The Life of an Editor: Dr. Russell Van Gelder, MD, Ph.D., Editor in Chief of Ophthalmology, the Journal of the American Academy of Ophthalmology

Malina-Maria Cernatescu,1 Juan C. Puyana,2 Francisco J. Bonilla-Escobar,3

Abstract
In this insightful interview article, we delve into the life and role of Dr. Russell Van Gelder, MD, Ph.D., Chair of the Ophthalmology Department at the University of Washington and Editor in Chief of Ophthalmology, the Journal of the American Academy of Ophthalmology. Driven by a profound passion for literature, he emphasizes the enduring impact of scientific publications as fundamental to knowledge. He views curating this literature as a privileged responsibility, ensuring its enduring quality. Dr. Van Gelder acknowledges the complexities of predictive editing and the challenges of identifying impactful papers. He let us dig into the editorial process at Ophthalmology as we learn about its rigor, involving meticulous screening, comprehensive reviews, and constructive feedback. For aspiring editors, he underscores the importance of a genuine love for literature and the value of constructive criticism. Dr. Van Gelder addresses common misconceptions about the editor's role, highlighting the ethical aspects of publishing, and advocates for a focus on content quality, especially in a world marked by predatory practices. He shares a memorable encounter with the work of Clyde Keeler, a scientist from the early 20th century, underlining the timeless nature of literature as a repository of knowledge that transcends generations. In essence, Russ, as affectionately referred to by colleagues, offers a deep understanding of the life of an editor dedicated to preserving the integrity and excellence of scientific publications in the field of ophthalmology. His perspective is distinctively important for medical students and early careers physicians, underscoring the crucial role that editors play in the advancement of scientific knowledge.

Introduction
Editors of peer-reviewed clinical journals, often coming from clinical backgrounds rather than having formal editorial expertise,1 are in a position where their competence could greatly benefit from proper editorial training.2 Surprisingly, since 1998, it has been observed that many journals do not typically provide training for their editors.3 Despite the understanding that “one always stands on the shoulders of those who came before,”4 there has been a gradual increase in the need for standardized training opportunities, in addition to learning from others. However, a significant deficiency in the quality and effectiveness of these training initiatives still exists.5

It is crucial to ensure that the publications overseen by editors of medical journals maintain the highest standards of quality and integrity. Only the most credible and valuable research should be shared with the medical community and, ultimately, the patients who rely on it for their well-being. This is of utmost importance as biased and incomplete reporting of research findings can have severe consequences, including patient harm and misjudgments regarding treatment.5 In the context of clinical trials, it is crucial to recognize that the incidence of fraud is not negligible.6 Additionally, research coordinators frequently encounter instances of misconduct, with only approximately half of these cases being reported.6,7 This makes the role of an editor akin to that of a detective and a goalkeeper, with one striving to uncover issues or suspicious clues and the other endeavoring to prevent biased research from being published.

Editors also play a vital role in adapting to the ever-changing landscape of medical publishing. In the digital age, they are increasingly responsible for ensuring the integrity of data, particularly given that issues like image manipulation can be inconspicuous in today’s technology-driven world.8

The role of an editor is central in managing this intricate process, as authors may have vested interests in their research outcomes, and reviewers may bring their own perspectives to the table. Editors must maintain a delicate balance and ensure that the
The Life of an Editor: Dr. Russell Van Gelder, MD, Ph.D., Editor in Chief of Ophthalmology, the Journal of the American Academy of Ophthalmology

Cernatescu MM, et al.

The Interview

Please tell us about yourself and the positions you currently hold

I’m Russell Van Gelder, from University of Washington, chair of the department of ophthalmology. I’ve been here for 16 years. I grew up in the New York area. I went to college, medical school and graduate school at Stanford in California. I did my internship there, then went to Washington University in Saint Louis for ophthalmology residency. I stayed there for a uveitis and medical retina fellowship and then stayed on faculty for another eight years at Washington University before coming here in 2008. I’ve been the Editor in Chief of Ophthalmology for about a year and a half. I took the helmet in February of 2022 and prior to that, I had been an editorial board member at that journal since 2013. I think I was on the editorial board of American Journal of Ophthalmology for about 10 years before that. I was an associate editor at Investigative Ophthalmology and Visual Sciences for at least 10 years. I was also an associate editor at Translational Vision Science and Technology (TVST). I wrote a column and was an associate editor for many years at the journal of Ocular Immunology and Infection. So, I had a fair amount of editorial experience before I came into the editor in chief position. I’ve only been in academia, and all my editorial experiences are in vision science and ophthalmology, so that’s what I do.

