
RETINA RESEARCH FOUNDATION NEWSLETTER

Foresight for Sight

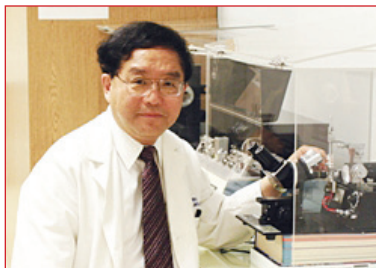
Number 3/2011

Thanksgiving Greetings
and
Best Wishes

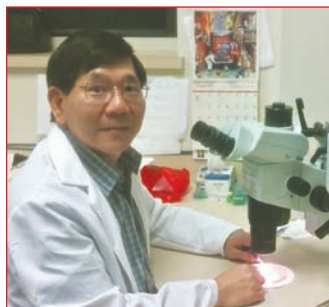
The Board of Directors and Advisory Trustees
Retina Research Foundation



2011 RRF Grant Recipients



Samuel M. Wu, PhD,
Baylor College of Medicine



Lih Kuo, PhD,
Texas A & M Health Science Center



Barbara Klein, MD, MPH,
University of Wisconsin



Nansi Jo Colley, PhD,
University of Wisconsin



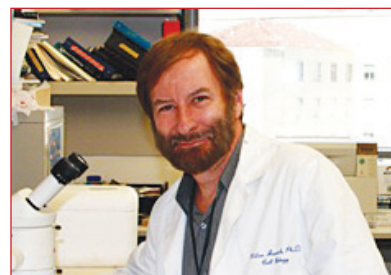
Richard Hurwitz, MD,
Baylor College of Medicine



Leonard Levin, MD, PhD,
University of Wisconsin



Ramon Font, MD,
Baylor College of Medicine



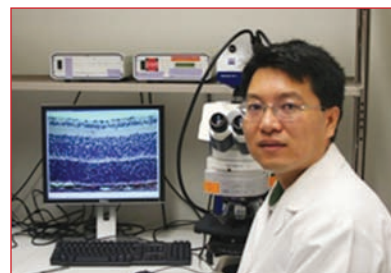
Milan Jamrich, PhD,
Baylor College of Medicine



Graeme Mardon, PhD,
Baylor College of Medicine



Louise Strong, MD,
University of Texas at
MD Anderson Cancer Center



Rui Chen, PhD,
Baylor College of Medicine

We invite you to visit our newly designed website to learn more:
www.retinaresearchfnd.org



Thanksgiving Greetings and Best Wishes

November 2011

Dear Friends,

We are anticipating the closing of our fund drive on December 31, 2011. This marks our 42nd year of funding research to cure retinal disease.

Retina Research Foundation is well prepared to meet the challenges ahead, and we step forward with great hope. Scientists around the globe are zeroing in on the causes and cures of retinal disease. RRF supports a wide variety of research programs advancing this mission including pilot study grants, ongoing research, established awards, international fellowships, and educational programs.

Much progress has been made, and new promising research findings will result in improved patient outcomes in the future. The scientists count on us and on our many friends and supporters to make their work possible.

You can be a part of this exciting mission of hope. If you have not yet given to RRF, we ask that you do so now.

This will be our last Newsletter of 2011, so let us take this opportunity to wish you a very happy Thanksgiving, healthy and joyful holidays, and all the best in the New Year and for many years to come.

With best regards,

Frank K Eggleston, DDS

Frank K. Eggleston, D.D.S.

Chairman of the Board



Novel Pathway Regulating Angiogenesis May Fight Retinal Disease and Cancers

In study recently published online in the journal Nature, scientists identify a new molecular pathway used to suppress blood vessel branching in the developing retina. This finding has potential therapeutic value for fighting diseases of the retina and a variety of cancers.

Richard Lang, PhD, of Cincinnati Children’s Hospital, was the senior investigator on the study. He reports that myeloid cells, blood cells involved in the immune system, use this molecular pathway to guide blood vessel patterning in the retina.

Furthermore, in the same study researchers were able to reverse this pathway to accelerate the growth of branching vessels, which could be important to developing new methods for repairing damaged tissues.

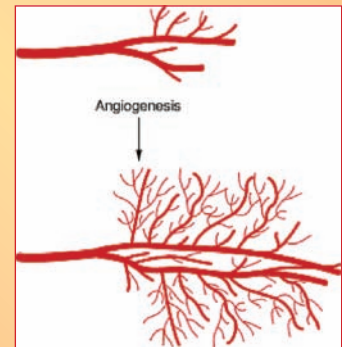
The study demonstrates how retinal myeloid cells regulate blood vessel branching in the still-developing retinas of postnatal mice by using the Wnt protein signaling network. The Wnt pathway is known for its role in embryonic and early development as well as in cancer. Although myeloid cells play an important part in the immune system, these cells are also found in many different tumor types and promote tumor progression.

Dr.Lang said the Wnt-Flt1 response is a new pathway for regulating VEGF-stimulated angiogenesis (blood vessel formation). This presents a number of new research opportunities to test its influence on retinal diseases that are often associated with abnormal blood vessel development and in tumor formation.

