



oundation

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

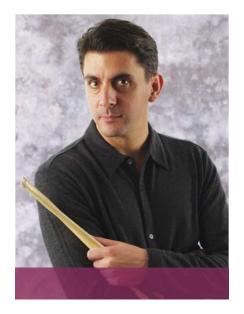
Passion, Music and Medicine:

Neuroradiologist Craig Russo, M.D. Shares His Story

At the age of fifteen, Craig Russo, M.D. traveled to Puerto Rico with his family and discovered the sounds that inspire his music today.

Dr. Russo grew up in the Midwest and attended the University of Iowa on a full-ride music scholarship. Knowing there was limited opportunity to be successful as a professional musician, Dr. Russo had a change of plans. He decided to focus on a career with a more defined path and found himself exploring medicine. "I took the easy way out and went to medical school," he joked. Dr. Russo attended medical school at Albert Einstein College of Medicine in the Bronx, where he took full advantage of the area's music and culture.

After his residency in diagnostic radiology at SUNY Health Science Center in Syracuse, N.Y., Dr. Russo completed his fellowship in neuroradiolgy at



to live vicariously," he said. "Giving to the R&E Foundation gives others the opportunity to conduct new research—it's my way of staying involved." Day to day Dr. Russo stays busy seeing patients, working with residents, serving on boards and, of course, performing his music. "Music is therapeutic; it allows me to develop a skill set I don't always use in the office. It's spontaneous."

The Craig Russo Latin Jazz Project will be performing in downtown Chicago this November during RSNA 2010and the proceeds will benefit the R&E Foundation. Dr. Russo has performed in past years during the week of the RSNA annual meeting for friends and

"Giving to the R&E Foundation gives others the opportunity to conduct new research—it's my way of staying involved."

Dr. Craig Russo, M.D.

Medical College of Virginia Hospitals, Richmond, Va. His career path eventually led him back to the Midwest, were he now resides and is part of Clinical Radiology Group in Springfield, Ill.

Dr. Russo supports the R&E Foundation at the Presidents Circle level. "I like colleagues, and he felt it would be great to turn the performance into a benefit for the Foundation. Don't miss the chance to see a top-notch performance in a historic Chicago venue—and help fund the future of radiology.



See the Craig Russo Latin Jazz Project — Benefiting the R&E Foundation

Enjoy a performance by world-class musicians with deep roots in jazz and Afro-Caribbean music—and benefit the RSNA R&E Foundation! A review in Latin Beat magazine described The Craig Russo Latin Jazz Project's recent album In the Middle as exploring "unlimited creative possibilities that fuse Afro-Caribbean rhythms with modern jazz sensibilities and masterful arrangements."

Performing at the historic Jazz Showcase Club at Dearborn Station, Monday, November 29, 8:00 p.m. and 10:00 p.m. Price per person: \$25 (includes donation to the R&E Foundation)

Foundation News

R&E Grant Recipients Present at RSNA 2010

This November, more than 230 current and past R&E grant recipients will present at the RSNA annual meeting in Chicago. Presenters who have received an R&E grant can be found in the RSNA 2010 Program in Breif with a R&E logo mext to their name.





Considering ways to give to the R&E Foundation? Sign up for the informative and comprehensive investment education seminars held during RSNA 2010.

Effective Real Estate Investment Strategies Course #PS03 Asset Protection and Retirement Planning In the New Era Course #PS23

► Sign up at RSNA.org/Registration

Leave Your Legacy Through A Bequest

Bequests are easy to arrange and have numerous benefits. Some individuals choose to donate through a bequest to preserve assets during their lifetime. Others want to ensure that loved ones are provided for first, and leave residual bequests. Whatever the amount of your gift, your bequest will greatly benefit the RSNA R&E Foundation and ensure a promising future for radiology. Learn details on leaving your legacy at *RSNA.org/PlannedGiving*.

If you wish to include the RSNA

R&E Foundation in your estate plans there are many options. Specific dollar amounts and a percentage of the total estate are popular ways to remember charities with a bequest. You might also consider a planned gift by making the RSNA R&E Foundation the beneficiary of an individual retirement account or life insurance policy. A residual bequest is a great option for individuals who are unsure of assigning a specific dollar amount to charity. With this type of bequest, the Foundation would receive

all or a portion of your estate which remains after all debts and other bequests have been paid.

