Careers in Medical and Scientific Writing

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Agenda

- Introduction to ProEd
- Introduction to medical and scientific writing
  - Career options
  - Work product examples
- Qualifications, experience, and training
- Resources
ProEd: Who We Are

- Founded in 1991
- Fully integrated health science communications company
- Headquartered in Beachwood, Ohio
- ~80 employees with diverse perspectives
- Domestic and global execution
The Healthcare Consultancy Group

Omnicom Group

Diversified Agency Services (DAS)
> 160+ marketing services and specialty communication companies

- A&P
- PR
- Branding
- DTC/DTP
- Medical education

Hyphen

HC Consulting Group

ProEd

KPR
Why Consider A Career In Medical Writing?

- Work is engaging
  - Diverse exposure to therapeutic areas
  - Cutting edge drug development
- Lucrative and in high demand
- See the world
Prague, Czech Republic
Career Options

- Scientific communications / medical education
- Pharmaceutical industry
- General science or medical publications industry
- Advertising
- Freelance writing
Medical Writing Opportunities Within the Pharmaceutical Industry

- Scientific communications
  - Manage publications plans
  - Develop manuscripts, abstracts, posters
  - Medical education

- Medical promotion

- Regulatory
  - Develop clinical study reports (CSR)
  - Write new drug application (NDA) documents
  - Support preparations for FDA meetings such as advisory committee meetings (ACM)
Portugal

Lisbon

Porto
What is medical writing all about?
Publications

- Manuscripts
- Congress activities
  - Abstracts
  - Posters
  - Oral presentations
  - Booth materials
Supportive Publications Services

- Strategic literature analyses
- Congress intelligence
- Ad hoc scientific analyses
- Interactive CD-ROM bibliography
- Supplements
- White papers
Medical Education

- Corporate-sponsored symposia at medical congresses
- Speaker training
- Speaker bureau
- Slide libraries
- Website content
  - Key opinion leader portals
- Monographs
Education Materials
Slide Libraries

Endothelin-1-like Immunoreactivity in Lung Tissue (Normal Versus PH Tissue)

- Normal lung tissue
- Plexogenic pulmonary arteriopathy
- Secondary PH

PH = Pulmonary hypertension
Adapted and reproduced with permission from the New England Journal of Medicine, 01993.

Survival Evidence: All Tumor Types
Bone
Survival in all tumors
Antitumor

Emotional
Independence
- Bone
- Anti-Tumor
- Emotional
- Fracture/SREs
- Bone markers

ProEd Private & Confidential
Web Portals
Pharmaceutical Company Training and Information Services

- Sales representative training manuals
- Medical science liaison (MSL) materials
  - Training
  - Physician education
  - Question and answer documents
- Reference libraries
Regulatory

- Clinical trial protocols
- Investigators brochure and updates
- Regulatory documents
  - Clinical Study Reports (Phase I-IV)
  - Integrate safety summaries
- Patient narratives
- Policy documents
- Submissions (investigational new drug application)
- IND and NDA annual reports, amendments, supplements
- Advisory committee preparation
  - FDA advisor briefing book
Promotion

- Newsletters
- Patient education materials
- Public relations materials
- Advertising copy for pharmaceuticals and other products
- Internet content
- CDs
- Magazine articles - popular press
- Detail aids
- Launch materials
Who Does What In The Agency World?

Promotion

Advertising Agency
- Advertising
- Trade press

Full Service Medical Communications
- Sales aids
- Training materials
- Booth materials
- Drug development strategy
- Publications
- Congress materials
- Advisory boards

Legal / Regulatory

Clinical Research Organization
- Regulatory consulting
  - Health economics
  - research and pubs
- Clinical study reports
  - IND
  - NDA
  - BLA

Sales aids
Training materials
Booth materials
Drug development strategy
Publications
Congress materials
Advisory boards
Regulatory consulting
Health economics
research and pubs
Clinical study reports
IND
NDA
BLA
# Medical Writing Services: ProEd

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<td>- Scientific content development</td>
<td>- Meetings</td>
<td>- Market shaping &amp; preparation strategy</td>
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<td>- Scientific animations</td>
<td>- FDA advisory committee</td>
<td>- HCP promotional education</td>
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<td>- Interactive education solutions</td>
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<td>- Disease backgrounders</td>
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<td>- Scientific research support</td>
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<td>- strategy</td>
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Medical expert relationships                                    High science
Select Client List

- adolor Corporation
- PDL BioPharma
- AMS Solutions for Life
- Abraxis BioScience
- Medtronic
- centocor
- Pfizer
- Gilead
- AMGEN
- Schering-Plough
- GSK GlaxoSmithKline
- Nycomed
- Genentech
- Johnson & Johnson
- Ortho Biotech
- Novartis
- McNeil
- CV Therapeutics
- King Pharmaceuticals
Barcelona, Spain

Sagrada de familia

Gaudi

Park Güell
How do I get there from here?
Qualifications

- Attention to detail - thorough and accurate
- Good communication skills (written and verbal)
- Ability to write well and tailor information to specific audiences
  - Clear, concise
  - Logical story flow
- Ability to work with team members of diverse educational backgrounds
- Ability to work independently (often remotely)
- Deadline oriented
- Good organization and management skills
Education and Training

- Education level parallels job requirements
  - BS or MS
  - PhD
    - Often requires 1-2 years postdoctoral training
  - PharmD
  - MD
- Excellent software skills
- May require testing or additional training
Training and More Information

- Read medical and pharmaceutical journals
- Subscribe to online newsletters (e.g. National Center for Education in Maternal and Child Health)
- Study basic statistics
- Obtain and be familiar with style guides and medical dictionaries (e.g. AMA)
- Familiarize yourself with FDA guidelines
- Gain software skills (MS Word, PowerPoint, Excel)
Training and More Information

- Complete a course in pharmacology
- Enroll in AMWA’s continuing education certification program
- Medical writing program through college or university
- Pharmaceutical Education & Resources Institute
- Pharmaceutical industry training courses
  - Focus on drug development and marketing
Choosing Between Freelance Writing and Industry (Pharma or Agency)

- Decision rests on
  - Experience
  - Financial and lifestyle needs
  - Tolerance for risk
  - Preference for team environment vs solo
  - Personal motivation and discipline
  - Industry trends and job market
Additional Resources


American Medical Writer’s Association
http://www.amwa.org

Links training, ethical publications guidance, medical writing resources...
Additional Resources

- Drug Information Association
  http://www.diahome.org/DIAHome

- Pharmaceutical Education & Resources Institute
  http://www.peri.org/become_faculty.cfm

- National Association of Science Writers
  http://www.nasw.org

- Pharmaceutical regulatory affairs training
Additional Resources

- Center for Professional Innovation and Education (Technical Writing for the Pharmaceutical, Medical Device, and Biotech Industries )
  http://www.cfpie.com


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