

NATURE REVIEWS: INSIGHTS AND INFOGRAPHICS

Explorations of the *Nature Reviews* publishing journey

In this document:

- The value of *Nature Reviews* for authors and readers
- Learn how our editors focus exclusively on curating the best content
- Authors explain how *Nature Reviews* journals are a valuable resource for advancing research
- Includes author guide and record-breaking survey statistics

The *Nature Reviews* journals are unique resources and teaching tools, widely used by students and faculty. Dedicated to filtering and condensing the latest advances in their respective fields, the journals play an increasingly important part in improving the accessibility of original research.

The *Nature Reviews*' editorial teams provide unparalleled service to authors and readers, and work tirelessly to be the premier source of Review and Commentary articles for the research communities they serve.

The case studies in this document offer insights into *Nature Reviews*' editorial process through Q&As with authors from titles in the portfolio. By exploring these valuable author partnerships, we show the visibility and impact of Reviews in research, their practical usage as a teaching tool, and how complementary artwork is used in presentations and conferences post-publication.

Further along the document, readers are invited to learn how to write for *Nature Reviews*, finishing with an overview of the record-breaking *Nature Reviews* Author Satisfaction Survey results.



"Researchers have an increasing focus and responsibility to contribute towards solving the world's most pressing challenges, from curing diseases to addressing the pressures our planet faces from climate change. As research becomes more collaborative, our journals distil the diversity of perspectives to guide readers through the literature, providing researchers with the tools they need to push the boundary of discovery.

Alongside our longer-format articles, the *Nature Reviews* journals present expert opinions and perspectives, news and analysis across the scientific spectrum."

Mina Razzak,
Editorial Director, *Nature Reviews*



Jay Shendure



Each *Nature Reviews* journal is run by a team of dedicated professional editors. What was your overall impression of the editorial process?

Jay Shendure: It's been terrific. Over the past 15 years throughout which I have worked with these journals, and *Nature Reviews Genetics (NRG)* in particular, I have consistently found the editors to be deeply knowledgeable, constructive and helpful in shaping the reviews.

Were the commissioning discussion and synopsis stage valuable when deciding on the scope or starting work on your Review? Can you tell us about the collaboration with your editor in the early stages of outlining and writing?

JS: Generally we've started with an introductory call, followed by our proposing a scope and an outline. A round of careful feedback on that outline is provided by the commissioning editor, which we then revise until we have consensus. We've been given considerable flexibility on the time needed to actually write the review, which I've always appreciated.

Nature Reviews editors work together with art editors and authors to turn complex concepts into clear figures that complement the text. Could you describe how you found the process?

JS: I am a much better writer than artist, so this is an aspect that I've especially found valuable. For highly cited reviews that I've contributed to *NRG* with colleagues, I've seen those figures reappear in presentations and teaching materials of others, which is very gratifying. It's varied in every submission, that is, in terms of where the initial concept comes from, but some back and forth throughout the process leads to steadily improving figures. This has been a much better process than I've experienced on other journals.

Expert peer reviewers are selected to provide guidance on every Review published in our journals. How did you feel the peer-review process improved your article?

JS: Peer review can be constructive or destructive. In each case of my reviews with *NRG*, it's been highly constructive, and I think resulted in major improvements to the balance and clarity of the reviews. This is really critical for reviews that will be widely read, as missing the right balance can be harmful.

Tell us about the impact of your Review/s post-publication, how it integrated into your career and what kind of conversations this spurred?

JS: In 2003, the specific advice given to me by my thesis defense committee was that, before I graduated, I needed to become an expert on something to the point where I knew more about it than anyone else in the world. Around that time, my PI (George Church) was asked to write a review on newly emerging sequencing technologies, and I became the lead author. The Review that resulted was effectively the introduction to my thesis, which also included one of the first reductions to practice of next-generation sequencing. The opportunity to write that review really enabled me to solidify my understanding of a newly emerging field and also set up my trajectory for my own lab, which I would start shortly thereafter.