New Planned Giving Legacy Donor Website Launched



Visit *RSNA.org/PlannedGiving* to read and discover gift giving options to benefit you and your loved ones.

Sample Language

I give, devise and bequeath to Radiological Society of North America (RSNA) Research and Education Foundation, a 501(c)(3) charitable organization having its principal offices in Oak Brook, Illinois: the sum of \$_____ or ____ percent of my estate or all (or _____ percentage of) the rest, residue and remainder of my estate.

This gift is to be used to further the charitable purposes of RSNA Research and Education Foundation at the discretion of its Board of Trustees.

Donor Profile

Solidifying the Future, Even in Turbulent Times Carol and Lawrence R. Muroff, M.D., F.A.C.R.

There are two ways a radiologist can contribute to protecting the specialty, says Dr. Muroff—time and money. "I've had the opportunity to do both."

Dr. Muroff is president and CEO of Imaging Consultants Inc., Tampa, and a clinical professor of radiology in the colleges of medicine at the University of Florida and the University of South Florida. He and his wife, Carol, are Platinum Legacy donors, creating a bequest to be paid outright after death to the R&E Foundation.

RSNA shapes the careers of all radiologists, says Dr. Muroff, whether they're in private practice or academics. "RSNA provides a forum for teaching, science, and evaluating new technology," he said. "And for me—I've presented teaching courses, listened to teaching and scientific presentations made by others, and spent extensive time evaluating and subsequently purchasing equipment."

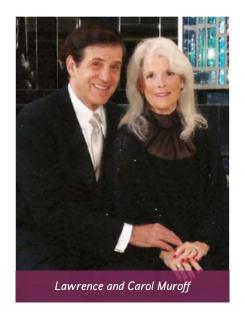
R&E funding nurtures and provides opportunities for researchers and educators to become involved in continued research, Dr. Muroff says. "It's a mechanism to ensure that the specialty will continue to thrive in an era of change."

Dr. Muroff notes the benefits to the donor as well as the specialty as a whole. "With a Legacy donation, they can defer the immediate cash donation, yet solidify their intention and provide the Foundation with an ongoing income stream that will take it successfully into the future."

This is a very turbulent time for radiology, Dr. Muroff says, and some radiologists may not feel comfortable making a sizeable donation they would otherwise wish to make. This gives them the opportunity to enjoy their money now—and provide for opportunity later, he says.

"It also allows us to solidify and expand our turf—our area of practice influence. This is not just an academic endeavor; practicing radiologists benefit enormously from seeing the scientific, educational and technological advances from literally all over the world."

Dr. Muroff says that his donation is simply a very small thank-you to a specialty that has given him such intellectual challenge and financial reward.



"People have to understand that they should provide the same type of opportunity for others," said Dr. Muroff. "There's an obligation to continue our specialty in a way that will enable others to reap the same rewards that we enjoy."

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For additional information on leaving a bequest or other planned giving options contact Karena Galvin, director, R&E Foundation at 1-630-590-7742 or kgalvin@rsna.org.

RSNA.org/Foundation Focus

Exhibitors Circle Profile

Resonance Technology Donates \$5,000 to Support the Foundation

For more than twenty years Resonance Technology Company, Inc. has manufactured some of the most advanced medical devices to aid in the MR imaging process. Resonance Technology uses unique all-digital virtual real-

ity and audio MR imaging entertainment systems and advanced fMR imaging technology. The company has also played an important



role in functional MRI (fMRI) by providing specialized auditory and visual stimulation and response devices to the research community. In 1990 Resonance Technology developed the first MRI compatible video system, giving patients a more pleasant experience.

Resonance Technology is dedicated to manufacturing a superior product that offers an excellent return on investment for clinics, while alleviating claustropho-

> bia or anxiety for patients in clinical setting. "We hope to give researchers the tool they need to advance their studies in human brain function. We firmly believe in MRI as the single most

useful and versatile imaging modality and strive to make it even more so," said Mokhtar Ziarati, President of Resonance Technology.

