

RETINA RESEARCH FOUNDATION NEWSLETTER

Foresight for Sight

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RRF Remembers Its Founder, Alice Ruth McPherson, MD

Alice Ruth McPherson, MD, passed away peacefully on the evening of January 16, 2023. Born on June 30, 1926 in Saskatchewan, Canada, the first daughter of Gordon and Viola McPherson, Alice McPherson spent much of her childhood in Minnesota and Wisconsin. Knowing she wanted to become a physician, she earned her undergraduate studies degree in 1948, medical degree in 1951, and completed her ophthalmologic residency in 1955, all from the University of Wisconsin.

Her focus in retina was motivated by low cure rates of retinal detachment in the early 1950s. In 1959, she completed a fellowship in retinal diseases and retinal surgery at the Massachusetts Ear and Eye Infirmary at Harvard University Medical School under the supervision of Charles L. Schepens, MD, considered to be the father of modern retinal surgery.



1955: Alice R. McPherson, MD, graduates as the first female resident from the Department of Ophthalmology and Visual Sciences, University of Wisconsin School of Medicine and Public Health.



She was one of the first fellows of Dr. Schepens and the first-ever female vitreoretinal fellow. Her admiration for Dr. Schepens, who became a mentor and a friend, informed many of her professional and philanthropic actions throughout the remainder of her life.

In 1958, Dr. McPherson married Anthony "Tony" Mierzwa and, when her training with Dr. Schepens ended, they made the decision to move to Houston, Texas. Dr. McPherson said, "The three best decisions I ever made were ophthalmology, Tony and Texas."

Dr. McPherson's retina expertise led her to become one of the world's leading

vitreoretinal specialists and retinal surgeons. Her scientific contributions included ground-breaking procedures. She vigorously advocated for the use of numerous retinal surgical procedures from their earliest implementation, including scleral buckling procedures, cryotherapy, xenon arc, laser photocoagulation, and vitrectomy, now accepted as basic elements of retinal disease treatment. Dr. McPherson pioneered the treatment of retinopathy of prematurity, and she was an early proponent of photocoagulation in the treatment of diabetic retinopathy. This was a highly debated approach, later proven correct by the large, randomized prospective National Eye Institute Diabetic Retinopathy Study. She trained over 100 vitreoretinal fellows, and her retina practice spanned more than 70 years, during which time she always did the best she could for her patients. Dr. Alice McPherson was devoted to her patients, and they to her.

With the establishment of her private practice and her professorship appointment at the Baylor College of Medicine in Houston, Dr. McPherson founded the first retina service in Texas and, more broadly, in the south. Simultaneously, she became the first full-time female retina specialist in the United States and the world. She remained committed to Baylor College of Medicine to the end of her life, and she ensured continuous funding of vision scientists affiliated with the College's Cullen Eye Institute for many decades.

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1960: Alice R. McPherson and Anthony "Tony" Mierzwa.



Dr. McPherson pioneered the treatment of retinopathy of prematurity.



Dr. McPherson was a founding charter member and later the first female president of the Retina Society, the founding president of the University of Wisconsin Ophthalmology Alumni Association, and the first female chair of the Pan-American Association of Ophthalmology Foundation. Dr. McPherson was the first American woman to be accepted into the prestigious European Club Jules Gonin, and she made ophthalmic history as the first woman selected to receive the Jules Gonin Medal, the highest achievement in ophthalmology. Most recently, Dr. McPherson was the inaugural recipient of the Retina Hall of Fame Award, bestowed in recognition of her inventive contributions in the retina field and her dedication to retina research. Never giving much thought to being the first in so many aspects of her life, Dr. McPherson was always self-effacing. She said, "It's all about working together, sharing ideas, educating and inspiring others—men and women alike—to join our mission to save and prolong eyesight."

In 1969, Dr. McPherson founded the Retina Research Foundation (RRF) in Houston, Texas, dedicated to the eradication of retinal disease by funding basic retinal research. She reflected, "As I gained experience in academic ophthalmology and clinical research, I became increasingly convinced that the most important contribution I could make would be to establish an organization that could help develop and sustain innovative retinal research. RRF moved from a dream, to a concept, to a reality." This endeavor gave her much satisfaction, and under her leadership as President and Scientific Adviser, RRF funded well over 1,000 basic research grants and helped to launch the careers of many major vision researchers in the United States and abroad. RRF established major awards in collaboration with the leading ophthalmologic societies, chairs and professorships at universities and research institutions, travel grants for young scientists, and international fellowships of advanced subspecialty training. From its founding, the Foundation has awarded over \$40 million to retina research.