What motivated you to become an editor?

My motivation to become an editor stem from my upbringing in an academic family, where my father worked as a wildlife biologist. Surrounding by writers and editors, I was encouraged to write from a young age and had the freedom to explore a wide range of literature. However, my deep love for literature goes beyond familial influences. I am driven by the understanding that, 50 years from now, the enduring legacy of our present-day efforts lies in the papers we produce. Unlike lab notebooks, which may be lost or forgotten, literature persists as the foundation of our collective knowledge. The pivotal point in the journey from discovery to practical application is the scientific publication of this knowledge. It is a privilege to serve as a curator of this invaluable literature, ensuring that the material preserved for future generations is of the highest quality and significance.

Since you mentioned "curate," we have observed situations where a prestigious journal rejects a paper, only for that very research to later receive a Nobel Prize. What role does an editor play in these circumstances?

Well, you’re not going to get them all right as the curator and it is much more of a curatorial job than an editorial job. You know people think of editing as rewriting and sharpening. My brother was editor and is now publisher of the magazine Fantasy and Science Fiction and when he edits, he curates first, he does choose his papers, but then he works with the authors very intensely to try to sharpen their writing and improve it, and a book editor really spends a great deal of time doing that. We don’t spend as much time doing that and so most of the job is really curation and selecting which papers will have the broadest impact. I don’t think you ever have a crystal ball to say “this is going to be the most important thing”. So, you do the best you can at the time and say “this will be a broad interest to our readership”, “will our readers want to read this paper?” and that’s really the criteria that we use. So, if I ever pass on a Nobel Prize winning paper at some point, I don’t think I’ll have any regrets.

There’s a lot of great work that’s never going to get a Nobel Prize and then there a few things that have gotten Nobel Prizes that maybe weren’t necessarily the greatest scientific papers. It’s too hard to predict.

Figure 1. Dr. Russell Van Gelder, MD, Ph.D., Editor in Chief of Ophthalmology, the Journal of the American Academy of Ophthalmology.
Can you briefly describe the primary roles and responsibilities of an Editor and how do you arrive to an editorial position?

The primary roles and responsibilities of an editor typically involve assessing submitted papers for interest and quality, assigning papers to editorial board members, and managing the publication process. To become an editorial board member, one is usually invited by the Editor in Chief based on their performance as a reviewer and their expertise in the field. Reviewers play a crucial role in the editorial process by evaluating manuscripts and providing feedback. Those who consistently excel as reviewers are often considered for editorial board positions.

At Ophthalmology and all of our family journals, the editor in chief still reserves the decision prerogative to make the final decision on a manuscript. But, in some journals the associate editors have that power, and they will make the accept or reject decision without the editor in chief being involved.

Reviewer and Editor positions can serve as training for becoming an Editor in Chief, with additional responsibilities such as assembling journal issues, shaping the journal’s direction, making policy decisions, and ensuring the timely publication of high-quality content. The Editor in Chief oversees the entire editorial process and holds the final decision-making authority regarding manuscript acceptance or rejection.

What about the editing projects that you are particularly proud of?

We have done a few things in the journal that are, I think, relatively innovative. We launched a journal club this year online, where we feature one paper and have an expert really dissect the paper for our readership. That's been quite popular: it's drawn hundreds of people to view these, and I think it's a value add. We've also done very well with our social media presence. That's a new area, obviously, in the publishing world, relatively speaking.

I just saw the numbers. We have a podcast that we do around our literature in ophthalmology and we're at 220,000 downloads on our podcasts at this point. So, that's really getting the literature to a very broad community which is what we want to see – people are actually engaged in the papers that we’re publishing.

We have a social media editor, who's an associate editor, Lorraine Provencher, and then we have four social media editors, and their responsibilities include hosting the podcasts and also curating our social media feeds (our Twitter and Instagram feeds). So, they'll pull things from the papers and highlight them and put them on X or Instagram and basically just keep people's interest in the literature.