A participant in the RSNA Exhibi-

tors Circle since 2009, Resonance Technology's donation of \$5,000 will support new research and education in the field. "Resonance Technology recognizes that research and education in radiology has been crucial in bringing MRI into the mainstream. Patients benefit from MRI on a clinical level through imaging for wide ranging medical conditions, while on a practical level, our MRI compatible audio video technology makes these exams possible for many people who would otherwise be unable to tolerate them We are grateful for our involvement in this exciting field of medicine and are proud to support the RSNA Research and Education Foundation," said Mr. Ziarati.

Visionaries In Practice (VIP) Program Welcomes 6 New Practices



This year, a total of 21 private practices and academic institutions have joined the R&E VIP program by investing in the future of radiology and the related sciences. New practices in 2010 include:

Charlotte Radiology
Charlotte, NC

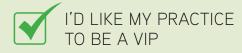
Foundation Radiology Group Pittsburgh, PA

Jefferson Radiology East Hartford, CT McHenry Radiologist & Imaging Associates

McHenry, IL

Radiology Imaging Associates, P.C Denver. CO

Suburban Radiology Consultants
Minneapois, MN



For more information on becoming a VIP practice, and for a complete listing of VIP benefits by giving level, please contact Robert Leigh, manager of fund development at rleigh@rsna.org or 1-630-590-7760.

Vanguard Company Profile

Bayer HealthCare Pharmaceuticals Continues its Support of Research in 2010

Bayer HealthCare Pharmaceuticals has been a Vanguard supporter of the Foundation since 2004. This year, the company funding a Research Seed Grant awarded to. Steve Fung, M.D., for his project, Detecting and Imaging Protease Activity in Head and Neck Cancers with Activatable MR Nanoprobe Contrast Agent.

Bayer HealthCare Pharmaceuticals Inc. is the U.S. based pharmaceuticals operation of Bayer HealthCare, an affiliate of Bayer AG. Established over

one hundred years ago, Bayer is one of the world's leading, innovative companies

in the healthcare and medical products industry. Bayer HealthCare combines the global activities of the Animal Health, Consumer Care, Diabetes Care and Pharmaceuticals divisions.

healthcare, diagnostic imaging,

general medicine, hematology/ neurology and oncology.

The company's aim is to discover and manufacture products that will improve human



health worldwide by diagnosing, preventing and treating diseases.

The Foundation's fourteen Vanguard Companies, including Bayer HealthCare

> Pharmaceuticals will be recognized at the RSNA Corporate

Donor Reception held in Chicago during RSNA 2010. The Foundation's Vanguard companies fund dozens of named grants through endowments and term funding HealthCare Pharmaceuticals and all of the Foundation's corporate supporters

"The initiatives that the R&E Foundation funds are Radiology an opportunity to conduct negresearch it's my way of staying involved."

Paul Genovese, Fujifilm senior vice-president

Visit corporate donors who support the R&E Foundation at RSNA 2010. Corporate donors can be found in the RSNA Technical Exhibition Guide indicated by the R&E supporter logo . The Foundation would like to thank its Vanguard and Exhibitors Circle companies for their support.

Bayer HealthCare **Pharmaceuticals**

each year. A special thanks to Bayer The company focuses on women's

for their investment in R&D.

2010 WILL BE OVER BEFORE YOU KNOW IT

Have you made your tax-deductible donation?

Donate by December 31st and take advantage of a 2010 tax deduction

Your support is needed to keep the R&E grant funding rate high. We would like to thank the thousands of RSNA members, private practice groups and corporations who support our mission. Donating to the RSNA R&E Foundation is quick and easy and donations of all sizes will make a difference. Visit RSNA.org/Donate or call 1-630-368-7885 and take advantage of your tax-deductible gift today.



Foundation Focus RSNA.org/Foundation

Your Donations are Making a Difference

These Bright Minds Thank You!

70 grants were made possible this year from the support of donors like you. Here is a glimpse at some current grant projects. See the entire list at RSNA.org/Foundation.

