Diversity in Retina Leadership

Where are the Women Now?



An interview with Julia A. Haller, MD.
By Adrienne W. Scott, MD, and Steve Sanislo, MD

Julia A. Haller, MD, and her team have been tireless in their pursuit of diversity, equity, and inclusion (DEI) in retina, particularly within research, authorship, and editorial positions. Here, Adrienne W. Scott, MD, and Steve Sanislo, MD, discuss with Dr. Haller the state of affairs in retina and just how far we have come—and how much is left to do.

- Rebecca Hepp, Editor-in-Chief

Adrienne W. Scott, MD: Your 2015 editorial in *JAMA Ophthalmology*, Cherchez la Femme, was the first of its kind in a high-impact, peer-reviewed journal.[1] When I read it, I was heartened, as a woman starting out in the field of vitreoretinal surgery, because I thought that if you were identifying a problem, bringing it to the attention of our field, and offering solutions, it's a very important issue.

DR. SCOTT: AS WE LOOK BACK ALMOST 10 YEARS, WHAT IS YOUR PERSPECTIVE ON WHERE WE ARE NOW?

Julia A. Haller, MD: I think we've made progress. An important piece has been recognizing that there's an issue and then getting metrics so that we can think of ways to

AT A GLANCE

- The 2015 editorial in *JAMA Ophthalmology*, Cherchez la Femme, written by Julia A. Haller, MD, was the first of its kind in a high-impact, peer-reviewed journal.
- Dr. Haller's research shows that, between 2015 and 2019, there was a definite increase in the number of women editorialists.
- One study found that women were significantly underrepresented in terms of engagement with industry, and when women were involved, they were paid less.
- Research on corporate board diversity found that, boards with more women were more successful and delivered more shareholder return.
- There's a lack of specificity and granularity in research databases, and there's room for important work on diversity, equity, and inclusion in retina.

Figure. Dr. Haller has been the ophthalmologist-in-chief at Wills Eye Hospital in Philadelphia since 2007, and her list of publications is nearing 500.

effect change. In that 2015 editorial, I looked around for examples of journals, even outside the field of medicine, that had made efforts to expand the number of women editorialists. When asked to nominate someone for a role, we usually think of our own friends and the people we know. Thus, to the extent that there have been fewer women and fewer people of color in the field, the existing hierarchy simply didn't know a diverse group of people to ask. It takes work and intentionality to expand who you know and who you might ask to achieve change.

It's encouraging that, when we identify and then measure differences, we can see the reasons for those differences and maybe advance the cause. Neil M. Bressler, MD, was the editor-in-chief of *JAMA Ophthalmology* at the time, and he invited me to write that editorial. Later, we did a study that looked at editorials written between 2015 and 2019, and there was a definite increase in the number of women editorialists.[2] That increase was led by *JAMA Ophthalmology*, and we have Dr. Bressler to thank because he really made an effort to include more women; it worked, and there was a ripple effect. Obviously, by that time, there were more women in senior positions, but it comes down to individuals and our responsibility to make the world a better place.

We conducted another study that looked at the presence of women on the podium—another instance in which speakers are chosen by their peers.[3] Between 2015 and 2019, there was not much of an increase, and it languished at about 20% to 25%. When we specifically looked at who was on the program committee, if there was at least one woman, there was significantly more representation. That's another way you can make a difference, but you must get women into leadership roles first.

When I took this job (Figure), there were only three women chairs in the entire country, and I was the only woman president of the American Society of Retina Specialists (ASRS) for 15 years until Judy E. Kim, MD, became the second in 2022. In eye journals, there are very few women on the editorial boards relative to men and, until recently, no female editors-in-chief.

We also looked at 25 years of retina publications, and we found a significant increase in women in first and senior authorship positions.[4] If there was a woman in a senior author position, it was much more likely to have a woman in the first author position. Leadership and mentorship are recurring themes that come up in all areas of diversity.

When we look across specialties, retina seems to be leading with DEI, so we can be proud of our specialty. If anything, we're punching a little above our weight.

Steve Sanislo, MD: Your approach to that research in 2015 was great because a lot of people were talking about the number of women in retina or ophthalmology, but they weren't specifically looking at leadership positions.

DR. SANISLO: WHAT ARE THE NEXT STEPS FOR YOUR RESEARCH?

Dr. Haller: We are interested in several things. When you talk about who's influential and who makes a difference, you cast a broader net. For example, Patel et al did an interesting study looking at the different relationships physicians can have with industry and who is considered worth engaging as an expert on scientific advisory boards and the like.[5] They found that women were significantly underrepresented across the board in those positions. That's one of the most apparent areas with disparities, and it may reflect the intersection between the disparities on the industry side and the disparities on the medical side. Even when women were involved, they were paid less.[5]

Another point is how DEI issues affect patient care, the way we recruit patients for clinical trials, and how we build a pipeline of retina specialists who are more representative of our patient base. We're increasingly understanding that having physicians whom you can relate to makes a difference no matter who we are.

