2016 RRF Award Recipients

Steve Charles, MD
**RRF Award of Merit**
*Presented at the Retina Society Annual Meeting*

Donald J. D’Amico, MD
**RRF Pyron Award**
*Presented at the American Society of Retina Specialists Annual Meeting*

King-Wai Yau, PhD
**RRF Kayser International Award**
*Presented at the International Society for Eye Research (ISER) Biennial Meeting*

Thomas W. Gardner, MD
**RRF Gonin Lecturer**
*Presented at the Club Jules Gonin Biennial Meeting*

Harry W. Flynn, Jr., MD
**Charles L. Schepens, MD/AAO Award**
*Presented by RRF and SIS at the American Academy of Ophthalmology Annual Meeting*

Christine A. Curcio, PhD
**RRF Macula Research Project**
*Administered by the Macula Society*

For a complete list of RRF Award recipients, please view our website: retinaresearchfnd.org
December 2016

Dear Friends,

RRF is now beginning the forty-eighth year of working in collaboration with the finest organizations in ophthalmology to support programs of vision research and education. RRF programs follow many paths, but the target is the same for all: making progress in the fight against blindness.

In 1969 under the leadership of Dr. Alice McPherson, RRF was established by a group of dedicated lay people. Dr. McPherson saw the need for a foundation dedicated to eradicating retinal blindness, focused on basic science research, entirely funded by private donations, and managed primarily by concerned leaders of the community.

That model continues to this day, and your ongoing interest in and support of our mission is key to our success. If you have not yet given to RRF, we ask that you consider doing so now. We are grateful for your ongoing interest in working with us to achieve our goal of preserving vision worldwide.

As another year draws to a close, let us take this opportunity to wish you a very happy, healthy and joyful holiday season, and all the best in the New Year and for many years to come.

With best regards,

Frank K. Eggleston, DDS
Chairman of the Board

Ben F. Orman, MD
Fund Drive Chair
In 1966, Dr. Alice McPherson began training other ophthalmologists in the subspecialty of retina as part of her clinical practice. Vitreoretinal Disease and Surgery Fellows trained by Dr. McPherson now number over 80, and are currently in practice or have practiced in 22 states: Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Michigan, Minnesota, Missouri, North Carolina, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, and Virginia; and three other countries: Australia, Mexico, and Puerto Rico.

A reunion of many of the Vitreoretinal Fellows trained by Dr. McPherson was held during this year’s American Academy of Ophthalmology Annual Meeting in Chicago. RRF congratulates Dr. McPherson on 50 years of training retina specialists!
Duke Researchers Create Handheld Imaging Device

Researchers at Duke University have recently designed a novel portable device capable of capturing high-definition images of the retinas of children. Researchers from the Pratt School of Engineering and the Duke Eye Center, led by Joseph Izatt, PhD, created a small handheld imaging device that does not require stillness and intense focus on the part of children.

Francesco LaRocca, PhD, principal author of the study, explained, “Children have difficulty fixating, so you can’t use traditional tabletop systems. [A device] has to be small and lightweight for the clinician to get good images from the subject.” Dr. LaRocca added that providing crisp images down to the photoreceptor level will allow doctors to identify a disease in its early stages.

Prior studies, as well as recently developed technology, led to the development of modifications that allowed the probe to be reduced to the size of a quarter. This design utilizes a single light source instead of two, a compact microelectromechanical systems scanner, and a converging beam design. “[The current version] was used mostly for getting our feet wet and having the clinicians use it and give us feedback so that we can generate the next device,” Dr. LaRocca said.

At this time, this device is in the early testing stages. Researchers look forward to refining the probe and continuing to make improvements. This high-definition imaging will be able to better identify the onset of certain vitreoretinal diseases, advance the study of juvenile retinal development, and may also lead to development of preventive measures in treating retinal diseases.

www.dukechronicle.com

“To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science.”

