Resources for Exploring Careers in Science Writing and Journalism

Communicating about science, engineering, and technology is an important skill set to develop in graduate school. There are many ways to incorporate science writing into a career. In some career paths, you can work full-time for organizations or universities to write, edit, publish, produce multimedia, and overall promote research.

Another career path is to write freelance for different companies, blogs, or other media outlets. Freelancers are in control of their hours and can choose their content. As such, freelancers actively seek out clients, pitch story ideas to them, promote themselves, and manage their own business. Watch this video to hear tips from a scientist who made the switch to freelance writing, https://www.youtube.com/watch?v=OWm1703xuPQ.

A third set of options is to incorporate writing as a side-job. Some tenure-track faculty and industry employees regularly contribute to publications and websites. Even though this type of writing is not part of their full-time job, and not their primary source of income, many scientists enjoy having an outlet for their perspective with a broader audience than academic journals. Since journalism is a competitive industry, writing as a secondary vocation can be a way of balancing interest in writing with making a living.

In writing careers, it’s very important to connect with professionals in the field and to demonstrate a body of work. Take the time to network, find your niche, build an audience, and compile a writing portfolio on a blog or personal website.

Explore The Variety of Career Paths With These Example Fields & Roles

Look up these titles or fields on http://www.indeed.com/ or LinkedIn to learn more about what projects they work on and what skills are needed. This information is also useful when writing your application documents and preparing for interviews.

**Publishing**

- Writer
- Science Writer
- Editor
- Science Communicator
- Scientific Illustrator

**Nonprofits**

- Press Package Writer
- Science Content Specialist
- Communications Outreach Administrator

**Self-Employment**

- Freelance Writer
- Contributor

**Research & Development**

- Communications Associate
- Science Writer
- Science Editor

Should You Pursue an Advanced Communication or Writing Degree?

Some universities offer master’s degree programs

- UC Santa Cruz Science Communication Program, http://scicom.ucsc.edu/
- MIT Graduate Program in Science Writing, http://sciwrite.mit.edu/

A master’s degree can be a useful credential in the competitive market for full-time writing jobs, but it is not necessary for part-time or freelance writing.

An established body of work and audience are more important than degrees.
Compare Different Science Writing and Journalism Organizations

* = in the Raleigh-Durham area; # = history of sponsoring visas from myvisajobs.com

Search LinkedIn or Google Finance for these employers, and look for the section on related companies to help you identify others.

**Nonprofits**
- AAAS
- American Society for Cell Biology
- WestEd#
- Wistar Institute#

**Academic Journals**
- Journal of Visualized Experiments (JoVE)
- Nature
- Wiley#
- Pearson Education#

**Higher Education**
- University/college news office#
- Public relations offices#

**Research & Development**
- Seagate#
- Illumina#
- Altarum Institute
- Fluke#

**Medical Centers**
- Sloan Kettering#
- Johns Hopkins Health System#
- Duke University Medical Center**#

**Government & National Labs**
- Smithsonian Institution#
- Oak Ridge National Lab#

**Consulting**
- Scientific Consulting Group
- Ripple Effect Communications
- IQ Solutions

**Publishing**
- American Journal Experts#
- Discover
- Popular Mechanics

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**Read Additional Science Writing and Career Resources**

Read through a guide to careers in science writing from the Council for the Advancement of Science Writing
http://casw.org/casw/guide-careers-science-writing

Read the Science Writer’s Handbook
https://www.amazon.com/Science-Writers-Handbook-Everything-Publish-ebook/dp/B00C0JDFME

Take advice from Carl Zimmer
http://carlzimmer.com/writers.html

Read stories of graduate students who have become science writers

See writing advice from professionals
http://www.theopennotebook.com/

Learn about the skills required and employment trends for these positions
https://www.onetonline.org/

Science writing panel discussion and professionals’ career stories on Versatile PhD
https://gradschool.duke.edu/professional-development/access-versatile-phd

Video of science writing panel discussion at Duke
https://www.youtube.com/user/DukePostdocServices

Follow these Twitter accounts
@fenellasanders, @WhySharksMatter, @neiltyson, @TheScienceGuy, @wired, @NatureChemistry, @AboutPhysics, @elakdawalla, @foodimprover, @leonidkruglyak, @EricTopol, @deepseanews, @ElizKolbert, @helenbranswell, @laurie_garrett, @aetiology

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*Duke Career Center • studentaffairs.duke.edu/career • 919-660-1050 • Bay 5, Smith Warehouse, 2nd Floor • 114 S. Buchanan Blvd., Box 90950, Durham, NC 27708*
Meet Science Writing Professionals to Talk About Opportunities and Their Careers

