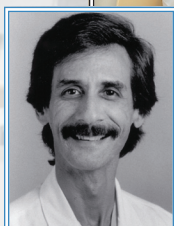
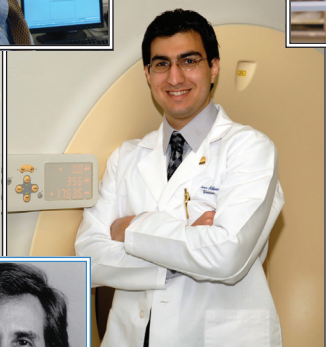
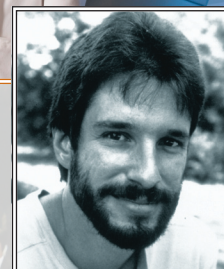
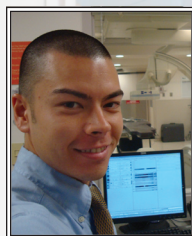
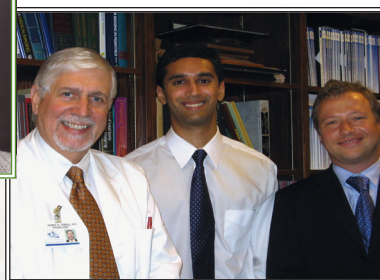
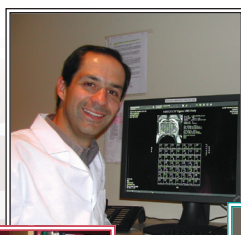




Foundation FOCUS

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Society of North
America Research
& Education
Foundation

Silver Anniversary Campaign Issue



1984–2009: The RSNA Research & Education Foundation celebrates 25 years of funding radiology's future with the \$15 million Silver Anniversary Campaign to protect funding for the next 25 years.

Giving Back to a Profession That Has Given Her Much Joy



Anne Roberts, M.D.

ANNE ROBERTS, M.D., BELIEVES IN THE SAYING “today’s research is tomorrow’s practice.” The techniques developed today in academic programs are what private practice radiologists will use as new tools and new procedures; without these, the practice of radiology would not be as strong.

Dr. Roberts grew up in Pasadena, California, and studied history at UCLA. Not sure if this was her calling, she took time off to explore some options, working at a variety of jobs including a clothing boutique and bank. She took an interest

Campaign Pacesetter, Anne Roberts, MD, shares her thoughts on the R&E Foundation

in medicine, and after one year studying obstetrics and gynecology, she made the switch to interventional radiology and was hooked.

“Once I found interventional radiology at the end of my first year as a resident, I knew that was what I was going to do for the rest of my professional career. I initially thought I might go into private practice, but no one would hire a woman at the time,” said Dr. Roberts. The University of California San Diego felt differently and assisted Dr. Roberts in her quest for a job. “I have loved my job. What I like the best is teaching and taking care of patients,” said Dr. Roberts.

“I have been very fortunate in being involved in organized radiology. The RSNA, the SIR, the ACR, the ABR, and the ACGME are all organizations that I have worked with, and they have given me much more than I have given to them,” Dr. Roberts added.

Dr. Roberts and her husband, John E. Arnold, M.D., support the R&E Foundation as members of the Presidents Circle, and as Silver Anniversary Campaign Pacesetters. “The reason

to support the Foundation is the need to get young radiologists into academics. It is critical that we keep some of the best young minds in academic radiology, because they are the life-blood of the specialty.”

Anne Roberts, M.D.

to support the Foundation is the need to get young radiologists into academics. Without the young radiologists we will get to a point where the academic radiologists retire or die, and who will there be to train the residents?” said Dr. Roberts. “It is critical that we keep some of the best young minds in academic radiology, because they are the life-blood of the specialty. Without

appropriate salaries, appreciation, and encouragement, they will go to private practice and the academic practices will no longer function to train new radiologists.”

Dr. Roberts feels that the possibilities are endless, and as we move into individualized medicine, imaging will become even more significant. That is why she is supporting the future of the specialty.

A CLOSER LOOK AT THE PRESIDENTS CIRCLE PROGRAM

Q.) I made a donation of \$250 with my dues and am interested in being a part of the Presidents Circle. How can I join?

