trainees and junior faculty should seek out experienced radiologists to serve as their mentors.

Dr. Horii: The research plan should support the testing of the hypothesis. As such, it should clearly explain how each of the specific aims is met by the proposed methods. The plan should also “flow”; that is, the achievement of the specific aims should logically and clearly show how the results advance the achievement of the next aim. Also, the investigator may be too familiar with the plan and may inadvertently leave out some explanations. Having someone unfamiliar with the plan review its content may help identify and correct unintentional gaps.

R&E: *What guidance would you give to applicants who don't receive funding?*

Dr. Ho: Learn from the experience and try again! Many applicants are not successful on their first attempt. Resubmitted grant proposals that are responsive to reviewers' comments and show



Vincent B. Ho, M.D., M.B.A. (left) and Steven C. Horii, M.D.

improvement of the original study questions or design are often recognized and greatly appreciated by reviewers.

Dr. Horii: Reviewers try to provide constructive criticism and helpful feedback for applicants. Careful attention to the critiques, particularly as they pertain to weaknesses in the proposal, should be fully addressed in any resubmission.

R&E: *What is the greatest reward associated with your role as a reviewer?*

Dr. Ho: Probably the greatest reward is the opportunity to read various innovative and often very ingenious research ideas that currently exist in our profession.

Dr. Horii: It is rewarding to see impactful results from successful resident and fellow applications. Receiving RSNA R&E funding can often be a major factor in whether a trainee continues a career in academic radiology. For me, the greatest reward is reading a paper or attending a presentation based on a project that the RSNA R&E Foundation has supported.

The Foundation is grateful for leaders like Drs. Ho and Horii. To volunteer for an RSNA R&E Committee, contact Sena Leach at sleach@rsna.org or 630-571-7810.



New Jersey Practice Group Starts Campaign Investment Trend

There is something to be said for being first.

University Radiology Group, East Brunswick, New Jersey, became the first practice group donor to make a multi-year annual commitment to the *Inspire-Innovate-Invest Campaign*. Its five-year, \$50,000 commitment will fund the specialty's premier researchers whose initiatives will extend beyond the research lab and into their practices.

The practice must have been on to something as six other practice groups followed their lead, making similar multi-year commitments to the Campaign. Practice group donors from across the nation contribute to the Foundation through the Visionaries in Practice (VIP) Program because they see their support as an investment in their own practice and patients.

"Because radiology is often the first step in the patient care continuum, we must continue to invest in science and technology in order to most effectively improve the quality of patient care for all of medicine," explained

University Radiology Group member and VIP Subcommittee vice-chair **Steven M. Schonfeld, M.D.** "Our group feels it is our duty to support the critical efforts of the Foundation because funded research has allowed our practice to enhance patient care, promote safety, and introduce new advanced technologies."

A leader in subspecialty imaging for

more than 50 years, University Radiology Group is one of the five largest privately

held radiology practices in the nation and is the largest provider of subspecialty radiology and teleradiology services in New Jersey. With more than 130 board certified radiologists, the practice interprets 1.5 million radiology procedures per year 24/7/365 at its 15 outpatient imaging centers and eight hospitals. In addition, University Radiology Group physicians serve as the academic radiology faculty and research arm at the Rutgers Robert Wood Johnson Medical School.

Thank you for leading the way, University Radiology Group!



Steven M. Schonfeld, M.D.,
University Radiology Group

Advance the Specialty at your Practice Group

Each radiology practice is part of a greater whole. An entire specialty committed to furthering the science of medical imaging, providing the best in patient care, and offering up the clearest and most accurate diagnoses.

You and your practice partners can champion this advancement by investing in the Foundation through the

Visionaries in Practice (VIP) Program. Tax-deductible contributions tell your patients, your staff, and the rest of radiology that you steadfastly support the specialty in which you practice, and its ongoing innovations.

Tiered giving starts at \$10,000 annually with benefits and recognition opportunities increasing with each level of group support.

Be an advocate for radiology's future in your practice group today. Here's how:

- Contact R&E staff member Robert Leigh at 630-590-7760 or rleigh@rsna.org.
- Talk to your colleagues about including the Foundation in your practice group's philanthropic pursuits.
- Request brochures to hand out at an upcoming leadership meeting at your practice.





