# The Evolution of *Neurorehabilitation and Neural Repair:*Perspectives From Former Editor-in-Chief Dr. Bruce Dobkin

When Bruce Dobkin, MD, accepted an invitation to join the editorial board for the *Journal of Neurologic Rehabilitation*, he could not have anticipated how the journal would shape his career and the lasting impacts that he would have on the journal's trajectory. The Journal of Neurologic Rehabilitation later became Neurorehabilitation and Neural Repair (NNR), and Dr. Dobkin was Editor-in-Chief for eight years. Currently, Dr. Dobkin is Distinguished Professor Emeritus of Neurology at the David Geffen School of Medicine at UCLA, where he also served as medical director of the UCLA Neurologic Rehabilitation and Research Program and Co-Director of the UCLA Stroke Center. Reflecting on the journal's history and his role as Editor-in-Chief, Dr. Dobkin noted that the journal transformed over the years into what it is today through mentorship, modernization, a global vision, and dedication to advancing the field of neurorehabilitation to make a difference for patients.



## **Early Experiences in Writing and Editing**

Writing was an important part of Bruce's life long before he joined the editorial board of the *Journal of Neurologic Rehabilitation*. He had edited his high school and college newspapers, authored a textbook (*The Clinical Science of Neurologic Rehabilitation*, Oxford Press)), and even written a novel (*Brain Matters*, Crown Publ) about a neurologist's quest to understand and treat his patients. An invitation to join the editorial board from Michael "Mickey" Selzer, MD, PhD, then Editor-in-Chief of the *Journal of Neurologic Rehabilitation* and an influential researcher in the field of neural repair and neurorehabilitation, was a welcomed opportunity. After accepting this editorial position, Dr. Dobkin got to work reviewing manuscripts, recruiting expert reviewers, and encouraging researchers to submit their work to the journal.

### New Frontiers and a Call to Lead

Over the years, Dr. Selzer continued building the journal's reputation and impact, helping it become a prominent neurorehabilitation journal. As the field expanded to include exciting new research on neural repair, Dr. Selzer and other ASNR leaders made the decision to broaden the journal's scope. The title was updated to *Neurorehabilitation and Neural Repair (NNR)*, and it became the official journal of ASNR and the World Federation of Neurologic Rehabilitation. In parallel, Dr. Dobkin's steadfast contributions on the editorial board were recognized, and he became an associate editor, taking on more responsibilities and gaining more editorial experience. When Dr. Selzer stepped down from his role as Editor-in-Chief, Dr. Dobkin was nominated for the position. He recognized that saying yes to this opportunity meant he would have to say no to other academic activities; however, Dr. Dobkin was highly motivated to continue building the science of neurorehabilitation and advancing the journal's position as a premiere outlet for sharing high-quality research in the field.

# **Enhancing and Modernizing Operations**

When Dr. Dobkin took over as Editor-in-Chief, many submissions were still being sent to *NNR* by mail in thick envelopes. Each page had to be photocopied, and then paper copies were assembled and mailed out to reviewers. Dr. Dobkin knew this needed to change. He championed and implemented a shift to electronic submissions using editable files, and he also developed databases to identify reviewers with relevant expertise and digital solutions for monitoring submissions. The whole editorial process became more efficient. Cutting out all the paper meant turnaround times for articles were faster, the triage process became more consistent so only fit-for-review papers were sent to reviewers, and the experience was better and more fair for authors and reviewers. "I read every submission before sending it out to my hard-working associate editors and editorial board" he recalls. "If it wasn't ready, I worked with the authors to fix it first. Our board and reviewers at that stage of *NNR* growth shouldn't have to waste time deciphering what an author meant to say," Dr. Dobkin noted.

# **Shaping an Inclusive Global Journal**

For Dr. Dobkin, growing *NNR* meant more than just increasing submission counts and attracting new readers. His vision was for *NNR*'s reach to extend around the world, and he actively sought contributions from researchers in Asia, Latin America, Eastern Europe, and Africa. When attending international conferences, Dr. Dobkin made it a habit to talk to early career scientists and encourage them to submit their work to the journal. He also became known for pinning his *NNR* Editor-in-Chief business card with a brief note onto boards with interesting posters to plant the seed for a future article submission to the journal. Dr. Dobkin's goal was for *NNR* to reflect the full breadth of the field and to serve as a welcoming venue for sharing high-quality work, regardless of its country of origin. His outreach efforts were effective, especially for early-career investigators who suddenly felt seen by a leading journal in their field.

