STUMBLE THROUGH THE JUNGLE
A NONLINEAR PATH TO MEDICAL WRITING

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OVERVIEW

Nonlinear Careers: How did I get here?

Medical Writing Careers: How do I become a successful Medical Writer?

Summary: Lessons Learned and Q&A
NONLINEAR CAREERS

How did I get here?
PFF...An Engineering Perspective

A basic path for a career in academia:

- **PhD**
  - Entry level position directly from PhD or industry

- **Assistant Professor**
  - Requires previous experience as a professor or comparable non-academic experience

- **Associate Professor**
  - Requires previous experience as a professor or comparable non-academic experience

- **Tenure**
TRADITIONAL MODELS OF PHD CAREER PATHS: PIPELINE MODEL

Via https://www.researchgate.net/figure/The-standard-scientific-career-pipeline-The-pipeline-includes-formal-scientific_fig1_325880254
TRADITIONAL MODELS OF PHD CAREER PATHS: PIPELINE MODEL

Where will a biology PhD take you?

A faculty job is an “alternative” career.

At this rate, ~48% of entering PhD students will become tenure-track faculty. Yet, 52% rank research professorships as their most desired career.

86,000 current US biology PhD students

37-68,000 current postdocs

29,000 current tenured and tenure-track faculty

17,000 current bio PhDs doing non-science jobs

22,500 current industry researchers

7,000 current grant researchers

Every year, 16,000 students start biology PhD programs

9,000 receive PhDs

70% (5,800) postdocs

70% leave the US

7.0 years

average time to degree

37% drop out

15% of postdocs get tenure-track faculty jobs within 6 years post PhD

10% of former postdocs suffer from PTSD

20% get non-tenure track academic jobs within 6 years post PhD

12% of former postdocs (up from 2% in 2010) consider themselves unemployed

10% of former postdocs (up from 2% in 2010) consider themselves unemployed

Sources:
1. Science Careers Inside Professoriate Survey (2013) http://www.sciencemag.org/content/341/6145/947.2
3. http://www.sciencemag.org/content/341/6145/947.2?ajac=sci@10.1126/science.1236694

Via http://thegradstudentway.com/blog/?p=2153
NONLINEAR CAREERS: WHAT REAL WORLD EVIDENCE SHOWS US

Via https://blog.talentcollective.co/how-non-linear-career-paths-are-the-new-norm-8975782544a7
People are not pathways

Life is messy

- Career needs change due to family structure, caretaking, health, geographic motility, etc.

Desired skillsets overlap greatly between job sectors

- Fundraising/budgeting, communication, analytical thought, project/program management, teamwork, leadership, etc.

Employer needs are rapidly changing

- Less-stable advancement pathways
- Cross-sector collaboration
- Advancing technology

Nonlinear careers are becoming the new normal

- “While the BLS estimates that baby boomers hold an average of 11 jobs during their working adulthood, millennials, many of whom entered the job market in the shadow of the Great Recession, might be on track to switch not only jobs but entire career trajectories at an even higher rate.”

WHY ARE YOU TELLING ME THIS?
MY NONLINEAR CAREER PATH

BA (MA?): Pre-Ed.
Postdoc: Cancer Pharmacology
Lab Tech
PhD: Cancer/Mol. Bio
QC Editor
Scientific Writer – Preclin.; Pharma
Quality Control (QC) Editor
Medical Writer – Reg.; Medical Devices
BioScribia
Owner/Operator
Sr. Medical Writer – Reg.; Medical Devices
JOJ
Medtronic

Medical Writing

Career Stage

Academia

Government

Industry
MEDICAL WRITING CAREERS

How do I become a successful medical writer?
**WHAT IS A MEDICAL WRITER?**

- Preclinical/Clinical – Study Reports, Manuscripts, Presentations, etc.
- Grantwriting
- Technical Writing – User Manuals, SOPs, Safety Documentation, etc.
- Regulatory – Performance/efficacy and safety evaluations for governing bodies (e.g., FDA, EU)
- Educational – CME materials for medical professionals

