Exploring a Career in Medical Communication:

A Collection of Articles from the

AMERICAN MEDICAL WRITERS ASSOCIATION JOURNAL

The Resource for Medical Communicators

WHICH COMES FIRST: THE SCIENTIST OR THE WRITER?

By Sue Hudson, BA, Julie Gelderloos, PhD, and Michele Vivirito, BA

Medical Writing Associates, Simi Valley, California; Gelderloos Medical Writing, LLC, Boulder, Colorado; and Global Medical Affairs, Amgen, Inc., Thousand Oaks, California

The Maldive Shark

About the Shark, phlegmatical one,
Pale sot of the Maldive sea,
The sleek little pilot-fish, azure and slim,
How alert in attendance be.
From his saw-pit mouth, from his charnel of maw,
They have nothing of harm to dread,
But liquidly glide on his ghastly flank
Or before his Gorgonian head;
Or lurk in the port of serrated teeth
In white triple tiers of glittering gates,
And there find a haven when peril's abroad,
An asylum in jaws of the Fates!
They are friends; and friendly they guide him to prey,
Yet never partake of the treat–
Eyes and brains to the dotard lethargic and dull,
Pale ravener of horrible meat.

– Herman Melville[1]

Is Melville's work the philosophic musing of a writer with a fondness for the sea? Or is it the insightful record of a scientist's observations of the symbiotic relationship between the shark and the pilot fish?

Which comes first, the scientist or the writer? This question has drawn the attention of medical writers since the medical writing profession was born. Some argue that an education in the sciences provides the best background for a medical writing career, while others insist that the best medical writers are educated first in the humanities. For people who hire and train medical writers, the answer may shape the medical writing staff of a department or company.

An open session at the 2004 AMWA Annual Conference was the setting for a panel discussion on this important topic. That panel discussion, combined with the questions and comments of audience members, forms the basis of this article. Questions are posed by panel moderator Sue Hudson and answered by Julie Gelderloos, PhD, for the "scientist first" perspective and by Michele Vivirito for the "writer first" point of view. Sue earned her Bachelor of Arts (BA) degree in journalism from the University of Minnesota and worked as a technical writer and publications manager before beginning her medical writing career. Julie earned her PhD in cellular and developmental biology from the State University of New York at Stony Brook, where her dissertation research examined the signal transduction pathways of the hemopoietic growth factor interleukin-3. After completing postdoctoral research, she became a medical writer in the pharmaceutical and device industries. Michele earned her BA degree from California State University at Fullerton, with a major in sociology, a minor in English, and a credential in special education. Before becoming a medical writer, she spent 7 years teaching children with language handicaps.

THE PATH TO MEDICAL WRITING

Why does a person with your skills and interests choose to become a medical writer?

Julie: The decision to become a medical writer might be related to professional aptitude and preference as well as to more practical considerations. For example, I prefer the intellectual side of science more than the technical side and enjoy analyzing data more than generating it. I also enjoy writing and communicating; in fact, I considered studying journalism before I decided to go into the sciences. On the practical side, I can work as a writer anywhere, without regard to the location of the laboratory. It's also easier for a medical writer to have a life outside the laboratory— no feeding cells on weekends. Medical writing may also allow more control over career decisions and project scheduling than laboratory science does.

Michele: A medical writer trained in the humanities often identifies herself or himself first as a writer; the content of the writing may be a secondary consideration. Many believe that a good writer can write about any subject. For those of us with a humanities background, medical writing offers the satisfaction of being able to practice communication and research skills, along with the opportunity for life-long learning. In addition, medical writing is a profession that makes a real contribution to society—we can feel good about the fact that our work matters. While there are some writers who write to satisfy the need to express themselves, many others write because it feels good to do work that exercises their skills and stimulates their interests.

ADVANTAGES OF EACH EDUCATIONAL PATH

What are the advantages of a science education as preparation for a career in medical writing?

Julie: An education in the sciences helps a person develop a knowledge base that provides a foundation for any

medical or scientific specialty. People trained in the sciences understand experimental design and develop skills in the critical evaluation, analysis, and interpretation of data. They know how to pick out the important information from a scientific or medical article.

A scientific education also provides experience in writing scientific content. Proposals, theses, dissertations, journal articles, and reviews are a way of life for people in the sciences, especially at the postgraduate level. This work may also give a writer some credits as an author, as well as an understanding of submission requirements and the peer-review process used in medical publications. Another benefit of a science education is the development of skills needed to work with other scientists, who are often intelligent, demanding, and sometimes eccentric. As a medical writer, an advanced degree in science may also provide the credibility required to interact on a peer level with subject matter experts (eg, clinicians, research directors, and regulatory authorities). And finally, science is very deadline-oriented, which is great preparation for medical writing.

What are the advantages of a humanities education as preparation for a career in medical writing?