Dr. McPherson's vision and support were essential to the formation of the University of Wisconsin Eye Research Institute, renamed the McPherson Eye Research Institute (MERI) in her honor in 2012. Always keenly interested in the scientific pursuits of the Institute, which leads collaborative efforts amongst researchers in vision-related fields across the Madison campus, Dr. McPherson remained actively engaged with its leadership and scientists. She highly valued her relationships with the Institute's successive Emmett A. Humble Distinguished Directors, Dr. Daniel M. Albert and since 2012, Dr. David M. Gamm.

It was Dr. McPherson's unique combination, an elegant, caring, and brilliant woman of many firsts and great accomplishments, that made her a legend, a visionary whose imprint will be remembered through the advancements achieved in retina research, in the education and encouragement of her ophthalmology colleagues, and in the compassionate care of the many, many patients to which she dedicated her life. Ever humble, Dr. McPherson desired no recognition of her passing, however, her life-long actions ensure that her commitment to retina research will continue through the organizations she championed.



Retina Research Foundation is dedicated to the eradication of retina disease through programs in research and education.
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2011: Dr. Frank Eggleston, RRF Chairman Emeritus, Harry E. Bovay, RRF Board Member and Benefactor, Dr. McPherson, RRF Annual Meeting.



2012: On the occasion of the naming of the McPherson Eye Research Institute (MERI), Dr. McPherson and Dr. Dan Albert, the Institute's first Director.



Dr. McPherson and Dr. Charles L. Schepens.



2014: Gonin Medal Lecture
Dr. McPherson, Dr. David Gamm, Distinguished Director, MERI, Dr. Petros Carvounis, RRF Board Member and McPherson fellow, (right) Lausanne, Switzerland.



2014: Receiving the Gonin Medal from Dr. Bruce Spivey, WOC, Tokyo, Japan.



Dr. and Mrs. Spivey sharing a laugh with Dr. McPherson, Gonin Medal Celebration Dinner.



2019: Receiving the Inaugural Retina Hall of Fame Award
Dr. Terek Hassan, Dr. McPherson, Dr. Jerald Bovino, Dr. John Thompson and Dr. Mark Humayun.

"I am deeply honored to accept this inaugural award for the Retina Hall of Fame for myself, and as a representative of all other ophthalmologists and scientists --- All working to prevent blindness. This is like receiving the Crown Jewel of Ophthalmology. I accept with deep gratitude and a sincere thank you."

Alice McPherson



2019: RRF 50th Year Gala.

Reflections

RRF has heard from individuals the world over, expressing their condolences upon learning of the death of Dr. Alice R. McPherson, correspondence that includes many stories of how profoundly they were impacted by their association with Dr. McPherson. She was admired and beloved by many, many individuals fortunate to come to know her, either as colleagues, patients, or friends who were from her community. In turn, she was sustained by these individuals' intellect, their passionate commitment to saving sight or their gratitude for having their sight preserved. Dr. McPherson often said she was part of a special group of people dedicated to patient care and to research to cure all forms of retinal disease so that they could do the very best for patients. Her far-flung influence originated from a strong core, home base in Houston, RRF's home also.

Thoughts From Arthur W. Willis, Jr., MD, RRF Board Member, President 2023



2022: Dr. Arthur Willis and Dr. McPherson, RRF Annual Meeting.

I first met Alice McPherson in 1972 when I came (to Houston) to do a fellowship with her. She was already famous at that time for her work on treatment of malignant melanomas of the eye and surgical treatment of retinal detachment. In 1973, I joined her in practice. In the mid-'70s, when vitrectomy surgery first began, she arranged the first international meeting on the topic, and then published a book. In the early 1980s she performed the first surgery for the treatment of retinopathy of prematurity, and then again wrote the book on it. Alice was a member of multiple ophthalmic organizations both national and international. She traveled all over the world both professionally, and as a tourist. Alice was a clinician, teacher, surgeon, traveler and collector.

In 1969, a patient of hers gave her a check for \$50,000 and said, "Do something good with this." Alice took this money and turned it into a \$70 million foundation that has given away over \$40 million for retinal research during its lifetime!! Today, the organization she created, is known as the Retina Research Foundation.