<http://www.medicalnewstoday.com>



*Richard Lang, PhD,
Cincinnati Children’s Hospital*



Angiogenesis

Anti-Angiogenic Foods		
Green Tea	Dark Chocolate	Soy Beans
Artichokes	Tomatoes	Strawberries
Blackberries	Raspberries	Blueberries
Cranberries	Garlic	Apple
Pineapple	Cherries	Oranges
Grapefruit	Lemons	Red Grapes
Red Wine	Kale	Broccoli
Cauliflower	Brussels Sprouts	Bok Choy
Ginseng	Licorice	Lavender
Turmeric	Maitake Mushroom	Ginger
Parsley	Pumpkin	Olive Oil
Grape Seed Oil	Nutmeg	compiled by: Christianna Pierce, MA, RD



Next Step in Gene Therapy for LCA

Researchers at the Perelman School of Medicine at the University of Pennsylvania and the Scheie Eye Institute have taken a major step in their pursuit of treatment for an inherited form of blindness known as Leber congenital amaurosis (LCA). Their findings show continued safety and efficacy of gene therapy in a large and age-diverse group of LCA patients.

Samuel Jacobson, MD, PhD, professor of Ophthalmology, was principal investigator of the clinical trial. The new research, which was published online in the Archives of Ophthalmology, documents in detail the progress of 15 patients ages 11 – 30 years.

All patients received an injection of genes into the retina of one eye for the type of LCA caused by a mutation in the RPE65 gene. This gene normally makes a critical protein in the visual cycle. Without this RPE65 protein, light-sensitive photoreceptor cells are starved of a retina-specific form of vitamin A and cannot function, blocking vision. The gene therapy entails taking a normal copy of the mutated gene and directly introducing it into the retinas of affected individuals.

The study tracked the continued progress of all patients treated and found that visual function improved in everyone to different degrees. The improvements were predictably localized to treated areas. “Counterintuitive was the finding that some of the greater success stories of this treatment were in the ‘older’ patients,” added Dr. Jacobson.

In addition to the safety and efficacy findings, the new research also proposes strategies for next steps to advance this new treatment to clinical reality for this and other forms of LCA.

<http://www.healthcanal.com/>

Two Announcements

RRF Website Redesign

RRF is pleased to announce a new design for our website. We hope you will enjoy visiting the site to learn more about the Foundation and the extraordinary variety of research programs which we support. Come visit us online at: www.retinaresearchfnd.org

RRF Anniversary

RRF celebrates 42 years of excellent research
Founded October 1, 1969



1.

***“Truth exists, only
falsehood has to be
invented.”***

***– Georges Braque
(1882-1963)***

1. LCA causes blindness in
young children

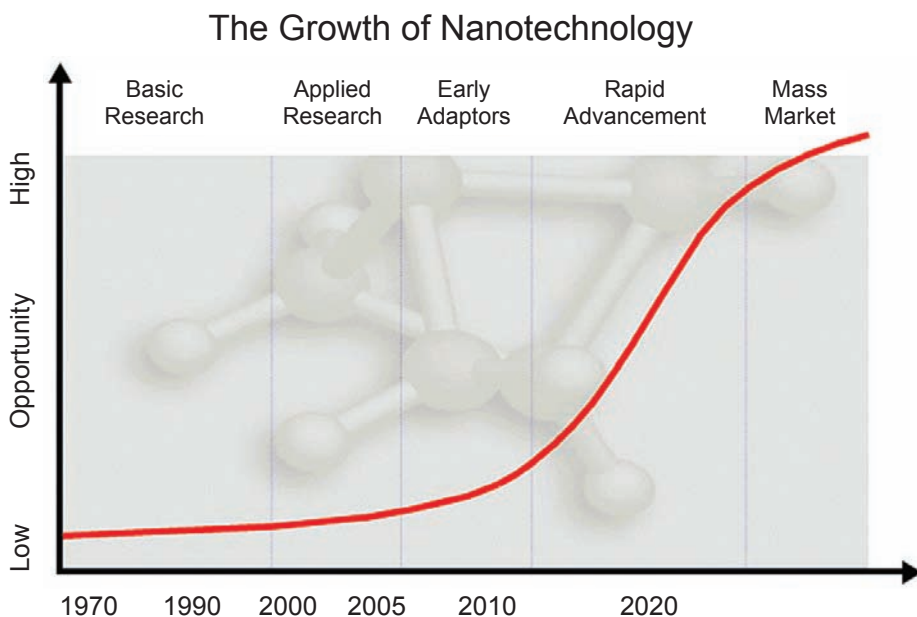
Nanotechnology and Blood Platelets

The laboratory of Erin Lavik, ScD, at Case Western Reserve University, has received recognition for using nanotechnology -- an emerging scientific field that manipulates material on very small scales -- to build synthetic platelets of biodegradable polymers which are designed to link with the body's natural platelets to slow or stop bleeding faster after injury.