What can you tell us about the Associate Editors of Ophthalmology?

We currently have six Associate Editors, each with varying responsibilities based on the workload of their respective areas. For instance, our Associate Editor for the retina section, Andy Schachat, is currently handling 25 active manuscripts. Andy Schachat is a notable figure, having previously served as the Editor in Chief of Ophthalmology. It’s worth mentioning that we have term limits for the editorship, with a maximum tenure of 10 years, including the possibility of renewal. Andy served a full 10-year term as the Editor in Chief and still enjoys his role, so when his board term was ending, he expressed his willingness to continue as an associate editor.

Additionally, we have an impressive lineup of former and current editors in chief from other renowned journals serving as associate editors. This includes the former editor of JAMA Ophthalmology and the former editor of the British Journal of Ophthalmology, among others. The expertise and experience of these individuals significantly contribute to the efficiency of our editorial team.

Furthermore, we have a dedicated editorial team of five members who collectively oversee our family of four journals: Ophthalmology (our flagship journal), Ophthalmology Retina, Ophthalmology Glaucoma, and Ophthalmology Science. These journals operate cohesively as a family, allowing us to transfer manuscripts between them when it’s deemed appropriate and with the consent of the authors. Our success is measured collectively as a family of journals, and our goal is to consistently publish outstanding scientific literature.

At IJMS we have a team of editors that mostly comes from the batch of student editors but they handle around 3 articles at a time. What is your opinion about this?

Where you (students) are at, is a different stage. There’s a learning curve on this. Usually, you start out doing a lot of reviews for journals that may not be as impactful as some of the journals that you end up working for, and that’s part of the process, that’s natural. I think I was an associate editor of Molecular Vision for many years. It’s not an enormously impactful journal but I learned a lot doing the work for that journal.

Could you walk us through your typical editing process?

The process begins with the submission of a paper to our journals, which are published by Elsevier but owned by the American Academy of Ophthalmology. The papers are uploaded to the Editorial Manager system. Our editorial staff conducts an initial check for plagiarism, formatting compliance, and adherence to author instructions. If the paper passes this stage, I review the abstract, figures, and tables. If it doesn’t align with our readership’s interests or our typical publishing scope, I may reject it. After this initial screening, promising papers are sent to associate editors for further evaluation. I sometimes ask the associate editors for their opinion on whether the paper is novel or pertinent to our field.

Since our readership consists of ophthalmologists from all around the world, I must think about them when accepting a paper. If a subject is too narrow, if it does not look like an area of research that we typically publish, then I reject it immediately, so that the authors can quickly move to another journal.
Interview

Cernatescu MM, et al.

The Life of an Editor: Dr. Russell Van Gelder, MD, Ph.D., Editor in Chief of Ophthalmology, the Journal of the American Academy of Ophthalmology

I should mention our journal is a member benefit for the American Academy of Ophthalmology. The 17,000 US members of the Academy all get the journal in print form every month, and then it’s available online for all our 26 thousand members worldwide. It’s a big subscription base for the size of the field. And I must be very mindful that when they get that blue journal in the mail and open it up, “a new technique for peripheral retina Retinopexy” is going to be of interest to a very small fraction of our readership, and that’s a reason for ophthalmology journal to pass on to us. But there’s also ophthalmology retina and that is read by the 3000 retina specialist in the US and they might open it up and say “wow that’s interesting”, so we try to get the paper to where it will have the best readership.

When I come across an intriguing article but I’m uncertain about its potential broad appeal, I forward it to one of my associate editors, often with a note attached to it saying, “this paper looks interesting, is this novel?”. I don’t know everything in the field, and I can’t tell sometimes if “something’s been done before or not”, “what’s the incremental knowledge here” and if “this is the right design”.

The papers may be rejected if they’re too similar to recent work or if there are design issues. Authors may be offered the option to transfer their work to another journal within our portfolio. We always aim to direct papers to the journals where they will find the most relevant readership.

Following the initial submission, papers undergo a review process. At this stage, our Associate Editors and members of the editorial board provide their initial recommendations, which can range from acceptance to revisions. I may offer overarching guidance on necessary revisions when the situation calls for it.