Professional Collaboration Sparks Lasting Friendship for Foundation Donors

A visiting professor appointment at the University of Michigan in 1988 proved to be life-changing for **Marnix van Holsbeeck, M.D.** and his family, and launched a lifelong friendship. It was there he met **Joseph Introcaso, M.D.**, at the time a first-year resident.

"I soon found out that this resident learned quickly, and that in return I could learn a lot from him," explained Dr. van Holsbeeck. Before attending medical school, Dr. Introcaso studied biomedical engineering and worked on Wall Street, experience that informed both his ideas and his ambition.

The physicians began collecting cases and together published articles focused on their shared interest in diagnostic ultrasound and its usefulness in understanding musculoskeletal diseases. That time spent working together eventually led to collaboration on a textbook.

Meanwhile, the one-year appointment ended, and the van Holsbeeck family returned to their home in Belgium. "I vividly remember their children saying, 'We are going back to Belgium and we'll never see you again!'" remembers Dr. Introcaso of their last evening together in Michigan. That would, of course, prove to be wrong.

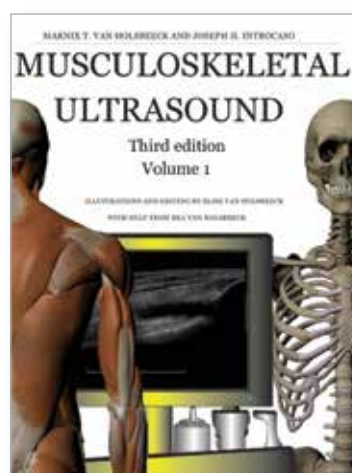
Less than a year later, Dr. Introcaso persuaded Dr. van Holsbeeck to accept a permanent position with Henry Ford Hospital in Detroit as director of emergency radiology and musculoskeletal imaging, the position he still holds today. The van Holsbeeks moved with their three young children across the ocean

to begin a new adventure. Six months later, their fourth child was born, and Dr. Introcaso became godfather to the family's first natural-born U.S. citizen.

The radiologists continued to work together on their manuscript, and the first edition of *Musculoskeletal Ultrasound* was published in late 1990. They also founded the Musculoskeletal Ultrasound Society, which hosts an annual meeting with international attendance.

Publishing has changed significantly since the time of that first publication. Today, Drs. Introcaso and van Holsbeeck are completing the third edition of the text, which will be released in traditional print and digital formats this spring.

"The renaissance of the publishing industry and emergence of digital media has enabled us to dramatically change the way we present information," explained Dr. Introcaso. Interactive video and 3-D animations enhance the digital



Marnix van Holsbeeck, M.D. and Joseph Introcaso, M.D. will release the third edition of their text this spring.

edition of the text. In fact, Dr. van Holsbeeck's daughter, **Elise van Holsbeeck, D.O.**, worked closely with the authors to create the illustrations for the latest edition.

Elise developed a love of realistic art, particularly anatomy, as a high school student. She grew up surrounded by anatomy books and skeletons displayed in her father's home office. She told her father she wanted to be an artist, and he advised her to first become a doctor.

Dr. Marnix van Holsbeeck's own father shared similar advice with his son, who wanted to become a writer.

Elise van Holsbeeck earned her Doctor of Osteopathic Medicine degree at Michigan State University College of Osteopathic Medicine. Today she combines her education with her love of art, pursuing a career in medical illustration.

"The beauty found in the details of human anatomy struck me at an early age," Dr. Elise van Holsbeeck said.

"We have always felt supported by the RSNA as an organization. That same support for the careers of young investigators is what we would like to see continue for the future. The R&E Foundation serves an essential function for radiology research."

Marnix van Holsbeeck, M.D., and Joseph Introcaso, M.D.



Marnix van Holsbeeck, M.D. (*left*) and Joseph Introcaso, M.D. share their passion for radiology as well as a long-lasting friendship.



Authors and illustrator agree the collaboration has been a rewarding one. Elise's role has expanded to include copy editing as she became an invaluable contributor to the volume. She values Dr. Introcaso's technical expertise and said working together is really fun. It is clear the bond between the two families is strong.

Both Dr. van Holsbeeck and Dr. Introcaso learned early on the challenge of securing seed grants to fund clinically relevant research, and both credit the RSNA with supporting their efforts from the start. They have attended the annual meeting together the past 26 consecutive years, and each year at least one of the pair presented a musculoskeletal ultrasound lecture.