“We were looking for ways to control internal bleeding in our experiments, and we were stunned at how limited the options are, so we built our own system,” said Dr. Lavik. Synthetic blood platelets made with nanoparticles may help slow internal bleeding, saving lives on the battlefield and following other traumatic injuries such as those sustained in auto accidents.

Dr. Lavik, associate professor of Biomedical Engineering, has focused on developing new approaches to understand and treat hemorrhaging, spinal cord injury, glaucoma, and diseases of the retina and optic nerve.

<http://scienceblogs.com/>



2.

“Scientific activity is the only one which is obviously and undoubtedly cumulative and progressive.”

*– George Sarton
(1884-1956)*

2. *Nanotechnology could revolutionize surgery*

Meet the Board

Shara Fryer

RRF Board Service:

2010 to present

Career Highlights:

A thirty-year veteran journalist and television news anchor, Shara Fryer was the preeminent and longest-running “prime time” anchorwoman in Houston television history. During her 27 years at Disney-owned ABC 13, the newscasts she anchored were number one in their time slots.

Shara earned many awards and journalist credentials for stepping outside the anchor desk, from Jerusalem to Rome to London and across the U.S., covering top stories of the day, political campaigns, special events, and getting the hard-to-get interviews for her popular newsmaker profiles.

Her “Up Close and Personal” segments and Emmy Award-winning “IN FOCUS” documentaries included exclusive interviews with Presidents, Foreign Heads of State, well-known Texans, and celebrities of national and international renown.

Current Involvement in World and Public Affairs:

- Fellow of the American Leadership Forum
- Alumni of the FBI Citizens’ Academy
- Executive Committee and Board member - World Affairs Council of Houston
- Board member - Japan America Society of Houston
- Delegate to The Vatican, Tokyo, Berlin, and Taipei
- Advisory Board of Baron Energy

Shara is also known by the Chinese name of Sha Na, as a partner in PacRim Consulting, linking American and Chinese business interests in the field of renewable energy.

She is well-recognized throughout the Houston area for her wide-ranging commitment to community and charity events, such as the Escape Center for Abused Children, the United Way, and the Houston Livestock Show and Rodeo.

A surviving cancer patient, Shara devotes much of her time to various cancer outreach programs and established the Shara Fryer Cancer Research Fund in the Department of Surgical Oncology at M.D. Anderson Cancer Center.

Personal:

Shara is married to native Houstonian Barry Silverman and they enjoy spending time with family and friends and their loving golden retriever Remy.



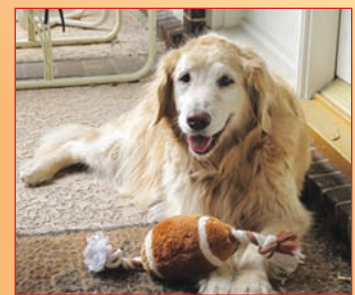
3.



4.



5.



6.

3. *Shara Fryer*
4. *Shara Fryer in China*
5. *Shara Fryer and Husband Barry Silverman*
6. *Remy, Shara's dog*

Donations now accepted by credit card.

Remove name from mailing list.
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clip and return entire address label in an envelope.
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Retina Research Foundation is dedicated to the eradication of retina disease through programs in research and education.

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Managing Editor: Margaret Faresse

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NEWSLETTER
RETINA RESEARCH FOUNDATION

FREE MATTER
FOR THE
BLIND OR
HANDICAPPED



**RRF Fall Luncheon
October 12, 2011**

Retina Research Foundation would like to extend a hearty ‘thank you’ to three scientists, all from University of Wisconsin/UW Eye Research Institute, who presented a very interesting and informative program titled *Tomorrow’s Treatments from Today’s Research*. Thank you also to RRF Board Member **Shara Fryer**, who served superbly as moderator of the panel.

Nansi Jo Colley, PhD
RRF Grant Recipient
*Retinal Degeneration
Through the Eye of the Fly*

Curtis R. Brandt, PhD
RRF Helmerich Chair
*Gene Therapy for Retinal
Degenerative Disease*

David Gamm, MD, PhD
RRF Murfee Chair
*The Role of Stem Cells in the Fight
Against Retinal Degenerative Diseases*

SPECIAL REMEMBERANCES

IN MEMORY OF

- Don Adcock**
Mr. and Mrs. William H. Wahlberg
- Miss Madelen Elizabeth Gill**
Mr. and Mrs. Radford P. Laney
- Saunders Gregg**
The Elkins Foundation
- James Knight**
Miriam K. Brennan
- Tony Mierzwa**
W. E. Harreld, Jr.
Harreld Chevrolet

- Charles P. Moreton**
Mr. and Mrs. Bolivar C. Andrews
- Mrs. Mary Ann Court Scarmardo**
Mr. and Mrs. Radford P. Laney
- Mr. Sammie M. Shaw**
Mr. and Mrs. Radford P. Laney

ESTATE GIFTS

- Mary K. Parr**
- Howard Sides**

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Call the office for more information. 713-797-1925



Additional memorials received will appear in the next issue.