Jay Shendure, MD, PhD

Investigator, Howard Hughes
Medical Institute

Director, Allen Discovery Center for
Lineage Tracing

Director, Brotman Baty Institute
for Precision Medicine

Professor, Genome Sciences,
University of Washington

Jay published in *Nature Reviews
Genetics* on five separate occasions
([2004](#), [2011](#), [2011](#), [2015](#) & [2020](#))

Susan Napier Thomas

Reviews are often collaborative. How have your co-authors benefited from writing for *Nature Reviews*?

Susan Napier Thomas: My co-authors were both members of my research team and approaching the end of their graduate training. They had already accumulated a broad base of literature knowledge to draw from, which helped to guide our writing. This Review focused on their research topics and therefore, it was an excellent opportunity for them to reflect on how material design, innovation and application have improved our field.

I typically involve the students I mentor in both the writing and peer-review processes. With respect to peer-review, the students learned to understand the point of view of the reader, which helps them to tell a compelling story when writing their primary research articles. The writing of Review articles helps the students to take a step back and contemplate innovations and key developments in the field. This critical approach allows them to look beyond day-to-day objectives, and think more broadly about the context of a field. Also, writing requires practise, and the more students write, the better they get.

Do you use your *Nature Reviews* article as an educational tool in class? How does it specifically benefit students?

SNT: I do. I teach the Advanced Biomaterials course at Georgia Tech, and this Review has been very helpful to explain the challenges related to lymph node drug delivery and the benefits of materials. The figures are important to explain the science, which would otherwise be difficult to communicate. Writing the Review also allowed us to investigate how different objectives require different material designs. With the immune system being recognized as a major contributor to a multitude of diseases and the broad recognition of infectious disease as a major problem requiring new technologies, the concepts covered in our Review are extremely interesting to the students in the course.

Could you describe how you found the art editing process?

SNT: The art editing process was very interactive and resulted in high-quality figures, which are useful to communicate complex concepts among diverse fields. I have used these images for teaching graduate-level engineering courses and in talks at conferences, which speaks to the breadth of their utility. Like a picture being worth a 1,000 words, the figures are worth so much to gain the attention of an audience, for online engagement, in class or in a high-level scientific talk.

What kind of impact has your Review had on the broader scientific community? Did you receive any feedback from the community?

SNT: Investigators in the immunoengineering community have congratulated us on our Review. They were delighted to see such an esteemed journal highlight this area. The article has also helped to articulate the challenges in our field and the importance of materials to overcome hurdles in therapeutic delivery. This is extremely important as it helps to communicate unsolved yet important problems in materials science. I have also heard of more and more investigators (both junior and senior) moving into this area, which is exciting. So, I think the article has had a positive impact and sparked interest from the community.



Susan Napier Thomas, PhD

Woodruff Associate Professor of Mechanical Engineering in the Parker H. Petit Institute of Bioengineering and Bioscience at the Georgia Institute of Technology