National Association of Science Writers, https://www.nasw.org/
Science Communicators of North Carolina, http://sconc.org/

Become active on Twitter
- Read through the Scientists on Social Media issue of ASBMB Today, http://www.asbmb.org/asbmbtoday/201609/SocialMedia/
- Tips from a AAAS conference discussion, https://www.elsevier.com/connect/how-to-use-social-media-for-science
- Build an audience for credibility with employers
- Contribute to conversations on large issues in your field

Contact Duke alumni and other professionals in science writing for informational interviews
- Alumni on LinkedIn (use the Find Alumni tool under My Network)
- LinkedIn Groups: Science Writers, Freelance Science Writing

Build These Specific Skill Sets and Highlight Them When Applying

We summarized these skills from conversations with professional science writers. Particular jobs may not require all of these skill sets, so find out from online resources and professionals you meet which of these skill sets are most relevant.

Knowledge base
- Broad understanding of scientific topics
- Specific niche areas of interest
- Stay up-to-date with new and promising research

Investigate
- Read primary and secondary literature
- Confer with experts
- Interview professionals

Project management
- Flexibility
- Keep calm when difficulties arise
- Meet tight deadlines

Managing people
- Enforcing deadlines, encouraging contributions, contacting experts
- Building rapport
- Collaborate with writers, editors, art directors, etc.

Communicate
- Engage diverse audiences
- Edit
- Proofread
- Experience with different writing forms
- Familiarity with common style guides and publications’ style sheets
- Integrate multiple types of media to complement the story
- Write ledes to draw the reader into the story
- Structure story into digestible segments
- Understand the reader's perspective for providing context and challenging misconceptions
- In an editing test, be aggressive to point out holes in the story, compile questions for the author, and show off what you know
- Plan how main text coordinates with insets, pullquotes, text boxes, graphics, social media, captions, subheadings, etc.
Gain Experience
You can gain experience in many ways that involve different amounts of time investment.

Apply for science writing fellowships and awards
http://casw.org/casw/fellowships-and-awards

Read through the Duke Scientific Writing Resource
https://cgi.duke.edu/web/sciwriting/

Attend a seminar or workshop at Duke taught by George Gopen on "Writing From The Reader's Perspective"

Contribute writing to the Duke Chronicle or other publications at Duke such as Duke Magazine
  • http://www.dukechronicle.com/page/join-us
  • https://dukemagazine.duke.edu/

Communication training on environmental topics at COMPASS
http://www.compassonline.org/

Read through Annual Reviews for latest trends in different fields
http://www.annualreviews.org/

Professional organizations often host publications and web content, such as IEEE Spectrum
http://spectrum.ieee.org/

Read broadly and critically to learn how writers tell a story and how it is presented

Attend conferences to learn about latest research, emerging ideas, and influential scholars

Build relationships with writers and journalists to increase your exposure and diversify your network

Participate in ComSciCon Triangle workshops
http://comscicon.com/

Volunteer at the Duke News Office or the Nicholas School News Office, especially if you can present an idea for a story you want to write
  • http://newsoffice.duke.edu/
  • https://nicholas.duke.edu/news

Participate in online courses on Poynter News U
https://www.newsu.org/

Follow trends in journalism at Nieman Lab
http://www.niemanlab.org/

Blog to practice writing, find your voice, and present a portfolio of your work
  • Write in different formats on diverse topics to show breadth of experience
  • You do not need to wait for someone to offer you a writing project
  • Create a social media presence, especially on Twitter, to start building up your readership
  • Contribute as a guest blogger for blogging networks such as SciLogs, http://www.scilogs.com/
  • Approach researchers and other experts for conversations and interviews for an in-depth understanding of a topic
  • Publish content regularly (monthly is an appropriate pace for beginners)
  • Comment on and curate others’ work in the field
    • See blogging platform sites such as Medium, https://medium.com/

Pitch a story to a publication for freelance writing experience
  • Read the publication and take note of their style, structure, content, and tone
  • Make a personal connection to the editor through networking
  • Convince the editor that the story is important and that you are the person to write it
  • Provide a short layout of the proposed article
  • Start with lede to capture their attention
  • List the people you will talk to or interview, especially if you’ve already connected with them
  • Suggest artwork beyond a Google search even if you don’t currently have permissions
  • Propose multimedia options that can complement the piece
Science Writing and Journalism Job Search Tools

Consider the common skills required by jobs and internships.

National Association of Science Writers Job Boards
  https://www.nasw.org/

CareerConnections, jobs and events hosted by the Duke Career Center
  https://studentaffairs.duke.edu/career/online-tools-resources

Upwork, freelance job database
  https://www.upwork.com/

Indeed, Job search tool with filtering and search agents
  http://www.indeed.com/