I commend the ASRS for making an effort to have us all log in and put more in our online profiles about race and ethnicity so we can get more granularity, understand ourselves a little better, and maybe correlate it with other types of outcomes.

Rebecca Soares, MD, MPH, a past Wills Eye fellow, spearheaded some interesting work looking at AMD clinical trials and evaluating how the clinical trial sites affect patient access.[6] The study found that clinical trial access was reduced for Black, Hispanic, and Asian patients, and it correlated with education level. Highly educated patients have more access, just based on geography. All the benefits of participating in clinical trials accrue to more privileged patients and are meted out unequally.

We just did an IRIS database study of treatment in the

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first year after central retinal vein occlusion (RVO) with a concurrent diagnosis of macular edema.[7] We found disparities in treatment across the United States, with women being treated less in the first year. We know that early treatment is important in terms of visual outcomes, and Black, Asian, and older patients were treated less, in addition to women. There was a VA sweet spot of 20/40 to 20/200 where about 75% of patients are treated. Even after all these years of available treatments for RVO, there's undertreatment and disparities, and you wonder why. Figuring that out and how to mitigate it—that's next!

Another interesting research avenue is the residency match, which didn't even record any information about race or ethnicity until 2016. If we wanted to look at all the Black retina specialists who've been trained to see whether there's less disparity in their RVO treatment—you can't do it because we don't have any data yet. The 2016 group is just finishing their training and going into practice right now, so we don't know what the outcomes are yet. We don't have good information about, for example, Hispanic or Asian ethnicity, either the patient or physician. There are so many things that we don't have the granularity to understand yet.

DR. SCOTT: THERE HAS BEEN SOME PUSHBACK AGAINST THE EXAMINATION OF DEI PRACTICES. IF YOU HAD TO SPEAK TO A COLLEAGUE WHO'S DESIGNING THE PROGRAM FOR A MAJOR MEETING, A PANEL, OR AN AD BOARD, WHAT WOULD YOUR ADVICE BE REGARDING THE IMPORTANCE OF DIVERSITY?

Dr. Haller: I share your dismay at what is a disastrous current climate that uses huge generalizations to disparage legitimate concerns about DEI. The best way to combat this is with data. It's a daunting environment, but at least in our professional community, data is the answer.

For example, researchers have looked at board diversity, the time spent deliberating on questions, and the type of decisions that were made, with metrics on the quality of the decisions and how much deliberation, research, and time was put into them.[8] If the board was diverse, it made a huge difference, which makes sense. If you're hanging out with your buddies from college, you may all come to the discussion with the same preconceptions.

But when I'm around a table of people I don't know, particularly if they come from different backgrounds, I do my homework because I want them to be impressed with my preparation. I'm coming in with a really different perspective. On more diverse boards, I push myself a little harder to prepare for the discussion, and that plays out in actual research and outcomes. Studies have looked at boards with more women and found that they've been more successful and delivered more shareholder return.[8] To combat the current antidiversity claims, we need to conform with language they understand and show them the data about outcomes in terms of the effectiveness of more diversity.

DR. SANISLO: IN LARGE CLINICAL TRIALS, WHY DO YOU THINK WE RARELY SEE ANY SUBGROUP ANALYSIS OF OUTCOMES BASED ON MALE VERSUS FEMALE?

Dr. Haller: I think it's because people haven't thought to do it. When Bernadine Healy became head of the National Institutes of Health, women weren't included in trials. The information about treating cardiovascular disease, for example, was all male centered. The classic heart attack was the *male* classic heart attack. Now we know that women have different symptoms than men, and the outcome was that women were being underdiagnosed and undertreated.

In our recent research on RVO, we found that women weren't treated as aggressively as men in the first year after diagnosis, and that was in all subgroups of visual acuity.[7] That delay and undertreatment must translate into worse outcomes, which is something we're interested in looking at now. Women have worse visual outcomes in terms of blindness all around the world. Is it because they're deprioritizing themselves and taking care of their family first, or is it because physicians don't treat them aggressively enough? There are likely many reasons that differ based on the culture. These are all very important questions.

DR. SCOTT: WHY DID YOU DECIDE TO BECOME A VITREORETINAL SURGEON, AND WHAT WAS THAT LIKE FOR YOU IN SUCH A MALE-DOMINATED FIELD AT THE TIME?