Albert Einstein
A new study presented at the 120th annual meeting of the American Academy of Ophthalmology (AAO 2016) has identified that diet and caffeine may play a significant role in protecting against age-related macular degeneration (AMD). A diet rich in fruits, vegetables, whole grains, legumes, nuts, healthy fats and fish has been demonstrated in prior studies to provide general health benefits, and this study shows that these benefits extend to preserving vision.

Researchers at the University of Coimbra in Portugal, led by Rufino Silva, MD, PhD, assessed the diets of 883 people in Portugal aged 55 or older. About half of the study group had early stage AMD (without vision loss) and half did not have AMD. Of those in the study group who closely followed the Mediterranean diet, only 39 percent had AMD – compared to those who did not follow the diet (50 percent had AMD). This represents a 35 percent lower risk in those who adhered to the Mediterranean diet. Fruits were especially beneficial. Overall, people who ate about five ounces of fruit or more each day were almost 15 percent less likely to have AMD.

Researchers also found that higher consumption of antioxidants such as caffeine, beta-carotene and vitamins C and E was protective against AMD. While caffeine is not considered part of the Mediterranean diet, per se, consumption of coffee and tea is common in Mediterranean countries. Caffeine is known to be protective against other conditions such as Alzheimer’s disease.

“This research adds to the evidence that a healthy, fruit-rich diet is important to health, including helping to protect against macular degeneration,” said Dr. Silva. “We also think this work is a stepping stone towards effective preventive medicine in AMD.”

www.aaop.org
Orientation and Mobility Information

Orientation and Mobility (O&M) specialists provide services to people of all ages with low vision. These vision rehabilitation professionals are professionally certified and trained to teach people who are vision impaired the skills and tools to travel safely and live independently. Whether it’s being able to move safely from room to room in the home or to safely walk to the local store, learning these practical techniques greatly improves the quality of life for those with low vision.

The Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP) teaches these specialists to help their clients learn new ways of:

- Developing all of their senses to help orient themselves in space and plan where they want to go;
- Moving safely through both indoor and outdoor environments;
- Using a cane and other devices to walk safely and efficiently;
- Seeking or declining assistance;
- Using strategies such as following directions to find destinations;
- Developing techniques for crossing streets such as analyzing and identifying intersections and traffic patterns;
- Developing problem-solving skills to determine what to do if they are disoriented, lost or need to change their route;
- Using public transportation and transit systems.

www.visionaware.org
Two New RRF Appointments at McPherson Eye Research Institute

Kathryn and Latimer Murfee Chair  
T. Michael Nork, MD  
Professor, Ophthalmology and Visual Sciences  
McPherson ERI, University of Wisconsin, Madison, WI  
Dr. Nork’s research focuses on the mechanisms by which various ocular diseases affect the outer retina (especially the rods and cones) and how injury to the outer retina might, in turn, affect disease pathogenesis.

MD Matthews Professor  
Bikash Pattnaik, PhD  
Assistant Professor, Pediatrics, Ophthalmology & Visual Sciences  
McPherson ERI, University of Wisconsin, Madison, WI  
Dr. Pattnaik’s research focuses on understanding mechanisms of retinal diseases due to ion channelopathy, and his future focus is on the basic understanding of the cellular basis of potassium and chloride channel function in the retina as tools to diagnose disease.

Special Remembrances

IN MEMORY OF

Jesse Cosby  
Jimmie Jordan  
Dr. Herbert A. Lesser  
Lorwen Merriman  
Carroll Todd  
Waneta Todd  
Rosella Felt  
Charla Zutavern  
David Sherman  
Marc Schwartz  
Wilson M. Wheat  
Dr. and Mrs. Robert Wheat

IN HONOR OF

My father, Larry L. Kalina  
Charla Zutavern

RRF accepts credit cards for donations securely online at www.retinaresearchfnd.org
Call the office for more information: 713-797-1925

Additional memorials received will appear in the next issue.