A.) The R&E Foundation has several types of Individual Donor Programs, based on annual and cumulative gifts. The Presidents Circle is made up of individuals who give a total of \$1,500 or more per year. You can make multiple donations throughout the year to reach a total of \$1,500 and become a Presidents Circle member.

Presidents Circle Recognition Benefits:

- Making a lasting impact on the future of radiology by supporting the Presidents Circle Research Grant
- Special Recognition in *RSNA News*, at annual meeting, on Foundation web site, and various RSNA publications
- Access to Donor Lounge at annual meeting
- Express Boarding Pass for taxis and shuttles at annual meeting
- Invitation to Distinguished Donor Reception

For more information on donor programs contact Robert Leigh, Manager, Fund Development, at Rleigh@rsna.org



Help Make the Specialty Stronger

For 25 years the RSNA Research & Education Foundation has kept the pipeline of research alive.

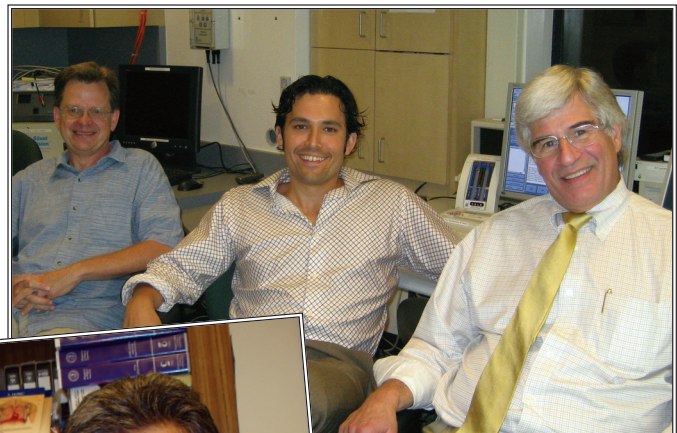
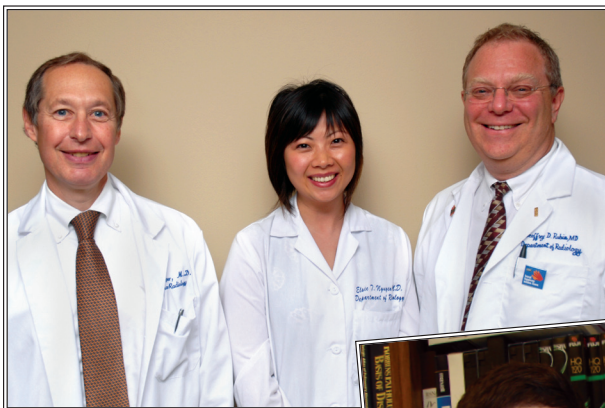
Make a gift to the Silver Anniversary Campaign today, so that we may continue funding these essential grants for years to come.

“My R&E grant helped me focus in the lab at an early and critical time in my career. It’s really impossible to measure how valuable it was... It was key to my career.” Michael Garwood Ph.D., Professor of Radiology, Associate Director of the Center for Magnetic Research, University of Minnesota, 1989 RSNA Research Scholar Grant Recipient

“Seed grants are extremely instrumental and organizations like the R&E Foundation are vital to help young investigators take an idea and have it mushroom into a clinical reality that helps patients.” Stuart G. Silverman, M.D., Professor of Radiology, Harvard Medical School, Director of Abdominal Imaging and Intervention, Brigham and Women’s Hospital, 1998 Research Seed Grant Recipient

“Seed grants are so valuable because they provide resources at a time in one’s career when resources are hard to come by. It primes the pump, so to speak ... I’m paying forward the investment RSNA made in me, and it’s great to see that evolution.” Ruth Carlos, M.D., Associate Professor of Radiology, University of Michigan Health System, 2000 Toshiba America Medical Systems/ RSNA Research Seed Grant Recipient

If We Won’t...Who Will?



To make a donation use the postage-paid return envelope in this issue of the Foundation Focus, or donate online at RSNA.org/donate.





Donors gather onstage at the Arie Crown Theater to show their support of the Silver Anniversary Campaign.