"We have always felt supported by the RSNA as an organization," said Dr. van Holsbeeck. "That same support for the careers of young investigators is what we would like to see continue for the future."

"The R&E Foundation serves an essential function for radiology research," agreed Dr. Introcaso.

Both members pay it forward with annual gifts through the R&E Foundation Presidents Circle giving program.



Elise van Holsbeeck, D.O. (*center*) pictured with Katie (*left*) and Charlotte Introcaso.

To learn more about how you can support the Presidents Circle with a minimum annual gift of \$1,500, contact Shelley Taylor at 630-590-7773 or sltaylor@rsna.org, or visit [RSNA.org/Foundation](https://www.rsna.org/Foundation).



Maximize the Benefit of your Retirement Plan Assets

While a retirement plan is an excellent vehicle for accumulating assets for your own use during retirement, it may not be the best way to pass an inheritance on to your loved ones.

When you leave your retirement plan assets to family, distributions are subject

to income tax. The percentage can be even higher if your estate is subject to estate taxes. That means if you die and leave your daughter \$100,000 in a retirement account, any distribution she receives will be taxed at her ordinary income tax rate.

A better alternative may be to pass on income tax-free inheritances—such as real estate, cash and life insurance—to family members. You can designate retirement plan assets to support charitable causes, which receive those assets free of taxes.

Here are two ways you can use your retirement plan assets to their fullest potential to benefit the R&E Foundation:

① If you would like extra income:

When you fund a charitable remainder trust with retirement plan assets, you and the organization both benefit. The trust makes payments to one or more beneficiaries for life or a set term of years. When the trust terminates, the balance supports the R&E Foundation. The portion projected to go toward the Foundation passes free of federal estate taxes.

② If extra income isn't necessary:

You can designate the Foundation as the beneficiary of all or a portion of your retirement plan assets. The Foundation will pay no income or estate tax, allowing 100% of the contribution to benefit its mission. To complete your gift, simply ask your plan administrator for a change-of-beneficiary form.

Visit RSNA.PlanMyLegacy.org for more information.

57% *The number of Americans aged 30 and older who don't know the tax effects on their retirement accounts when they name a loved one as beneficiary.*

Source: "Stelter Donor Insight Report"

R&E Unveils Refreshed Website

The RSNA Research and Education (R&E) Foundation website—accessible at RSNA.org/Foundation—has a whole new look! To celebrate the launch of *Inspire-Innovate-Invest: The Campaign for Funding Radiology's Future®*, the R&E Website received a fresh and exciting update.

At the click of a mouse, users can review a detailed explanation of the Campaign's goal to raise \$17.5 million to fund grants in radiologic research and education, bridging gaps in funding for promising investigators and educators.

The site includes a searchable archive of all current and past grant recipients and their projects, along with testimonials from grant recipients and donors.

In addition to Campaign information and a list of current Centennial Pathfinders, users are invited to access other resources available at RSNA.org/Foundation:

- Detailed information, applications and deadlines for the Roentgen Resident/Fellow Research Award and available grants in three categories: education, research, and medical school.
- Your Donations in Action—Learn about the work grant recipients are producing that continues to fuel radiology's future.
- Archived issues of *Foundation Focus*

We invite you to visit today!





R&E Grants Help Medical Students Extract New Diagnostic Information from CT Images

Guided by their scientific advisor **Andrew D. Smith, M.D., Ph.D.**, two University of Mississippi medical students embarked on separate research projects to develop strategies for extracting new diagnostic information from existing CT images.

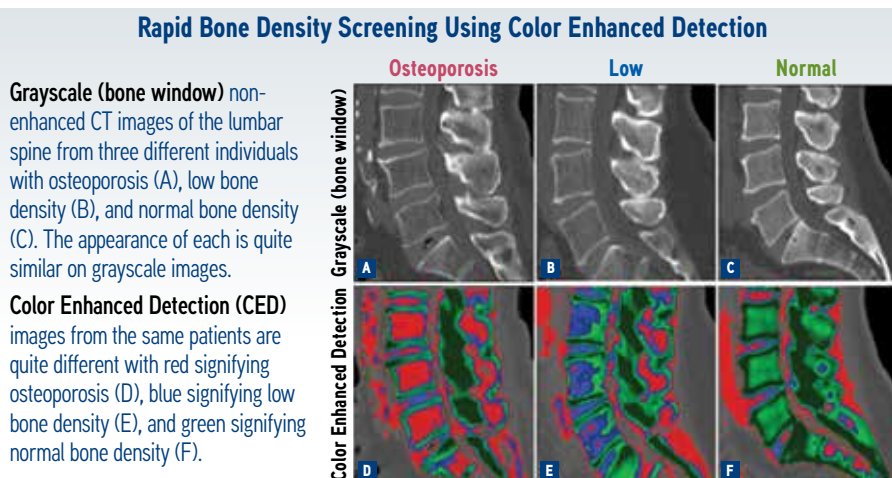
FUJIFILM Medical Systems/RSNA Research Medical Student Grant Recipient **Boshen Lui, B.S.**, investigated the feasibility of rapid bone density screening of routine CT images using Color Enhanced Detection (CED).

