Introducing Joe G. Hollyfield, the 2009 Recipient of the Proctor Medal

It is my distinct pleasure and honor to introduce Joe G. Hollyfield, MD, PhD, who will deliver the Proctor Lecture this afternoon. I met Joe at ARVO—40 ARVOs ago. We both attended our first ARVO meeting in Sarasota in 1970. At that time, the meeting was held entirely in hotels on Lido Key. The afternoon beach time was religiously protected then, with nothing scheduled between noon and 4 o’clock in the afternoon. Since this was my first ARVO, I knew very few people and spent my first afternoon at the pool bar at the Sheraton Sandcastle. It was Joe’s first ARVO also, and he found a barstool near me. We began talking that afternoon and haven’t stopped since. A strong friendship developed that has endured for 40 years.

Let me tell you about Joe Hollyfield. He was born in Arkansas, in the southwestern corner, and grew up in a very small town named Smackover. Examination of an Arkansas map of this region reveals a number of towns with strange names. Because the early explorers and cartographers of this region were French, everything was given a French name. When Napoleon sold the Louisiana Territory to the United States in 1803, many of the names were Anglicized. The area originally named Sumac Couvert became Smackover. Aux Arcs became the Ozark Mountains and Eau d’sucre became Toad Suck!

Joe was the only son of Nell and Dee Hollyfield. His mother was an educated woman who had great hopes for Joe and tried to introduce him to the finer things of life in a rural community. She promoted him on the national level and even achieved a modicum of success, as evidenced by his honorable mention in a childhood photography contest. However, despite his mother’s best attempts, Joe, like most southern boys of that time, had only two interests: guns and girls. We see him here (in the first slide) as a successful mistletoe hunter, double-barreled shotgun in hand. Here he is with his date to one of the high school dances. Diane Alderson and her husband Edwin have been great friends of Joe and his wife Mary Rayborn. Diane and Edwin are here to celebrate this occasion with Joe.

After graduation from high school in 1957, Joe attended Hendricks College, a small, excellent liberal arts college in Conway, Arkansas. Here is a slide showing him hard at work at his desk preparing for some class. This is the picture he sent home to his mother. The next slide is a more likely representation of what he did most of the time in college. He was found to have a keen eyesight and ability to read other people’s cards.

Despite his active social life as an undergraduate, Joe also did very well academically. After receiving his Masters Degree at LSU, he went to the University of Texas in Austin, where he worked in the laboratory of Antoine Jacobson, a developmental biologist of considerable renown. After receiving his PhD in 1967, he applied for and received a Fight for Sight postdoctoral fellowship to study in Holland in the laboratory of the late Peter Nieuwkoop, also a famous developmental biologist. While he was still in Holland, he received a letter from the late George Smelser, a well-known ocular anatomist. Professor Smelser had reviewed Joe’s Fight for Sight postdoctoral fellowship application and wrote him a letter in January of 1968 inviting him to join the faculty at Columbia. Joe accepted and was at Columbia from 1970 to 1977. It was there that he met Mary Rayborn and her poodles. Joe and Mary joined the Cullen Eye Institute in 1977, and we were colleagues there for 18 years.

Over the course of his career Joe has received numerous awards and has served with distinction as an officer of several organizations devoted to vision research. In 1991, he received the Distinguished Alumnus Award from Hendricks College. He is shown here with his wife Mary, his mother Nell, and a number of vision researchers including Steve Fliesler, John Penn, Joe Besharse, Janet Denlinger, Andre Balacz, and me. Joe served as president of the International Society of Eye Research from 1988 to 1992 and was an ARVO trustee from 1989 to 1993 (and served as president in 1993).

Joe and Mary moved to the Cleveland Clinic in 1995, where Joe currently serves as the Llura and Gordon Gund Professor of Ophthalmology Research and Director of Research at the Cole Eye Institute.

Joe Hollyfield has made a series of seminal observations that established him early on in his career as one of the leaders of vision research in the world. For the past 15 years, he has devoted his efforts to studies on age-related macular degeneration. He and his colleagues were among the first to define the chemical composition of drusen. They further demonstrated that the products of oxidation of the long-chain polyunsaturated fatty acids found in the retina decorate proteins that are found to a much greater extent in the retinas of patients with AMD than in eyes of age-matched unaffected persons. They also showed that antibodies against these proteins can be found in higher titers in the blood of persons with AMD than in control subjects and perhaps can serve as biomarkers for AMD. More recently, he has developed an animal model of AMD, which he will discuss today. This body of work has propelled Joe and his colleagues to the cutting edge of research on age-related macular degeneration. For this contribution, and contributions over a lifetime of vision research, Joe Hollyfield was awarded the Proctor Medal. Alongside Joe on this marvelous journey has been the love of his life and his major source of support, his wife Mary. Together, they make a wonderful team. Most of the beautiful micrographs you will see today were prepared by Mary.

Ladies and gentlemen, it is my great privilege and honor to present to you my colleague and my dear friend, Joe Hollyfield, who will deliver this year’s Proctor Lecture.

Robert E. Anderson