No Gift Too Small

Because of You, We Have Been Going Strong for 25 Years

PEOPLE OFTEN TELL US, "I REALLY WANT TO help out, but I only have a \$100, will that help at all?" The answer is YES! In fact, thousands of loyal donors that give the requested \$50, \$100, or \$250 each year come together to provide significant support for the Foundation. Residents, past grant recipients, retired radiologists, individuals who remember us every year are truly vital to the Foundation.

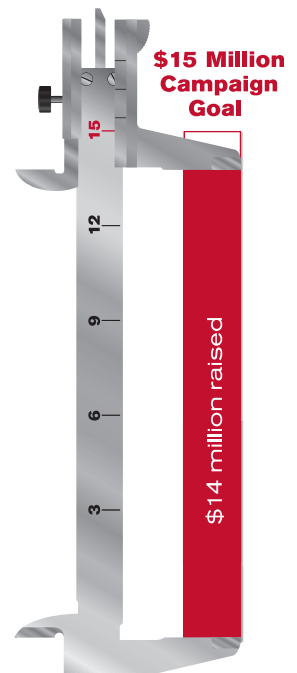
Dr. Frederick Fitts of Twin Falls, Idaho has given us an average annual gift of \$250 since the Foundation started. His long

history of giving has recently added up to over \$5,000. As a testament to our donors, Dr. Fitts is not alone. Many others like Dr. Leo Sheiner of Bloomfield Hills, Michigan, Dr. Stephen Dalton of Houston, Texas, and Dr. Linda Gruener of Palos Hills, Illinois, have followed this path of loyal annual support.

Your gifts have funded over 700 research and education grants that are paying dividends not only today, but also for forthcoming generations of radiologists and their patients.

NO MATTER THE SIZE of the donation, every gift makes a difference. We are asking for your support, again this year to help us reach our Campaign goal of \$15 million. We are confident the remaining \$1 million will be raised by the end of 2009 because you care.

Just think, if every RSNA member gave \$50 the Foundation could fund 60 new seed grants. Your support has sustained the Foundation for a quarter century. It is your continued commitment that paves the way for the R&D that will keep radiology in the forefront of medicine where it belongs.



25 YEARS OF BUILDING A STRONG FOUNDATION

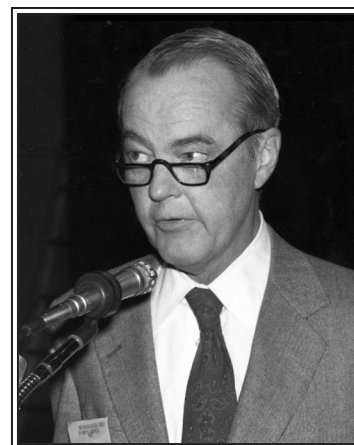
PART II. CORPORATE FRIENDS

The late 1980's was a time of new partnerships and development for the R&E Foundation. In 1989, the Foundation reached out to industry friends to support its mission. The Vanguard Group was founded by The Agfa Corporation, E.I. Du Pont de Nemours Inc, Eastman Kodak Co, Fuji Photo Film U.S.A., General Electric Medical Systems, Philips Medical Systems Inc, Siemens Medical Systems, Squibb Diagnostics, Toshiba America Medical Systems, Winthrop Pharmaceuticals, and Mallinckrodt Medical Inc. Members and other individuals in the radiologic community were very receptive of the RSNA 75th Anniversary gift ask, which amounted to 30% of their usual annual support. RSNA's sister societies, the American College of Radiology, the American Roentgen Ray Society, the American Association of Physicists in Medicine, and the Chicago Radiological Society, also came forward with generous support.

IN MEMORIAM

AN INSTRUMENTAL TRUSTEE, Remembered, Hillier L.

Baker, Jr., M.D., of Rochester, Minnesota, passed away on December 22, 2008. Dr. Baker was heavily involved in the formation of the R&E Foundation; he served on the first Board of Trustees as the Secretary-Treasurer and was part of the Million Dollar Club for



Hillier L. Baker, Jr., M.D.

his efforts in obtaining corporate support from many of the founding Vanguard companies. Dr. Baker served as RSNA President in 1980.