Member of the Winship Cancer Institute of Emory University

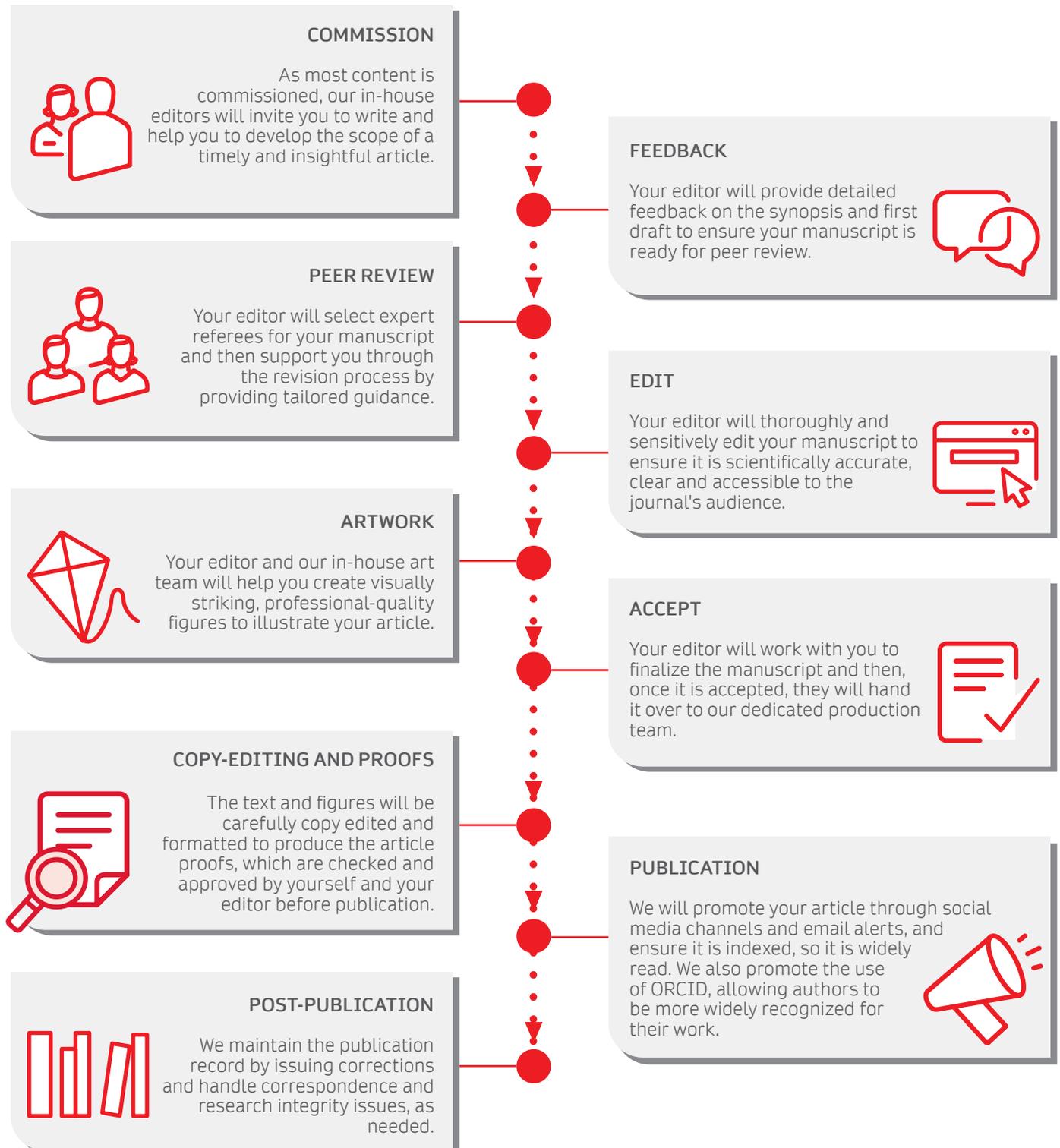
Susan published in *Nature Reviews Materials* in [2019](#).

How did writing for *Nature Reviews* compare to other Reviews journals? Are there any editorial or production steps that are unique to *Nature Reviews*?

SNT: The close interactions with the editor from the very beginning of the process up until now - a year after publication - have been nothing but wonderful. She approached us about contributing to the focus issue, as the immunoengineering field was recognised by the editorial team as growing in size and importance in the materials community. She proposed her vision, but also carefully and thoughtfully listened to my comments. We have had nothing but a very positive experience and know that the Review became stronger because of her guidance through the entire editorial process. We are incredibly grateful for the opportunity and trust she gave us.

Writing for *Nature Reviews*

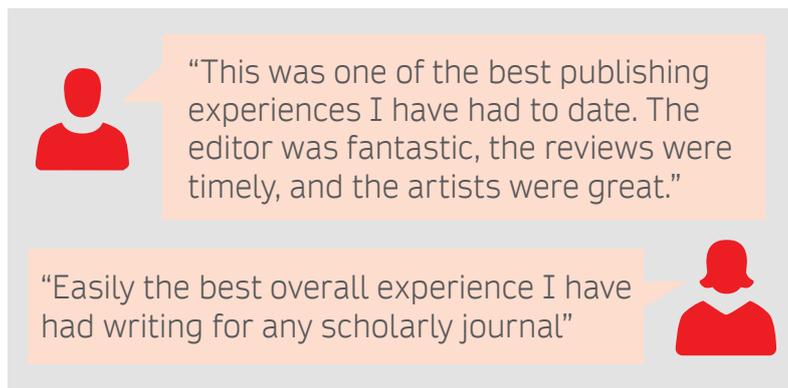
At the *Nature Reviews* journals, we are committed to working with you to produce articles of the highest quality. Find out more about the support we provide during the editorial process in this infographic.