Dr. Haller: I came to ophthalmology loving surgery. I was a Halsted intern in surgery at Johns Hopkins and was all set to go into general surgery. I came down to Wilmer Eye Institute and spent a month with Stuart Fine, MD, during my fourth year of medical school. It was too late for the match, so I did a year of research in pathology with

Frederick A. Jakobiec, MD, DSc, and then matched into ophthalmology. What was attractive about ophthalmology for me was the surgical aspect, and in those days, if you were a woman, you had to have a male attending who would take you under his wing, unless you were very lucky to find one of the few female mentors around.

Dr. Fine was quite a recruiter of medical students into ophthalmology, and I was one of the many he introduced to the field. And then Ronald G. Michels, MD, considered the top retina surgeon in the world at the time, became a mentor; I wanted to be like him, too! When I was a first-year resident, my senior residents, Eugene De Juan, MD, and Paul Sternberg, MD, were both going into retina surgery, and they would get me to assist in the OR, and I couldn't believe it. During my first operations, I said, "Wow, you can do this? This is just awesome." Arnall Patz, MD, was a wonderful inspiration and support, and Morton F. Goldberg, MD, was hugely influential and gave me projects that allowed me to give some talks. Robert B. Welch, MD, was the first person I did scleral buckles with; he would tell me about Alice R. McPherson, MD, because she had been a fellow at Massachusetts Eye and Ear with him. He instilled in me a desire to be part of that world.

I aspired to emulate all these heroes, and it took me a while to find my own voice. When I became more confident just being myself, I had more success. I, like most women of my era, had mostly male mentors, and they were great.

FURTHER READING

Women in Vitreoretinal Meetings: 2015-2019
By Ali Syed, BS; Audina M. Berrocal, MD; and Jayanth Sridhar, MD

Diversity in Clinical Trials: A Work in Progress
By Abdul-Hadi Kaakour, MD, MS; Hong-Uyen Hua, MD; and Aleksandra Rachitskaya, MD

The Effect of Race on Vision: A Look at DME
By M. Ali Khan, MD, FACS

Exploring the Gender Gap Through Authorship in Retina
By Ankur Nahar, BS, and Julia A. Haller, MD

DR. SANISLO: WHAT ARE YOUR THOUGHTS ON RESEARCH REGARDING OTHER BIAS SUCH AS RACE OR SEXUAL ORIENTATION?

Dr. Haller: Ethnicity is particularly hard to study because of the missing data. In our IRIS RVO analysis, for example, we expected Hispanic ethnicity to have a negative correlation, but it didn't show up in our analysis; of course, we had about 30% with no ethnicity data.[7] When you don't have the data, you just don't know. We must make more of an effort to figure out what we want to be studying and then collect that data. Any subgroup that's been marginalized is probably hard to study with very little data, and low enrollment numbers.

For example, we looked to see if there was a difference in outcomes for Black patients treated with ranibizumab (Lucentis, Genentech/Roche) versus White patients, and there wasn't enough data due to few Black patients enrolled.[9] It looked like Black patients didn't do as well as White patients, but you couldn't be sure because there weren't enough patients enrolled at any one clinic. And that's the entire Genentech and DRCR Network database. We must correct this.

As another example, the 2023 AAO Jackson Memorial Lecture was a remarkably illuminating talk on disparities, where Eve J. Higginbotham, SM, MD, ML, made many important points, including pointing out the research into the huge genetic diversity within Africa, the descendants of whose people have been lumped together as *Black* in our studies because of a lack of awareness and the missing data.[10] There's a lack of specificity and granularity in our databases, and there's a lot of room for much-needed, interesting work.

DR. SCOTT: DO YOU HAVE ANY FINAL COMMENTS ABOUT WHERE WE ARE AS A FIELD CONCERNING DEI, AND HOW WE CAN KEEP MOVING THE FIELD FORWARD?

Dr. Haller: We have made progress. Fifteen years ago, none of the interviews I did were on this topic. I gave the first DEI talk at AAO retina subspecialty day only 2 or 3 years ago. So, we're late to the game, but it's on our radar now, and it needs to stay there. We now have explicit leadership training that we're doing in ophthalmology; it's important because everyone can be a better leader. And part of leadership training is learning how to harness a diverse workforce.

I must give a shout-out to our retina organizations and also Women in Ophthalmology. There was no society for women in ophthalmology or women in retina when I was coming along. And now those groups are specifically talking

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about leadership, mentoring, and even spearheading studies and piloting projects.

The other message for young trainees is to get the best training possible, and work hard to be excellent physicians and surgeons. That's the foundation for leading.

There are many more options out there for mentoring and leadership training, and people can aspire to that on every level, be it local advocacy, subspecialty groups, the AAO's Young Ophthalmology group, and all the way to the top. There are many opportunities out there, and I'm very encouraged by this generation of trainees.

We can be proud of the outstanding students who want to go into our specialty. There's a lot of hope there. ■

Editor's note: This manuscript has been edited from the original transcript for clarity and space purposes.

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