VANGUARD COMPANY PROFILE

An Industry Pioneer Gives Back Enabling Research to Move Forward

"COVIDIEN IS COMMITTED TO SUPPORTING research and education in the field of imaging and all related modalities. Our support of the R&E Foundation allows us to provide grants for fellows who have promising theories in imaging research," said Rick Lytle, Vice President and General Manager, Imaging Solutions. "In addition, the Foundation provides opportunities to collaborate with our healthcare partners for the development of imaging technologies and agents that can help physicians improve patient diagnosis and care."

Covidien is one of the leading global healthcare products companies that creates innovative medical solutions for better patient outcomes and delivers value through

clinical leadership and excellence. Formerly Tyco/Mallinckrodt, Covidien has been a part of the RSNA R&E Vanguard program since the program's inception in 1989, fund-

"Our industry leadership is also reflected in our support of the RSNA R&E Foundation. Through grants from the Foundation, individuals and institutions are able to foster innovation in radiology, which can help physicians diagnose and treat disease as early as possible."

Rick Lytle, Vice President and General Manager, Imaging Solutions, Covidien

ing grants to launch the careers of over a dozen researchers. Covidien manufactures, distributes and services a diverse range of product lines in four segments: Medical Devices, Imaging Solutions, Pharmaceutical Products and Medical Supplies.

A company that cares, Covidien is committed to improving the health and well-being of patients around the world, giving locally and worldwide. Covidien contributes to the availability of affordable, quality healthcare in the markets it serves around the world,

and funds local programs that provide care and treatment for specific diseases and address the needs of the communities in which it operates.

A true pioneer, Covidien has aided in revolutionizing safety and efficiency, with such firsts as Ultraject™ prefilled contrast media syringes, to help reduce the risk of certain medication-dispensing and mislabeling errors that may occur when syringes are manually filled from multi-dose packaging. "Our industry leadership is also reflected in our support of the RSNA R&E Foundation. Through grants from the Foundation, individuals and institutions are able to foster innovation in radiology, which can help physicians diagnose and treat disease as early as possible," said Mr. Lytle.



COVIDIEN



Distinguished Donor Reception

Visionary, Legacy, Presidents Circle, Visionaries in Practice, and top level corporate donors gathered at the Union League Club, Chicago this past December for the Distinguished Donor Reception. Anne G. Osborn, M.D., outgoing Chair, welcomed guests and presented a Campaign update adding a special thanks to the Campaign Pacesetters. Paul Berger, M.D., was recognized for the \$1.5 million donation he made in honor of his mentor, Derek Harwood-Nash, M.D. Over 150 guests took a break out of their busy RSNA 2008 schedules to celebrate with fellow donors at the annual reception.

EXHIBITORS CIRCLE PROFILE

Providing Researchers and Clinicians with the Necessary Tools

Hologic encourages women around the world to be proactive with their health

"ON BEHALF OF THE 4,000 ASSOCIATES OF Hologic, I want to thank the RSNA R&E Foundation for helping us make a difference in the lives of women everywhere. ... Whether you're a republican, democrat or

independent, regardless of your race, color or creed, every woman is at risk for developing breast and cervical cancer. Cancer is an insidious disease

that spares no one in its path," said Jack Cumming, Chairman and CEO, Hologic, Inc.

Supplying clinicians the tools necessary to assist in the earlier detection of cancer in women is Hologic's mission, providing earlier more effective detection of cervical cancer and advanced breast health imaging and workflow solutions. If a suspicious lesion is detected, Hologic supports the next clinical steps with its

breast biopsy systems which have fewer needle insertions. For the woman who requires radiation treatment Hologic offers a patient friendly alternative to traditional whole breast radiation

with the 5-day targeted radiation therapy. Hologic provides imaging and software for osteoporosis

prevention and improved risk assessment for breast cancer, products aimed at fertility assessment, and premature birth risk testing saving women's lives.

With the belief that when a woman is helped, so is a family, and when a family is so is the community, Hologic has been a Platinum Level supporter of the R&E Foundation's Exhibitors Circle for four years. Hologic is committed

to being an active voice and a corporate role model in promoting women's health initiatives.