After the article returns from review, typically the Associate Editor or an Editorial Board member will furnish an initial recommendation. It’s exceedingly rare for a paper to be accepted outright; I can’t recall ever accepting a paper without suggesting potential improvements since there is usually room for enhancement. These improvements are typically informed by the combined feedback from the 2-3 reviewers and the editorial board member.

Occasionally, I may also contribute a higher-level recommendation. While I seldom delve into minute details like specific line edits (such as removing a comma from line 41), I might provide more general feedback. For example, I could suggest that the core message of the paper is somewhat limited, despite its importance, and recommend condensing it into a report for further consideration. In some cases, I may advise authors that their submission essentially comprises two separate papers, each addressing distinct questions. Given the constraints of our printed journal, where page space is limited, I may suggest shortening the paper, a recommendation authors usually follow. This approach is necessary to ensure we can effectively manage the publication of approximately 10 papers and 2 reports each month while balancing page space constraints.

One of the nice things we have is that we are considered the most impactful journal in the field. So, our impact factor is sitting up around 13.7, which is healthy for a specialty journal, that’s the same territory as Proceedings and National Academy of Science or Cancer Research or some of the bigger journals out there. We’re about five points above the next general ophthalmology journal, so I think people want to have their work in our journal, because their visibility is higher, so when we ask for people to modify their papers, they’re usually happy to do that in order to get it published in Ophthalmology.

Have you continued to develop as an editor like training or something you can mention for future generations?

We’ve actually gone the other way and we are setting up our own editorial mentoring program within Ophthalmology (not just our journal but the 7 major Journals in Ophthalmology, Optometry and Visual science) entered into a consortium, where we are training the next generation of editors, through a selection process, paired mentoring to really create people who are very thoughtful about the literature. We’re just launching it this year. Our first session is going to be at ARVO 2024 which will be here in Seattle. I anticipate I am going to learn as much as the trainees, especially the first run or two through this, from my colleagues. At the editor in chief level, you don’t have any mentors except previous editors in chief. And I have learnt a great deal from the last editors of our journal. But the opportunity to interact with the other editors in chief from the journals in our field I think is how I will get the most of my learning.

How have you adjusted to evolving landscapes, particularly in terms of technological advancements?

The realm of technology is constantly evolving, and it’s crucial to surround yourself with individuals who possess a deep understanding of these technological developments and their practical applications. I belong to a generation that didn’t grow up with innate familiarity with social media. That’s why I value the presence of our five social media editors, all of whom are younger than 40. They play a pivotal role in keeping me informed about the nuances of various social media platforms such as Instagram, X, and TikTok, along with their respective strengths and weaknesses.

To stay ahead of technological changes, it’s imperative to have a team that comprehends the ever-shifting tech landscape. However, there’s also a timeless quality to the scientific literature. I’ve ventured into the archives at the Health Sciences Library to retrieve papers dating back to the 1920s. When you delve into those historical papers, it feels like stepping into a time machine. The process of scientific discovery remains remarkably consistent. It’s worth noting that someone a century from now, perhaps in 2123, will be able to visit a library, locate one of the papers I edited, and appreciate that a hundred years ago, this
foundational knowledge was established. Preserving this timeless essence of literature is of paramount importance because it means we are effectively preserving knowledge at a particular point in time for the benefit of future generations.

What do you know about Artificial Intelligence (AI) and how it's going to affect our work?
We've addressed this issue in a recent editorial, and our stance, is that AI, such as chatGPT, cannot serve as a co-author. Co-authors must understand and take responsibility for the paper's content, which AI cannot do. AI's capacity for hallucinations and other inaccuracies further reinforces our reluctance to have authors vouch for AI-generated content. However, there's a range within artificial intelligence, and we permit the use of AI tools like spell checkers or readability-enhancing apps. These can be helpful for clarity. AI is a tool, not a substitute, and while it can assist in improving writing clarity, someone must ultimately take responsibility for the final output. We don't want incorrect information cited in our journal due to AI errors.

What about the other way so you’re mentioning the author side, what about the editor side with chat GPT?
The use of any AI system in a trial process inevitably requires a training process. For example, I could potentially establish an AI to assess every abstract and determine whether it merits a review. However, this approach would essentially institutionalize my existing biases. I'm cautious about entrusting editorial authority to an AI because it needs to be trained, and my implicit biases differ from those of others. These biases are not related to race but rather to scientific preferences. I might, for instance, tend to dismiss papers like small surgical series outcomes that lack a control group or comprehensive patient selection. Such papers must meet a very high bar for me to consider them novel surgical techniques worth publishing. If I trained an AI to mimic my decision-making and reject abstracts, it would likely lead to the rejection of valuable papers, even the rare one in 100 that genuinely merits publication. Consequently, I currently see limited utility for AI in our editorial process.