#### **Growth, Impact, and Innovation**

Under Dr. Dobkin's leadership, article submissions rose by approximately 300% within just a few years. *NNR* achieved a five-year impact factor above five and ranked among the top journals in both rehabilitation and neurology. One of the things that set the journal apart was a willingness to publish well-conducted experiments and clinical trials that produced null or negative results. Dr. Dobkin championed this before many other journals. "The field learns as much from what doesn't work," he emphasized. "Publishing solid null findings keeps us honest and moves us forward." Another unique feature of the journal was Dr. Dobkin's hands-on approach. He gave thoughtful feedback to reviewers as well as authors, encouraging reviewers to focus on the essence of a paper rather than peripheral critiques. For Dr. Dobkin, reviewing was a form of teaching, and editing was a form of service. "Authors and reviewers are often the same people, just wearing different hats," he explained. "If you can flip that hat around with empathy, the whole system gets stronger."

# **New Challenges**

The successes were stacking up, but they were accompanied by new challenges. More submissions meant more manuscripts to triage, more demands on associate editors and the editorial board, more reviewers to recruit, and more demands on Dr. Dobkin's time. An increase in submissions from all corners of the globe also meant Dr. Dobkin was working with more

authors for whom English was not their primary language. For these authors, Dr. Dobkin provided detailed feedback on framing, methods, and interpretation in order to smooth the path for more constructive peer review. There were growing pains, but the payoff from Dr. Dobkin's hard work was clear. The journal was thriving, and so was the field of neurorehabilitation and neural repair that it served.

## **Lessons Learned and Paying it Forward**

Being deeply involved in all of the inner workings of *NNR* also affected Dr. Dobkin's perspectives on the review process for his own research papers and the submissions to other journals and grant applications he reviewed. He became more patient as an author, more empathetic as a reviewer, and more attuned to the craft of science communication. Dr. Dobkin's vast experience in writing and reviewing, along with his prowess in effectively translating complex science, made him an ideal mentor for colleagues and trainees seeking assistance with their manuscripts and proposals. In this mentorship role, Dr. Dobkin regularly channeled the "editor's voice" that had become second nature to him.

#### Passing the Baton and Looking Towards the Future

Looking back, Dr. Dobkin described his time as Editor-in-Chief (2006-2014) as a blend of service, teaching, and discovery. After eight years as Editor-in-Chief, Dr. Dobkin was ready to transition the role to one of *NNR*'s trusted associate editors, Randy Nudo, PhD. By that point, the systems were modernized, the journal had a strong international presence, and there was great momentum. Dr. Dobkin has continued to serve on the *NNR* editorial board, and he is proud of the remarkable community that he helped build. Contemplating the future of academic publishing, Dr. Dobkin highlighted a need to think carefully about the role of technology, particularly artificial intelligence (AI). Just as new technologies were introduced in the past, today's authors, reviewers, and editors must be discerning. Al can be a double-edged sword, serving as both a helpful tool and a potential source of misinformation. "Technology should amplify rigor, not undermine it," he cautioned. "Our job is to keep the bar high."

# Being Part of a Deeply Human Enterprise

Even in light of the potential risks and benefits of new technology, Dr. Dobkin reflected that the editorial process, and science as a whole, are human endeavors. At its core, *NNR* is about people — the authors taking risks with new ideas, the reviewers donating their time and expertise, and the early-career scientists seeking encouragement and mentorship. Academic journals like *NNR* are more than just a place to publish research findings. These journals have the power to shape careers, foster global collaboration, and move the science of neurorehabilitation and neural repair closer to improving the lives of patients. "It looks like a machine from the outside," he noted, "but behind every decision are humans, and their goal is the same: to do good science and to make a difference."