

# **Ph.D. Career Overviews**

## **Medical Writing**

**Johns Hopkins Medical Institute  
Professional Development and Career Office  
(PDCO)**

**1830 East Monument Street**

**Suite 2-107**

**Website: <http://pdco.med.jhmi.edu>**

**Make an appointment to develop a career strategy  
and optimize your job search tools**

## **Medical Writer**

### **PhD Career Insights**

#### **What will you do?**

Medical Writers use their scientific background and excellent communication skills to help share scientific knowledge with both expert and non-expert audiences. This highly varied career has options for those who want to write for a specialist audience as well as a lay audience.

#### **What are the day-to-day responsibilities?**

- Writing for scientific/medical audiences or for lay audiences
- Authoring research posters, abstracts, and papers; literature reviews; white papers; and monographs
- Preparing documents for regulatory authorities (FDA, notified bodies)
- Authoring research protocols
- Writing medical device instructions for use
- Writing press releases, marketing brochures, or advertising copy for medical device and pharmaceutical companies
- Editing for content, style, grammar, or fact-checking
- Designing educational materials for patients or continuing medical education courses
- Authoring books or textbooks
- Writing online content for blogs, e-learning, or company websites
- Making training materials for sales representatives
- Researching and authoring news articles on scientific and medical topics
- Working with engineers or bench scientists to help communicate their knowledge
- Using project management skills to balance workload, scope, cost, and scheduling needs
- Performing systematic literature searches using PubMed and other research-focused search engines
- Reading scientific and clinical research papers and summarizing their content for non-experts

#### **Where would you work?**

- Freelance
- Clinical/contract research organization (CRO)

- Medical device company
- Media outlet that covers health news (newspaper, magazine, website)
- Medical education company
- Public health organization
- Pharmaceutical company
- Medical or research non-profit
- Continuing medical education company

### **What skills are required?**

- PhD or MD with writing experience, or a journalism degree with a science background
- Medical or technical writing degree or certificate are beneficial
- Love of writing and ability to translate complex ideas into simple, clear language
- Excellent command of English grammar and style rules
- Understanding of drug approval process and ability to interpret clinical trial data
- Project management skills
- Ability to work in a variety of writing environments (Microsoft Word/PowerPoint, Adobe FrameMaker and other XML-based authoring systems, websites and HTML-based authoring systems)
- Ability to edit your writing and others' writing
- Good time management skills and ability to juggle multiple assignments simultaneously
- Networking skills to seek out and meet new clients (if freelance or consultant)
- Knowledge of medical and scientific terminology

### **What is the salary range?**

- Entry-level salary - \$60K
- Average salary - \$70-\$90K
- Experienced or senior-level salary - \$90-\$110K
- Average salary in PHARMA is \$110K

*\*Note: although similar, "medical writer" positions usually pull in a higher salary than "technical writer" positions, even though technical writers can work in the medical field. This reflects the assumption that a medical writer has more specific education in the science or medical field, possibly an advanced degree.*

## Where can I find out more about Medical Writing careers?

- [American Medical Writers Association – Toolkit for new Medical Writers](#)
- [Science Careers – Working as a Medical Writer](#)
- [Perspectives in Clinical Research – How to Become a Competent Medical Writer?](#)
- [Science Careers – Careers in Medical Writing: Opening Doors](#)
- [About.com – Medical Writer – Overview of Medical Writing Careers](#)
- [Dr. Sarah McKay – Medical Writer blog](#)
- [Medical Writer blog – Medical Writing Programs: Are They Worth It?](#)
- [Emma Hitt Nichols, PhD – Medical Writers SPEAK podcast](#)
- [Writer Access podcast](#)
- [How to Get a Job in Science Writing video, NIH, OITE](#)
- [Nature Jobs blog – Getting an internship in science journalism](#)
- [Meet Rajendrani Mukhopadhyay, science writer for ASBMB Today](#)

## How can I improve my writing?

- There are some sources on-line that can help improve your writing. We recommend you enhance your skills and seek feedback on your writing before starting a blog or contributing content that will be in the public domain and represent your writing “Brand”.
  - <https://cgi.duke.edu/web/sciwriting/index.php>
  - <https://owl.english.purdue.edu/owl/resource/681/01/> hosts a long list of topics from transitions to conciseness and has a section specifically targeted at medical writing.
  - Gopen, G.D., and Swan, J.A. (1990) [The Science of Scientific Writing](#), American Scientist 78: 550-558.
  - Scientific Writing Easy When You Know How by Jennifer Peat [http://www.gekko.ro/files/Scientific\\_writing.pdf](http://www.gekko.ro/files/Scientific_writing.pdf)
- Consider more formal training such as a degree or certificate. Johns Hopkins has both an MA in Science Writing and a Graduate Certificate in Science Writing (classes are fully online). The University of Chicago Graham School of Continuing Liberal and Professional Studies offers a Medical Writing and Editing certificate, and MIT offers a one-year Master’s degree program in Science Writing.