What advice would you give to early career editors?
First and foremost, it's crucial to distinguish between an editing career and editorial service. Full-time editor positions in biomedical literature are exceedingly rare, with the New England Journal possibly being one of the few exceptions. To make this a significant part of your career, consider the following advice.

1. Passion for Literature: Only pursue this path if you have a genuine love for literature. If the idea of spending your free time in a library is appealing, this might be the right job for you.
2. Not for Recognition: Don't do it for the prestige or recognition. Editorial roles often involve making tough decisions that may not sit well with everyone, so thick skin is essential.
3. Say Yes to Opportunities: Embrace every opportunity to engage in the editorial process. If asked to review a paper, accept the task. When you do review a paper, seek feedback from the editorial board on the quality of your review and how it could be enhanced. Avoid excessive detail; focus on summarizing why you find a paper worthwhile or not. Explain what questions or concerns arise when reading the paper and how it could be improved.
4. Constructive Criticism: Instead of merely stating a paper is not good, provide specific insights. Ask yourself, “If I were an author on this paper, what would I have done differently?” This is the type of feedback that authors find valuable. For instance, if you would never submit a paper based on a small sample size, make that clear in your review. If a figure is unclear, suggest how it could be improved. Remember that being an effective editor requires a deep passion for literature, a willingness to accept criticism, and the ability to provide constructive feedback that helps authors enhance their work.

What are some common misconceptions about the editor’s role?
It's somewhat challenging to gauge because people's perceptions of the editor's role may vary. As an Editor in Chief, there might be an impression that you possess more authority than you typically exert. In reality, I rarely override the decisions of my associate editors or editorial board members. I can count on one hand the instances where I've overturned their recommendations, whether they suggested rejection and I opted for acceptance, or vice versa. I seek their opinions for a reason, and I highly value their expertise. Authors sometimes receive rejection and then approach me, suggesting that the reviews weren't excessively critical and asking for reconsideration after making revisions. What I'd like to convey to them is that they're appealing to the wrong party. The reviewers and editorial board members were the ones who determined that the paper wasn't suitable for publication, and my decision aligns with their judgment. Unless there's a significant flaw in the process, such as a conflict of interest issue, I'm generally in agreement with their assessments.

For example, we maintain a rigorous system to ensure our editorial board's integrity. We require them to disclose any financial connection to a competitor of that drug, and the paper is rejected, authors may question the fairness and impartiality of the decision. In such cases, I acknowledge the issue and agree that it was not handled correctly. However, we seldom encounter such situations, as we make efforts to be aware of potential conflicts among our editors.

The Life of an Editor: Dr. Russell Van Gelder, MD, Ph.D., Editor in Chief of Ophthalmology, the journal of the American Academy of Ophthalmology
Can you give advice to early career researchers to enhance the quality of the work?

Unfortunately, we’re in this “publish or perish” world, where people feel compelled to publish everything they do and to show that their time was well spent by publishing. That is an error, a lot of work should not be published. If you don’t have a clear answer to something, don’t just dump the data out there, it’s not useful. Concentrate on the work itself. If you do good work, you will be published in good places. Be extremely rigorous. Be your own worst critic by far. You never want someone to come back with a review that finds things that you didn’t see. If someone says in a review “this paper is flawed in the following way” and you’re like “Oh my God it is”, that should never happen. You should have anticipated everything that is not right and you should fix it before you do the work. So, doing a flawed experiment and saying “well it’s flawed but I’m going to publish it” really doesn’t do any favors to anybody. In this day and age, I think that publishing work anywhere will get recognized. In the old days you had to publish in journals that had subscriptions and that libraries picked up. Now with Open Access anyone could find your work anywhere, which is great. Don’t get hung up on the percentage of the journals that you’re publishing in. You can publish great stuff in low impact factor journals and that’s fine, people will recognize good work when they see it. Pick your questions carefully and answer them and design your experiments as well as you can. I do tell my students that you can pick your question, you can design your experiments, you can execute your experiments and you can interpret your experiments, the only thing you can’t pick is your results. So, keep that in mind: your work is really just to plan and to execute and that the results will be the results.