"Protecting women's health is what defines Hologic, women are the heart and soul of our mission. This is why our associates use vacation time to travel to far off places to help train medical personnel on how to perform screening procedures. That is why we walk, run, swim, paddle, and bike thousands of miles each year to raise funds for cancer research," said Mr. Cumming. "And that is why we are honored to help the researchers supported by the RSNA Foundation. We are proud of the work you do to make a difference."

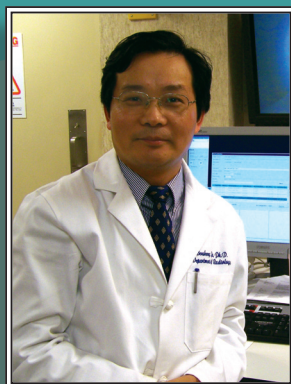
HOLOGIC™

The Women's Health Company.

"On behalf of the 4,000 associates of Hologic, I want to thank the RSNA R&E Foundation for helping us make a difference in the lives of women everywhere."

Jack Cumming, Chairman and CEO, Hologic, Inc.

A glimpse at just one of the many promising projects made possible by your support.
Every dollar you donate helps secure grant funding, research, and the future of radiology.
A complete listing of grant projects can be found at RSNA.org/Foundation.



Bensheng Qiu, Ph.D., University of Washington School of Medicine, Seattle, WA
2007-08 Fujifilm Medical Systems/RSNA Research Seed Grant



Title: Instant Magnetosonoporation (MSP) Cell Labeling for MRI Tracking of Stem Cell Migration

Short Abstract:

Stem cells are being explored for infusion or transplantation into tissue for purposes of repair, revascularization, and other therapeutic measures. Non-invasive magnetic resonance imaging (MRI) is a useful tool to serially track the migration of magnetically labeled stem cells. The overall goal of this study is to develop a novel, instant cellular magnetic labeling technique, termed magnetosonoporation (MSP). The concept of MSP is based on the hypothesis that ultrasound-induced sonoporation can increase the permeability of cell membrane, thus facilitate the transfer of MR contrast agents into the cells.

Specific aims and goals:

AIM1: To develop a MSP-mediated cell labeling technique, we specifically:

- a) Develop an experimental ultrasound instrument for MSP cell labeling;
- b) Optimize MSP labeling parameters, including the concentration of the MR contrast agent, ultra sound intensity, duty cycle, and exposure time by comparing cell viability and uptake efficacy of Feridex;
- c) Evaluate MSP cell labeling technique.

AIM2: To validate the feasibility of using in vivo MRI to track the migration of MSP-labeled neural stem cells, C17.2, to glioma, we will, specifically:

- a) Inject MSP-labeled neural stem cells into the tumor implanted mice;
- b) In vivo MRI serially track the cell migration to the tumor sites;
- c) Histologically confirm the migration of Feridex-labeled cells.

Results:

We completed all of aims and goals specified in AIM 1&2, to develop a MSP-mediated cell labeling technique and validate this technique in vitro and in vivo.

The clinical significance and future clinical impact of the results of your study:

Monitoring of the delivery, migration and homing of stem cells to their targets is essential for obtaining the success of clinical and basic researches. For the use of non-invasive magnetic resonance imaging (MRI) to track stem cell migration, the most important effort is to develop cell labeling methods, such as simple incubation and electroporation. The simple incubation method will use additional polycationic transfection agents to internalize the contrast agent into the cytoplasm, which requires a long preparation time, which is inconvenient and may cause contamination as well. The electroporation method will use an electrical pulse to shock the cells, which will cause the death of some cells and the loss of the cell viability. In this project, we developed an efficient and alternative instant magnetic cell labeling technique, called magnetosonoporation (MSP), which is based on the fact that ultrasound can induce sonoporation and increase cell membrane permeability to external MR contrast agent.

Our research results, supported by this RSNA seed grant, have showed that this MSP-based cell labeling method is a convenient, efficient cell labeling method, and safer than the currently existing cell labeling methods. The complete study will facilitate using MRI as a non-invasive imaging tool to monitor the migration of stem cells, and thus to explore new insights into the early diagnosis and efficient treatment, such as cell-based gene therapy, either in preclinical or clinical applications.