Hersh Chandarana, M.D. Radiology, New York University School of Medicine, Siemens Healthcare/RSNA Research Scholar Grant, Evaluation and Prediction of Treatment Response in Liver Metastasis Undergoing Chemotherapy

Undergoing Chemotherapy
with Use of Dual Energy CT Iodine Quantification
Technique

Lidia Nagae, M.D., Ph.D.
Radiology, Division of
Neuroradiology, The
Children's Hospital of
Philadelphia, RSNA
Research Fellow
Grant, A Multimodal
Neurobiological Imaging
Study of Pediatric Mild
Traumatic Brain Injury



Naiim Ali, B.A.
Radiology, New Jersey
Medical School, RSNA
Research Medical
Student Grant, Evaluation
of Combined Modality
Radioimmunotherapy for
Treatment of Mammary
Adenocarcinoma Using
In Vivo Bioluminescence
Imaging



Daniel Hamstra, M.D., Ph.D. Radiation Oncology, The University of Michigan Medical Center, RSNA Research Scholar Grant, Molecular Dissection of the Role of Tumor Vasculature

in Radiation Sensitivity



Nils Arvold, M.D.
Radiation Oncology,
Harvard Radiation
Oncology Program,
Massachusetts General
Hospital, RSNA Research
Resident Grant, Molecular
Imaging of Tumor Hypoxia
Before and After Tyrosine
Kinase Inhibitor Therapy in

Patients with EGFR-Mutant Advanced Non-Small Cell Lung Cancer Bryan G. Allen, M.D., Ph.D. RSNA Research Resident Grant, University of Iowa Hospitals and Clinics, Sensitization of Lung Cancer to Chemo-Radio-Therapy Using Ketogenic Diets



Mizuki Nishino, M.D.
Radiology, Brigham and
Women's Hospital,
Dana-Farber Cancer
Institute, Agfa
HealthCare/RSNA
Research Scholar Grant,
Chronological Analysis of
Tumor Size, Volume and

CT Attenuation Coefficient in Women with Adenocarcinoma of the Lung Treated with Erlotinib Daniel Higginson, M.D.
Radiation Oncology,
The University of North
Carolina at Chapel Hill,
RSNA Research Resident
Grant, Retinal Oximetry:
A Novel Technology for
Studying Radiationinduced Retinopathy



Alvin R. Cabrera, M.D.
Philips Healthcare/RSNA
Research Resident Grant,
Duke University Medical
Center, Investigating
Changes in Tumor
Vasculature with Dynamic
Contrast-Enhanced MRI
Following Treatment of
Recurrent Gliomas with



Stereotactic Radiosurgery and Bevacizumab

David Wilson, M.D., Ph.D. Radiology, University of California, San Francisco, RSNA Research Seed Grant, New 13C Hexose Probes for the Metabolic

Characterization of
Tumors In Vivo Using
Hyperpolarized 13C Spectroscopy



Sidhartha Tavri, M.B.B.S. Radiology,Univeristy of California San Diego, Hitachi Medical Systems/RSNA Research Resident Grant, Stem Cells as a 'Trojan Horse' for Ultrasound-Targeted Cell Therapy



Vignesh A. Arasu, B.S.
Canon U.S.A./RSNA
Research Medical
Student Grant, University
of California, San
Francisco, Diagnostic
Accuracy Using Signal
Enhancement Ratio
(SER) in MRI-Detected
Secondary Breast Lesions

sity Service of the s

for Patients Undergoing Preoperative Staging



Grant Report Highlight

A glimpse at just one of the projects made possible by your donations. A complete list of grant projects can be found at RSNA.org/Foundation.

PHILIPS sense and simplicity

Zhen Jane Wang, M.D.

Radiology, University of California San Francisco, CA 2008 Philips Healthcare/ RSNA Research Fellow Grant Project Title: Urinary Oxygen Tension Measurement in Humans Using MR Imaging

Abstract: Hypoxia of the renal medulla is a key factor implicated in many forms of kidney disease, including acute tubular necrosis, diabetic nephropathy, contrast or druginduced nephropathy, and papillary necrosis. Our broad, long-term goal is to develop an imaging tool to identify patients with pre-clinical renal dysfunction related to renal medullary hypoxia and thereby allow for early diagnosis and patient-specific treatment monitoring. Specifically, we propose to study a novel MR imaging method that exploits the known high correlation between renal pelvis urinary oxygen tension and renal medullary oxygen tension. The urinary oxygen tension in the renal pelvis equilibrates with that of the adjacent medulla, and reflects medullary perfusion and metabolic function.

