A Career in Scientific Publishing

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My background and winding road to being Editor of Cell

• Undergraduate Wesleyan University, BA in Biology (Neuroscience). Was headed to Med School

• Technician at Columbia (Eric Kandel’s lab) and Yale. Decided I wanted to be a scientist, not an MD

• PhD Yale Biology/Neuroscience

• Postdoc, Salk Institute/UCSD. Switched fields from invertebrate physiology to molecular bio in vertebrate development.

• Decided to move to career outside of academic science. Joined Neuron as Senior Editor in 1998

• Appointed Editor of Neuron in 2001

• Appointed Editor of Cell in 2003. Responsible for editorial vision for Cell and all final editorial decisions, managing the Editors of the other Cell Press journals and planning new journal launches and other publishing innovations.

• Became CEO of Cell Press in 2011
Publishers and Editors

Publishers:

- Responsible for a portfolio of journals
- Oversee many facets:
  - Editors and editorial boards
  - Publication strategy
  - Manuscript flow
  - Production processes
  - Financial success
  - Marketing
  - Publishing Ethics

Editors:

- Academic editors
  - Distinguished experts in their field
  - Multitasking with all their other academic responsibilities
  - Primarily oversee peer-review and editorial decisions
- “In-house professional editors”
  - No longer active in academic research
  - Full-time on the journal
  - Oversee peer-review and publication decisions but also handle many functions of a Publisher
Different Kinds of In-House Editors

  - Core of the job is the evaluation of scientific research studies for publication
  - Less emphasis on writing skills, though communication is important

  - Handle reviews, news articles but usually not primary research articles
  - More emphasis on writing and language editing

- **Journal assistant editors (Chemistry & Biology, Journal of Cell Biology, AJHG)**
  - Usually support roles for academic editors

- **Book editors (acquisition editors)**
  - many large publishing houses, some specialized for science books for the lay public, others for technical/educational books

- **Science writing/editing for the popular press**
  - magazines, newspapers, websites, TV, other media
A day in the life of an editor

• **We read lots and lots of papers** ---core of the job is evaluating scientific content

• **Work in small editorial teams**, 2-12 editors. Editorial team meets every day to discuss papers and editors interact frequently with one another and with editors in other groups

• **Each paper is assigned one handling editor who is responsible for the paper throughout the review process.** Editor reads the paper and related literature as appropriate, makes decisions on whether to send out for review, chooses reviewers, etc

• **Make lots of decisions:** decision to send to peer review; decisions after review; decisions on rebuttals/appeals. Write decision letters to authors to communicate the decision

• **Read revised papers; handle rebuttals and appeals of decisions.** Often involves additional emails or phone calls with reviewers and authors as we consider the issues and decision
More “day in the life of an editor”

- **Commission content to support research articles**: Reviews, Minireviews, Press Releases
- **Networking**: Attend meetings/conferences, local seminars to learn about different fields
- **Recruit exciting new papers**: requires keeping an active eye on developments in the field
- **Interact with support staff at Cell Press**: production staff, marketing/press staff, editorial assistants on journal production issues
- **Work on other aspects of journal**: website, covers, marketing
- **Participate in Cell Press wide projects**: (eg committees to develop the Cell Press websites and online formats)
- **Plan meetings/conferences**: annual Neuron SFN satellite meeting, other Cell Press meetings (*Lab Links, Exciting Biologies* series)
Assistant Editor—usually comes straight from academia (post doc)
- Participates in editorial meeting
- Reads and evaluates manuscripts
- Decides which to send out
- Chooses reviewers
- Makes decision on accept/reject
- Develops skills in communicating decisions
- Attends conferences

*For an assistant editor, there is a lot of on the job training and all assessments and decisions are seconded by a more senior editor*

Associate Editor
- Many of the same activities but develops independence in evaluating papers and executing decisions
- Takes on more difficult decisions and situations
- Takes on additional projects—organizing conferences, giving talks, working with other internal departments
- Builds external network

Senior Editor
- Fully independent
- Contributes to planning larger journal strategy
- Takes on responsibility for additional journal tasks
- Mentors junior editors
- Is recognized as a key opinion leader in the scientific community

Deputy Editor
- Stands in for EIC as needed, manages junior editors, responsible for operational aspects of the journal

Editor in Chief
- Sets overall journal strategy, buck-stops—there responsibility for all editorial decisions
What I like about being an editor

• Fast paced, dynamic job. Never a dull day; I learn something new every day.