Can you share a memory or impactful experience from your career?

It’s somewhat challenging to pinpoint uniquely impactful papers, as I recall some of the papers we turned down more vividly than those we accepted. We encountered a few substantial clinical trials that came our way, and despite the significant effort and resources invested, we identified fundamental flaws that led us to decline their publication. For instance, in a well-designed clinical trial, endpoints are pre-specified, and the analysis plan, such as intent-to-treat, is defined. If a study initially commits to an intent-to-treat approach but then switches to presenting data based on actual treatment outcomes due to dropouts, it raises questions about why individuals dropped out and how this might skew the results. We made the decision not to publish such papers, even if they later found their way to more impactful journals. This is something I take pride in, as we prioritize quality over chasing impact factors.

In the publishing landscape, some journals are profit-driven, relying on advertising or charging high fees for open access publishing. They may use their impact factor to justify these costs to authors and advertisers. However, as a not-for-profit organization, we focus on delivering content that serves our members’ interests rather than chasing a high impact factor. We place greater value on maintaining our integrity and ethical publishing practices over maximizing profits.

Is having sponsors in a journal a concern?

It’s a matter of caution. Advertising is acceptable to sustain operations, as someone needs to cover the costs. From my perspective, literature should not be a profit-driven endeavor, and that’s a fundamental belief. I hold the view that hospitals and literature shouldn’t be driven by profit motives. While our journal operates on a not-for-profit basis, our publisher, Elsevier, is profit-oriented, generating substantial revenue. Many publishers thrive on the contributions of volunteer reviewers and authors who pay to share their work. I understand the open-source movement, and pre-print servers, which offer valuable services to the scientific community. However, they lack curation and editing. In fields like physics, there’s a culture of sharing preprints, but it’s still evolving, and some preprint servers contain unsorted content.

The NIH, as a primary research funder in the US, has only recently caught up to 2004 funding levels in real terms after two decades with minimal increases. Despite this, the volume of published research has doubled since 2004. This suggests that increased efficiency isn’t the sole reason; it’s often because academic institutions equate publication numbers with productivity. They assess factors like the number of papers, where they’re published, an author’s h-index, and journal impact factors. Some institutions even use formulas that multiply paper count by impact factor. This system can be manipulated, leading to questionable publications. For instance, a paper titled “What’s the Deal with Birds” was published in the “Scientific Journal of Research and Reviews” with peculiar tables and graphs. It’s an extreme example, but it illustrates the issue. The key advice is to focus on producing high-quality work, and the rest will follow naturally.

Is any there any particular piece of work that left a lasting impact on you?

When I was a young faculty member entering the field, an older colleague advised me to explore the work of Clyde Keeler, who had a long history in the area. Clyde Keeler, born in 1900, published from 1928 to 1992, amassing 72 years of publications. He made notable contributions, including the discovery of the retinal degenerate mouse in 1920. I delved into his papers, which I found in the library, and was amazed by its brilliance. This experience, around the year 2000, revealed that Keeler had tackled the same issues I was contemplating 80 years earlier, using the technology available at the time. He examined pupillary light responses with a metronome and a ruler to graph time because computers and advanced tools were unavailable. It taught me that literature is a frozen repository of knowledge and intelligence, allowing communication across generations and time, which left a lasting impact.
Summary – Accelerating Translation

In summary, the interview with Dr. Russell Van Gelder, Editor in Chief of Ophthalmology, provides a comprehensive view of academic publishing and editorial responsibilities. Dr. Van Gelder’s dedication to curating scientific literature, commitment to quality over quantity in research and publishing, and emphasis on staying updated with evolving technologies underscore the key principles for success in this field. His insights into the role of an editor, the evolving publishing landscape, and the importance of maintaining ethical standards in an era of profit-driven models offer valuable guidance to early career researchers and aspiring editors, ultimately highlighting the enduring pursuit of knowledge and integrity in academic publishing.

References

11. Keeler CE. The geotropic reaction of rodless mice in light and in darkness J Gen Physiol. 1928;11(4):361