At our institution, we have recently developed a modified single-shot fast spin echo pulse sequence that quantifies oxygen tension in fluids based on its longitudinal relaxivity (R1=1/T1). This technique has been validated in phantom models and in vivo for the assessment of cerebral spinal fluid oxygen tension. Our current proposal is to validate the use of this method for measuring urinary oxygen tension in humans.

Specific Aim: To validate the ability of MR imaging to quantify urinary oxygen tension in vivo. This aim will test the hypothesis that MR imaging can reliably measure urinary oxygen tension in volunteers.

To quantify the effect of supplemental inhaled oxygen and diuretic (furosemide) on urinary oxygen tension of healthy subjects. This aim will test the hypothesis that MR imaging can monitor temporal changes in urinary oxygen tension

This study will provide preliminary data and experience for the development of a novel approach to assess urinary oxygen tension, and thereby renal medullary oxygenation. This tool may be useful to assess the association between renal



"The RSNA fellow grant program has allowed me to focus my research and establish my long term career goal in renal functional imaging. The research training I received has helped me to obtain the 2010-2012 RSNA scholar grant. My plan is to use the data gathered from the Scholar grant to apply for a NIH R01 grant." Zhen Jane Wang, M.D.

medullary hypoxia and common renal diseases, therefore facilitating diagnosis and rational intervention.

Summary Statement: The specific goal for the fellow grant proposal was to validate a novel MR imaging method for the measurement of urinary oxygenation, as a surrogate marker for renal oxygenation in humans. We were able to achieve the specific goals as outlined in the original fellow grant proposal, and published our work in the journal *Academic Radiology*. 2008; 15 (11):1467-1473).

In addition, we expanded on our original proposal to study renal oxygenation using Blood oxygen-level dependent (BOLD) MR imaging in patients with diabetic nephropathy. The manuscript on the findings from the expanded proposal has been submitted to *Journal of Magnetic Resonance Imaging* and is currently under review.

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▶ 2010 Donation Recap

\$1+Million
INDIVIDUALS

\$350,000 VIP GROUPS **\$950,000** COMPANIES

What's Happening at RSNA 2010?

Visit the R&E Foundation Booth

Be sure to visit the R&E Foundation located on the upper level of the Lakeside Center in the RSNA Services area. Photos and abstracts of the 2010 grant recipients will be on display as well as donor recognition and interactive touch screen monitors with information on the Foundation. R&E staff will be present for questions regarding grants, donations or committee involvement.

R&E Donor Lounge

Anyone who has contributed \$250 or more this year will receive access to the R&E donor lounge located in the Lakeside Center. The lounge is perfect for relaxing between sessions, visiting with colleagues, checking email, or enjoying hot coffee and snacks.

Onsite donations are welcome for donor lounge access, or go to RSNA.org/Donate.

Sunday, November 28 R&E Foundation Report in the Arie Crown Theater

Join us at 4:00p.m. in Arie Crown Theater, Lakeside Center for a report of the R&E Foundation's current activities and achievements.

Monday, November 29 Latin Jazz Benefit Concert

The Craig Russo Latin Jazz Project will perform at the Jazz Showcase, Dearborn Station, 806 Plymouth Court. 8:00 p.m. and 10:00 p.m. performance times \$25 per person (includes donation to R&E Foundation).

Express Boarding Pass

Skip the line! Donors in the Presidents Circle (\$1,500 annually) receive the benefit of express boarding for taxi and shuttle transportation. Visit the R&E Transportation desk located in the North Building to take advantage of this benefit.



For more information, visit the R&E Foundation booth located in the RSNA Services area.



PERSONALIZED MEDICINE: In Pursuit of Excellence

NOVEMBER 28 – DECEMBER 3 · McCORMICK PLACE, CHICAGO