• Job is intellectually stimulating, challenging. Editors at Cell Press contribute actively to decisions and do not just tally reviews.

• I like thinking, reading, writing and talking about science on a range of topics.

• Pace is more rapid than working at the bench and there are more tangible milestones of progress.

• Working with authors and reviewers - - - opportunity to meet and work with some of the smartest people in the world.

• Playing an active role in the scientific community, away from the bench. Get to be a part of science at the leading edge.

• Satisfaction in guiding new research towards publication. In particular, it is very gratifying to help authors improve their papers and to see a good paper published.

• Working with smart, engaged colleagues.

• Attending meetings/conferences, travel all over the world.

• Someone else pays my salary---no grant writing.
Some downsides

- **Challenging, demanding job** that rarely slows down. Editing is definitely not a 9-5 job.

- **Heavy-workload** requires a very focused/efficient approach. Office job.

- **Difficult, high-stakes decisions.** A lot of what we do is say “no” and disappointing authors who have worked hard on their papers is always hard.

- **Emphasis on breadth often comes at the expense of depth.** There is rarely time or opportunity to delve too deeply into details.

- **“Next steps” on the career path are not always clear** and most journals are pyramid structures---few jobs at the top.

- **Guiding a paper to publication is not the same as discovering something yourself.**

- **Changes in publishing as an industry** - - - flip side is that the publishing industry is being forced to reinvent itself, so lots of opportunities for innovation, new ideas.
Where do people go after editing?

• Though the career path “after editing” is not always clear, editors have unique skills that are applicable for many other career paths
  
  • Broad knowledge of scientific field
  • Strong writing and communication skills
  • Ability to navigate complicated decisions and to multitask diverse responsibilities
  • Extensive network of contacts in field - - - know “who’s who” in the field

• Careers post-editing:
  
  • Other aspects of publishing (management, business development)
  • Academic administrators
  • Grants administrators, program officers at NIH
  • Science policy analysts
  • Science advisors for private foundations
  • Consulting, business development for biotech, pharma, finance
  • Science writing and journalism
  • Intellectual property and patent law
Considering publishing as a career

- **Skills we look for in new editors**
  - Broad knowledge and interest in science
  - Ability think critically but fairly about papers
  - Diplomacy skills: fairness and integrity
  - Ability to make decisions clearly and decisively but also flexibly
  - Write/communicate effectively
  - Work both independently and as part of a team
  - Strong Multi-tasking skills and ability to work under pressure

- **If you are interested in a career in editing or science communication**
  - Keep up with the broader field—attend seminars and meetings, read papers
  - Meet and talk to editors to get an ideas what their job is like
  - Edit your colleague’s papers and talks
  - Hone your evaluation skills: participate in lab journal clubs, group meetings
  - Ask your PI to let you help review papers with them
  - Develop strong writing/communication skills
  - Some journals have internships
  - Formal science writing workshops: eg Santa Fe Science Writing Workshop
Questions

Careers:
• Does Editorial/Publishing provide a good work/life balance?
• Are there opportunities to work from home if needed?
• Do you have any suggestions for navigating the application process? What are the major do's and do not's for interviewing, writing tests, etc.?
• Working for a large publisher like Elsevier, would you say there is a lot of career mobility and interaction/exposure to the company as a whole?
• How does the in-house editorial process work from the time when you receive a submission to the time it gets published?
• Opportunities for new PhDs and international students

Publishing Industry:
• What are some effective strategies for journals to improve the impact factors and ranking of the journal?
• Open Access publishing trends, present and future thoughts
Thank you!