Impact the RSNA R&E Foundation grant had on your career:

This RSNA seed grant is very important for a junior faculty to establish (collect preliminary data to apply more grants from other agencies such as NIH), and is like a seed for the growing of a productive tree.

Foundation Focus

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1-630-571-7837 Fax

R&EFoundation@rsna.org



8 Foundation Focus

RSNA Research & Education Foundation

VISIONARIES IN PRACTICE PROFILE

Community Has Many Definitions for this Little Rock Practice

IN THE EARLY 1980'S RADIOLOGY ASSOCIATES, P.A., received the first MRI scanner in their state, in fact it was among the first 100 clinical MRI installations in the world. It was a first for the community of Little Rock, and a first for the state of Arkansas. But, it is not just the new equipment, or the quality care the staff provides, it is playing an active role in the community that makes this practice stand out. The physicians and staff at RAPA, have been practicing by these ideas since the practice began more than 80 years ago.

The fully accredited and board-certified physicians and technologists at RAPA are working to provide state-of-the-art equipment and cutting edge technology for quality care in over 20

facilities. In addition to quality care, RAPA also prides itself on being a good corporate citizen. RAPA physicians and staff offer volunteer and financial support to numerous charitable organizations, hospitals, schools, and foundations, including the RSNA R&E Foundation.

As part of the Visionaries in Practice (VIP) program since 2005, RAPA is supporting critical research and development that will impact entire the radiologic community. RAPA's contributions are funding research today that will shape the way they practice tomorrow. "We are at a critical time when all

radiologists must share this same vision and commitment. Practices such as Radiology Associates, P.A., and their individual members are

truly 'visionary' in their support of the future of our profession through the RSNA Research and Education Foundation," said William T. Thorwarth Jr., M.D., co-chair of the VIP Subcommittee. Practices from coast to coast are supporting the R&E

Foundation as part of the VIP program, funding research to improve technology and treatments that one day will impact their patients, and their community.



THANK YOU ALL OF OUR VIP PRACTICES

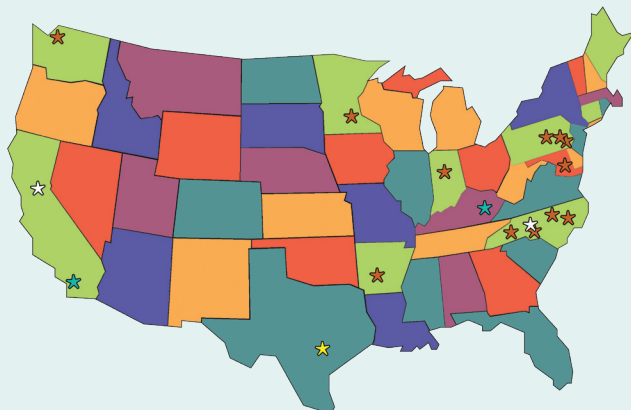
Platinum Level ★

Austin Radiological Association, *Austin, TX*

Silver Level ☆

Catawba Radiological Associates, *Hickory, NC*

Radiological Associates of Sacramento Medical Group, Inc., *Sacramento, CA*



Bronze Level ★

Asheville Radiology Associates, *Asheville, NC*

Eastern Radiologists, *Greenville, NC*

Greensboro Radiology, *Greensboro, NC*

Johns Hopkins Medicine, *Baltimore, MD*

Mecklenburg Radiology Associates, *Charlotte, NC*

Northwest Radiology Network, *Indianapolis, IN*

Radia, *Everett, WA*

Radiology Associates, P.A., *Little Rock, AR*

Southeast Radiology Ltd, *Glen Mills, PA*

St. Paul Radiology, *St. Paul, MN*

University of Pennsylvania Health System, *Philadelphia, PA*

West Reading Radiology Associates, *West Reading, PA*

VIP Level ★

Hazard Radiology Associates, *Hazard, KY*

Newport Harbor Radiology Associates Medical Group, Inc.,
Newport Beach, CA

Would your practice like to be a VIP? Contact us at R&EFoundation@rsna.org