- Johns Hopkins Center for Leadership Education offers writing courses tailored for International Students: Research Writing for International Students and Professional Writing and Communication for International Students.

## **How can I gain skills and experience for a career in Medical Writing?**

- Find opportunities to practice medical writing to build your portfolio of writing samples, or “clips.” Determine what sort of medical writing suits your skills and your passion (expert audience or lay audience, print or digital media, etc.). It’s good to experiment with different types and gain experience in multiple areas.
- Learn how to use software such as Adobe FrameMaker or how to write in XML or HTML.
- Learn how to perform a systematic literature search using PubMed, Google Scholar, or other medical and scientific search engines.
- Build knowledge about the clinical research process – how to design, register, run, monitor, and publish a clinical trial
- Familiarize yourself with the types of documents needed for a regulatory body, such as Investigational New Drug applications, 510(k) applications, Premarket Authorizations, Clinical Evidence Reports, and Technical Files.
- Practice writing about your own research for different audiences, including expert scientist, non-expert scientist, and lay audiences
- Edit research paper manuscripts for your classmates or lab-mates, or by working with a company such as American Journal Experts.
- Start a blog or podcast where you talk about interesting science and medical research

## **Where can I find Medical Writing internships or fellowships?**

- Sometimes, the Johns Hopkins Office of Media Relations or the American Society for Biochemistry and Molecular Biology will take interns on a case-by-case basis. Contact the editor or director to inquire about opportunities.
- Local non-profits for diseases, including the Sickle Cell Disease Association of America (SCDAA) will sometimes hire interns to manage web content such as Twitter or Facebook feeds. Contact SCDAA to inquire about opportunities.
- The National Cancer Institute offers a [Health Communications Internship Program](#).
- Consider the [AAAS Mass Media Fellowship](#).

## Johns Hopkins Medical Institute Professional Development and Career Office

- The National Association of Science Writers offers an [internship fair and a mentoring program](#).
- [Science News Internship](#) offered by the Society for Science and The Public.
- The Economist offers the Richard Casement internship to work on the newspaper in London writing about science and technology. It is advertised in January each year.

### **What professional organizations can I join?**

Join a professional society as a full student member (most have reduced pricing and/or scholarships available for fledgling members) to connect with other medical writers and gain access to resources such as members-only articles, job postings, email lists, and more.

[American Medical Writers Association](#)  
[National Association of Science Writers](#)  
[Society for Technical Communication](#)  
[DC Science Writer's Association](#)

### **LinkedIn Groups**

[Medical Writer Jobs & Editor Jobs](#)  
[AMWA LinkedIn group](#)

**Strategic Checklist for Medical Writing Careers**

Strategic Task	Check one or more	Details	Date
Confirm medical writing careers is the right career.	<ul style="list-style-type: none"> <li>• Informational interviews with medical writers</li> <li>• Attending career talks or panels by medical writers</li> </ul>		
Optimize writing through coursework, reading and practice	<ul style="list-style-type: none"> <li>• Attend on-line course (AMWA)</li> <li>• Attend course on campus</li> <li>• Read publications</li> </ul>		
Build expertise in software	<ul style="list-style-type: none"> <li>• Adobe Framemaker</li> <li>• HTML</li> <li>• XML</li> </ul>		
Gain experience editing	<ul style="list-style-type: none"> <li>• Lab</li> <li>• Colleagues</li> <li>• Journal reviewer</li> </ul>		
Understand regulatory affairs and clinical trials	<ul style="list-style-type: none"> <li>• Take course on campus</li> <li>• Take on line course (FDA/AMWA)</li> </ul>		
Gain experience writing	<ul style="list-style-type: none"> <li>• Start a blog</li> <li>• Write for scientific society</li> <li>• Write for <i>Biomedical Odyssey</i></li> <li>• Complete internship or fellowship</li> </ul>		
Network	<ul style="list-style-type: none"> <li>• Join societies and attend meetings</li> <li>• Connect with alumni who are science writers</li> <li>• Join LinkedIn medical writing groups</li> </ul>		
Optimize job tools for medical writing career	<ul style="list-style-type: none"> <li>• Optimize resume</li> <li>• Develop writing portfolio</li> <li>• Optimize cover letter</li> <li>• Identify target companies to work for and apply</li> </ul>		