**A group of careers**

<table>
<thead>
<tr>
<th>In any sector</th>
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<tbody>
<tr>
<td>Industry – Tech, Pharma, Device</td>
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<tr>
<td>Government</td>
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<tr>
<td>Academia</td>
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**With multiple advancement opportunities**

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<th>Regulatory Body Work</th>
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<td>Management/Executive Leadership</td>
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<td>Business Owner</td>
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<td>Grants Administration</td>
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<td>MSL</td>
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**What is being a medical writer like?**

- I get to help people
- I get to be a geek
- I get to see the fruits of my labor within my lifetime (and usually in under a year)
- I have an independent schedule (in general)
- I have life-work balance (in general)

**Working in industry**

- The work is streamlined
- I have opportunities for skill/career development
- My results are frequent and tangible
- I have a team that wants to succeed together
<table>
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<tr>
<th>Skills Most People Think Medical Writers Have</th>
<th>Skills Medical Writers Really Have</th>
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<tbody>
<tr>
<td>Reading, Writing, and Editing</td>
<td>Reading</td>
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<tr>
<td>Adaptability</td>
<td>Writing</td>
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<td>Analytical Skills</td>
<td>Editing</td>
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<td>Attention to Detail</td>
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<td>Collaborative Attitude</td>
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<td>Creativity</td>
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<td>Decision-Making</td>
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<td>Multitasking</td>
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<td>Strategic Thinking</td>
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<td>Independent Capability</td>
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<td>Project Management</td>
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<td>Stakeholder Management</td>
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<td>Time Management</td>
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<td>Self-Learning</td>
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<tr>
<td>Ability to Handle Emails</td>
<td>Ability to Handle Emails</td>
</tr>
<tr>
<td>A LOT of Emails</td>
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**WHAT SKILLS DO MEDICAL WRITERS NEED?**
THAT SEEMS LIKE A LOT.

Your doctoral and postdoctoral work prepare you for much of this

<table>
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<tr>
<th>Independence</th>
<th>Multitasking and time management</th>
<th>Analytical and strategic thinking</th>
<th>Synthesizing information from data and written sources</th>
<th>How to precisely and accurately present answers to scientific questions</th>
<th>How to manage expectations</th>
<th>...and probably managing lots of emails</th>
</tr>
</thead>
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And you can develop further in academia with a little extra effort

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<tr>
<th>Collaboration and teamwork – work with people outside your academic circles</th>
<th>Mentoring and leadership – ask for these opportunities and have conversations with other mentors</th>
<th>Writing and editing – help others with their manuscripts; apply the AMA Manual of Style to everything you write</th>
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WHAT ELSE DO I NEED TO PREPARE TO TRANSITION?

• Understand business communication and culture
  • Solution- and deliverable-oriented
  • Team-focused
  • Deadline-driven
  • Email etiquette
  • Professional Communication

• Learn basic project management skills
  • Free course

• Additional learning opportunities about medical writing careers and skills
  • Free: Ultimate Guide to Becoming a Medical Writer; AMWA blog
  • Not Free: AMWA online learning
OK BUT HOW DO I FIND AN ACTUAL JOB?

- Look for entry-level jobs
  - Titles: medical writer, technical writer, scientific writer, editor, etc.
  - Good sites: Indeed, LinkedIn, AMWA jobs board
- Contract part-time for ESL editing companies
- Work your network
- Be patient
  - Entry-level industry jobs are few and far between
  - A job that includes an opportunity to develop writing further may be a good steppingstone (e.g., working in a grants office, a scientist role that involves writing study reports)
- Starting out independent is very difficult
SUMMARY

LET ME EXPLAIN.

NO, THERE IS TOO MUCH.
LET ME SUM UP.
LESSONS LEARNED

• Believe in and take responsibility for growing yourself. No one cares about your career more than you do – not even your mom.

• It’s not always easy, but sometimes it is.

• Industry gets a bad rap – any environment can be toxic.

• Listen to your gut and pay attention to pink flags.

• Setting boundaries is very important.

• Feedback is essential, even when it’s harsh.
CONTACT

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• Reference this talk so that I have context
• It may take me a few days to respond