Alice lived every minute of every day of her life. She practiced medicine until the age of 95, and went to a satellite clinic an hour and half drive away twice a month. Many people who know Alice described her as a workaholic, but I would say that she was a LIFE-AHOLIC. She will be dearly missed by all of those whose lives she touched.



Dr. McPherson with many of her fellows, including to her left in photo, Dr. Willis.

Thoughts From Samuel M. Wu, PhD, Baylor College of Medicine, RRF Researcher for the Past 41 Years

With a profound sense of loss following the passing of Dr. Alice McPherson, I write to remember my unforgettable experiences with her throughout the last four decades. It was my great fortune to meet with Dr. McPherson in early 1982 when I joined Baylor College of Medicine as an assistant professor. Since then, for the past 41 years, Dr. McPherson and the Retina Research Foundation have continuously provided research funds for my lab, making me the longest, continuously funded recipient of

research support in RRF's history of over 50 years. The cumulative amount of this support is over \$1.4 million. This belief in my work and the financial support has helped make my group's laboratory one of the most well-equipped retinal physiology labs in the world, and has allowed us to develop the multi-electrode-array, two-photon calcium imaging and the state-of-the-art multiple patch electrode recording systems for retinal research. From the beginning, Dr. McPherson inspired the direction of my research. Her suggestions, comments and encouragement helped to transform my lab from a basic retinal electrophysiological lab working on cold-blooded animals to what it is today -- a comprehensive physiological/structural/genetic research laboratory studying mammalian retinal circuitry and disease models, such as glaucoma and congenital stationary night blindness. We owe a great deal of our research success and accomplishments to Dr. McPherson and the Retina Research Foundation.



2015: Visiting Baylor College of Medicine Retina Research Labs from left, Bettie Lee, Dr. Carvounis, Dr. Bernard "Bernie" Hicks, Dr. McPherson, Dr. Sam Wu, Dr. Eggleston.

On a personal note, Dr. McPherson was an extremely warm and caring person. She invited me on many occasions for lunch and dinner. She always greeted and spoke with my wife, and I was most moved when she was the first person to attend my wife's funeral visitation and offered us the most comforting words. Dr. McPherson was not only a mentor, an inspiration and a supporter of my research, but also a dear friend. I shall miss her dearly.

1989: Dr. McPherson and Dr. Wu, Sam and Bertha Brochstein Award for Outstanding Achievement in Retina Research, RRF 20th Anniversary Luncheon.





Thoughts From Nancy Steffen, Nurse, Licensed Vocational II McPherson Eye Associates and Baylor College of Medicine

My very first “real” job was with McPherson Associates in the medical records department. I was fresh out of high school, not sure what I wanted to do. I worked for less than one year and went off to nursing school. Long story short, I ended up right back with McPherson Associates. It was the best decision I ever made.

I worked as Dr. McPherson’s lead tech for over 40 years. I was able to experience so much. She, by far, will be the most incredible person I will ever know.

To this day, I still receive calls from individuals begging to see her, to make an appointment with her. I will be forever grateful to have collaborated with her as her technician. She will forever be in my heart, and I cherish the memories she has given me. I will miss her dearly; she lived an impressive life and had an incredible medical career.



2022: RRF Executive Committee, from left, Patricia Boyd, Ron Giroto, John Dawson, Chairman, Dr. Willis, Dr. McPherson, Rich Walton and Bettie Lee.



2022: Dr. McPherson’s Baylor staff and RRF Administrators, from left, Catherine Romero, Joseph Morales, Adrianna Coronado, Dr. McPherson, Nancy Steffen, Virginia Gissel Schwanauer (RRF) and Margaret Farese (RRF), RRF Luncheon

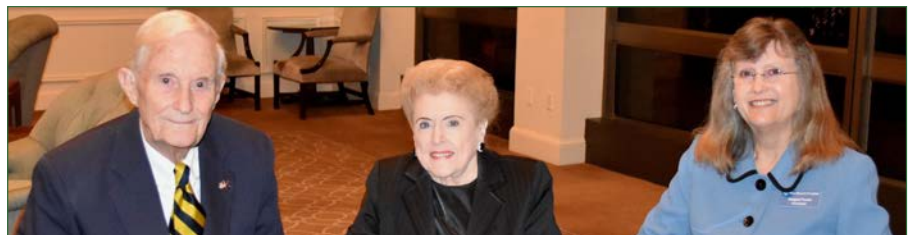
Thoughts From Margaret Smith Farese RRF Administrator, 2011-2020

Like a fine diamond with many facets, Dr. McPherson’s light was reflected in the lives of those around her. In my case, I had the honor of working for her for over nine years, observing first-hand what an amazing, fun, creative, decisive, organized, open-minded, talented person she was inside the office or out. Highlights of my time with her were many and included seeing her deliver the Gonin Lecture in Lausanne, Switzerland and then being presented with the Gonin Medal in Tokyo.