What authors are saying about *Nature Reviews*

Throughout 2019, Springer Nature collected and surveyed responses from *Nature Reviews* authors to gauge their experience. Here, we offer some highlights:

Overall Experience



"This was one of the best publishing experiences I have had to date. The editor was fantastic, the reviews were timely, and the artists were great."

"Easily the best overall experience I have had writing for any scholarly journal"



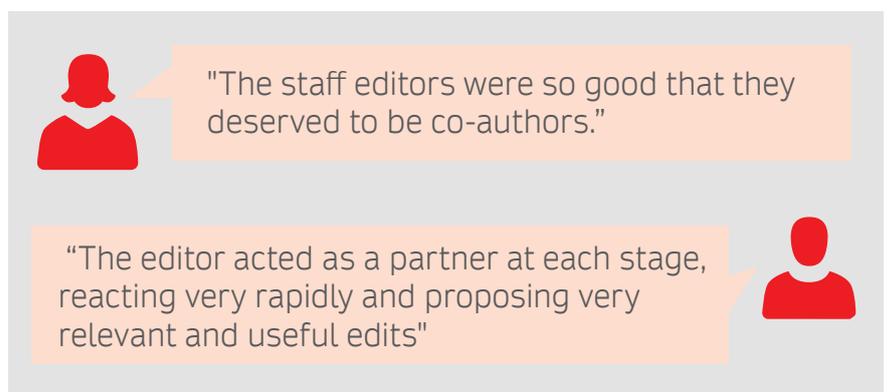
Editorial Feedback

Editorial feedback was one of the highest-rated aspects of the author experience:



88%

of authors rated the editor's feedback as 'excellent'

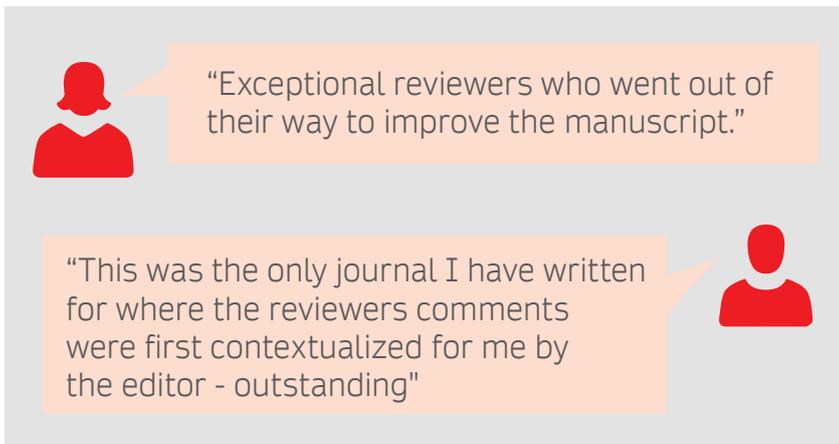


"The staff editors were so good that they deserved to be co-authors."

"The editor acted as a partner at each stage, reacting very rapidly and proposing very relevant and useful edits"

Peer Reviewers

The authors also commended the editors for selecting expert reviewers:



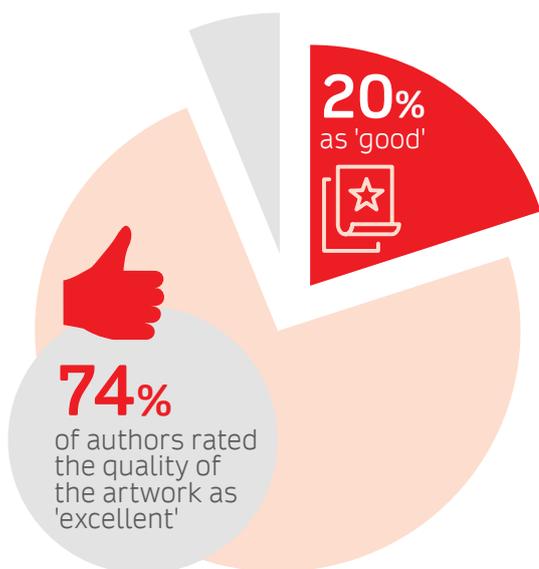
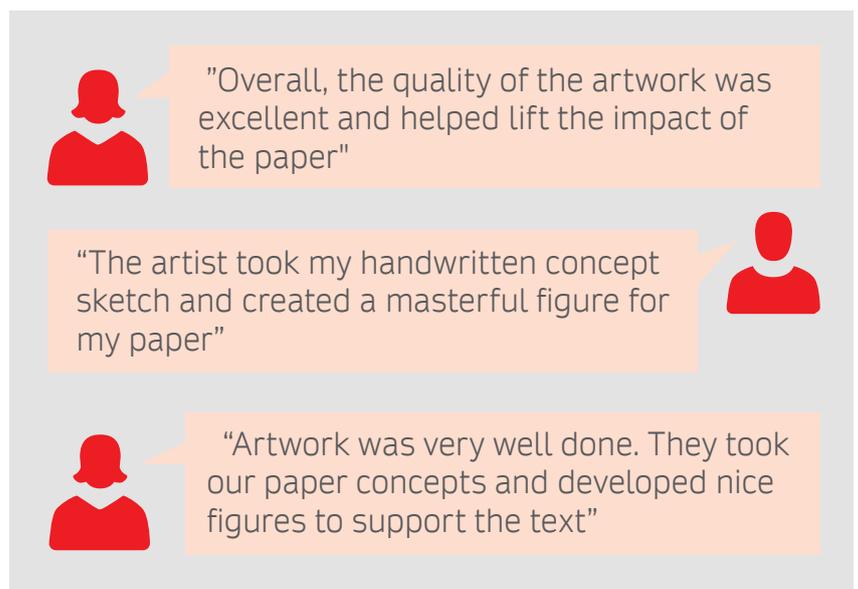
“Exceptional reviewers who went out of their way to improve the manuscript.”

“This was the only journal I have written for where the reviewers comments were first contextualized for me by the editor - outstanding”



Quality of Artwork

At *Nature Reviews*, the editors and art editors work together with the authors to turn complex concepts into clear figures that complement the text:

“Overall, the quality of the artwork was excellent and helped lift the impact of the paper”

“The artist took my handwritten concept sketch and created a masterful figure for my paper”

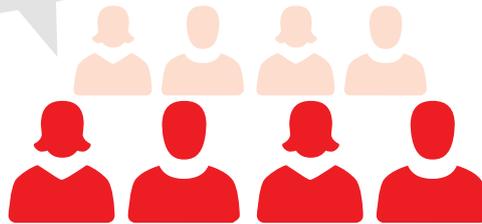
“Artwork was very well done. They took our paper concepts and developed nice figures to support the text”

Comparison to Other Journals

And finally, when asked how the experience of writing for *Nature Reviews* compared to writing review-type articles for other journals:

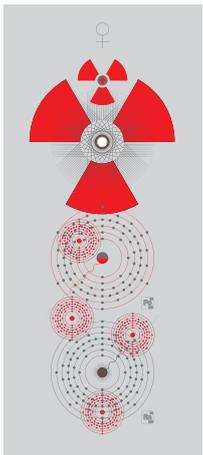
"*Nature Reviews* sets the benchmark for author experience - the scientific publishing world would be a much better place if others aspired to this standard. It was a real pleasure and I hope to do so again sometime in the future"

"Very good. The attention to detail, including copyediting of text and professional preparation of figures was higher than for other journals for which I've contributed reviews"



Want to learn more about *Nature Reviews*?

Visit our webpage: springernature.com/naturereviews >



Springer Nature advances discovery by publishing robust and insightful research, supporting the development of new areas of knowledge and making ideas and information accessible around the world.

Marie Curie (1867–1934)

In a scientific world still dominated by men, Marie Curie shone not only as an extraordinary pioneer in the field of radioactivity, but also as a trailblazing female scientist. A French-Polish chemist and physicist, Curie discovered two new elements, polonium and radium, and revolutionised our understanding of radioactivity, the process by which unstable atoms decay by emitting energy in the form of radiation. The first person of either gender to win or share two Nobel Prizes, Curie is one of the most renowned scientists of a generation, whose influences can be seen throughout many areas of modern science, from particle physics to medicine.

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