“Color Enhanced Detection method refers to conversion of the normal grayscale (black and white) pixels of a routine CT image to color, such that osteoporosis is red, or normal bone density is green,” Liu said. By creating this semi-automated algorithm, clinicians will be able to make an accurate and rapid diagnosis of osteoporosis or low bone density early in patient care, reducing the heavy health-care and economic costs associated with osteoporotic fractures.”

Thanks to this preliminary work, a

2014 RSNA Medical Student Grant recipient **Tara Lewis, B.S., R.N.**, focused on quantification of liver surface nodularity, a condition caused by scarring and development of regenerative nodules that increase in size and number in parallel with the severity of cirrhosis. A liver phantom with four zones of

“The RSNA Medical Student Grant provides a mechanism for recruiting outstanding medical students into radiology by providing an opportunity to participate in cutting-edge imaging research. The dollar-for-dollar return on this investment by the RSNA R&E Foundation is high, as these students are increasingly likely to become the next generation of academic radiologists and clinician scientists. In the cases of Lewis and Lui, both have converted their summer research projects into larger three-year projects as part of the Medical Student Research Program at the University of Mississippi Medical



prospective study has been initiated to validate the Color Enhanced Detection method in a true screening population (N=200).

varying nodularity was used to optimize CT imaging parameters on a single CT scanner. Using the collected data, Lewis applied the parameters to scan the liver surface nodularity phantom on 23 scanners from several equipment manufacturers across ten imaging centers. The results were highly consistent.

Center. This trajectory is not unusual, as prior students with RSNA grant awards followed the same path and are now matriculating into radiology residency in top programs,” said Andrew D. Smith M.D., Ph.D., vice chair and director of radiology research, assistant professor, Department of Radiology, University of Mississippi Medical Center.

Each year the Foundation awards 25 medical student grants. The 2015 recipients will begin their work this summer. The R&E Foundation is proud to support these young innovators.

“The Liver Surface Nodularity score is probably best used to predict outcomes of chronic liver disease such as development of liver decompensation, liver cancer, or death, but it may also be applicable to diagnosis and staging of chronic liver disease and to monitoring treatment response,” Lewis said.



2014 University of Mississippi Medical Students Boshen Lui, B.S., and Tara Lewis, B.S., R.N. (seated) with scientific advisor Andrew D. Smith, M.D., Ph.D.



Hitachi Commits to Inspire-Innovate-Invest Campaign

The R&E Foundation is proud to announce that Hitachi Medical Systems America, Inc. has generously made a new \$300,000 commitment to support the Inspire-Innovate-Invest Campaign. As a Vanguard donor for 25 years, Hitachi Medical Systems America, Inc. has supported 16 research seed and resident grants.

Hitachi Medical Systems America (HMSA) offers a broad range of patient-friendly diagnostic imaging equipment includ-

Thank You!

ing MRI, CT and OT. Its innovations drive clinical solutions to deliver diagnostic confidence, improve workflow efficiency, and provide a better patient experience. In addition, HMSA is known for its comprehensive customer support programs that maximize the lifecycle value of equipment through responsive service maintenance, significant software upgrades, and ongoing applications support.

Thank you for your continued support, Hitachi.

HITACHI
Inspire the Next

"Hitachi Medical Systems is pleased to support the RSNA Research & Education Foundation. We appreciate the value of this research contribution to the continuing advancement of medical imaging."

Sheldon Schaffer, vice president and general manager of MR/CT
Hitachi Medical Systems America, Inc.

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Three Easy Ways to Give



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