Dr. McPherson was a dreamer with an analytical mind. The word “impossible” was not in her vocabulary, and she fearlessly tackled any challenges in her way. She inspired hope throughout her life but recognized the need to weed out false hope and easy answers. While intensely focused on preserving vision for her own patients, she managed to create an environment of support for research into the unsolved mysteries of vision for the benefit of future unknown patients around the globe. She was one of the rare individuals throughout history who truly could see the forest *and* the trees.



2022: Dr. McPherson and W. Richard Walton, RRF Board Member, RRF Luncheon.



2018: F. Ames Smith, RRF Board member, Dr. McPherson, Margaret S. Farese, RRF Administrator, RRF Annual Meeting.

RRF Pilot Study Research Program Expands in 2023

With the start of the 2023 grant cycle, the RRF basic research pilot program expanded to fund the work of 25 vision researchers at top-tier U.S. universities and institutes. Joining the existing multi-year grant recipients, six additional researchers received grant funding this year:



Kinga Bujakowska, PhD

Department of Ophthalmology
Harvard Medical School, Massachusetts Eye and Ear Infirmary
Modeling EYS Associated Retinitis Pigmentosa in Human iPSC Derived Retinal Organoids



Jeffrey M. Gross, PhD

Department of Molecular Biosciences
University of Texas at Austin
A Proteomic Analysis of Mitochondria-ER Contact Sites in Muller glia and the Potential Role of Metabolomic Changes in Regulating Intrinsic Retinal Regeneration



Alex J. Smith, PhD

Department of Ophthalmology
University of California, San Francisco
Measuring Fluid Clearance Pathways in Retinal Edema



Christine M. Sorenson, PhD

Department of Pediatrics
University of Wisconsin-Madison, McPherson Eye Research Institute
Treatment and Prevention of PVR and Retinal Detachment



Eric Weh, PhD

Department of Ophthalmology and Visual Sciences
University of Michigan
Developing A Novel Treatment to Prevent Vision Loss due to Recurrent Retinal Toxoplasmosis



David M. Wu, MD, PhD

Department of Ophthalmology
Harvard Medical School, Schepens Eye Research Institute
Metabolic Modulation of Complement in the Retinal Pigment Epithelium

Please visit
retinaresearchfnd.org
to learn more about
the novel research
conducted by RRF pilot
study researchers.

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1977 Butler Boulevard, Houston, Texas 77030
(713) 797-1925 • rrf@retinaresearchfnd.org

Editor in Chief: Arthur W. Willis, Jr., MD
Managing Editor: Virginia Gissel Schwanauer

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Margaret and Frank Farese
Lewis and Amy Gissel
Nancy F. Japhet
Debbie and Frank Jones
Allen Kurtz
Bettie and Ronald Lee
Linda Lesser
Mr. and Mrs. Hunter Martin
Suzanne Miller
Mr. and Mrs. Floyd Ames Smith
Gary Stenerson
Dr. Douglas Waldman
Mr. and Mrs. Larry Wuebbles

Eura "Jean" Beets

Randy and Robin Beets
First Baptist Church of Clute
Charlotte Morgan

Hurbert Elwer and in honor of the Elwer Family

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Keith Humble

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Mrs. Jesse S. Treviño

Ann Wilson

Ann and Richard Goldfarb
Kathleen Corrigan
R.J. Feely, III
Lawrence H. Hatch
Ben Willis

IN HONOR OF

My father, Henry Cho
Franklin Cho

Colin and Kacey Hirth
Susan Hirth

Mary Farrish Johnston
William S. &
Lora Jean Kilroy
Foundation

ESTATE BEQUESTS

Sylvia K. Brown Estate

YOUR GIFT TO RRF IS ESSENTIAL TO WHAT WE DO. The success of our efforts depends on donations from our community. RRF accepts secure donations at retinaresearchfnd.org, or you can mail your donation to the RRF office. For more information call: 713-797-1925. Thank you for helping us stimulate innovative research to discover cures for the retinal diseases that damage and destroy vision!

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