Michele: A humanities education helps a person develop a network of skills that are important to success in medical writing. These skills include reading and thinking critically, speaking clearly, and writing persuasively. With the Socratic method, a teaching style that is still used in the humanities, students learn to examine opinions and challenge assumptions by asking questions and thinking about the answers. They learn to see connections across academic disciplines and value what they can learn from people with different backgrounds; they also develop experience in brainstorming ideas. These are valuable skills for the medical writer who works on project teams.

A humanities education also teaches the ability to tolerate ambiguity and maybe even to delight in it. This kind of thinking is key to approaching dilemmas, including dilemmas in medical ethics, for which there are no obvious right answers. Humanities majors also learn to see the connection between abstract ideas and their application in daily life. We can develop a vision of a worthwhile life and imagine ways of achieving it. An important part of that process is the cultivation of a life-long practice of reading for pleasure. It's difficult to see how one can become a truly excellent writer without the habit of reading, and paying careful attention to, the writers universally acknowledged to be the very best at their craft.

LIMITATIONS OF EACH EDUCATIONAL PATH

Now that we've explored the advantages of each educational path for medical writing, let's talk about the limitations of a science or humanities education as preparation for a career in medical writing.

Julie: The way a scientist works is different from the way a writer works. People trained in the sciences are accustomed to working to academic research standards, where endless research and criticism are a way of life. Scientists also work very independently and have a great ego investment in their work, with the goal of publication and successfully funded grant applications. But these limitations are not career killers; once they are recognized, they can be overcome or leveraged in ways that are beneficial to a medical writer. One other limitation of a scientific education is that, in spite of a lot of writing experience, the focus of scientifically trained writers has largely been on the content rather than the presentation of written information; as a result, their writing skills may need some polish.

Michele: Medical writers trained in the humanities may have little or no academic foundation in science, and may be more comfortable with ideas than with data. For them, keeping up with the latest scientific advances will be more of a challenge than it is for their scientist colleagues. In addition, many humanities graduates may have absorbed the suspicion of science and technology that has so often been a theme in novels and short stories since the Industrial Revolution. There may be an intimidation factor, as well, based on limited early contact with scientists as teachers or as friends. Credibility may also be an issue; physicians, scientists, or writer-colleagues with PhDs in science may have trouble believing that an English or history graduate can be a competent medical writer. There are remedies for these limitations, though, just as there are for the limitations of a science education.

OVERCOMING LIMITATIONS

How do you overcome the limitations of your initial education?

Julie: A scientist needs to recognize that different standards apply to different medical writing tasks. A regulatory submission, a sales aid, and a trade journal article have different audiences and objectives, each with a different standard. While a writer needs to be analytical and critical, he or she also must understand that the work has to be completed with the data that exist. Whether the objective of the written piece is regulatory approval, education, marketing, or science, it is important to realize the writer's goal is to produce a good document that clearly and accurately describes the data. As a scientist first, you may need to suppress the urge to act as scientific advisor and the desire to suggest additional controls, new studies, or other analyses.

It may also be hard for writers trained as scientists to accept the fact that they will not ordinarily be named authors; however, they can take pride in their role as writers, contributing substantially to the successful commu-

nication of important information. They should also request published recognition for their writing contribution, as recommended by the AMWA Position Statement on the Contributions of Medical Writers to Scientific Publications.[2] It may also help scientists to remember that their projects are not dependent on funding fueled by a list of their authored publications; their writing *experience* is what employers will seek.

Working in teams may also take some practice for scientists accustomed to working independently. It's helpful to understand your own role on the team and to learn the functions of other team members so you can utilize their knowledge and strengths for the benefit of the project. When part of a team, you will also be appreciated much more if you learn to ask for help *before* a crisis occurs, and learn to delegate tasks for large projects.

Every writer's skills can be improved, and scientists are no exception. AMWA provides excellent resources, including its core, advanced, and noncredit courses and its books of Essays for Biomedical Communicators.[3,4] Style guides and reference materials such as *Dorland's Illustrated Medical Dictionary,*[5] *AMA Manual of Style,*[6] *The Chicago Manual of Style,*[7] *The CBE Manual for Authors, Editors, and Publishers,*[8] *How to Report Statistics in Medicine,*[9] and *Medical English Usage and Abusage*[10] are important resources. Study examples of good writing, analyzing what is effective. Reviewers' comments are also helpful in identifying weaknesses in your own writing style and understanding the standards that you are expected to meet. Practice writing, using your own academic research articles to create pieces for other audiences, such as a Web site or a trade magazine piece.

Michele: A writer educated in the humanities will need to work on the fundamentals of science by taking courses and reading science books and articles. It's important for writers to

TIPS FOR GETTING HIRED

FOR SCIENTIST-WRITERS

- See yourself as a medical writer, not as a failed researcher. Your research education and experience was the training that prepared you for the medical writing career you want. If you are asked why you left research, perhaps you might explain that you conducted research successfully and enjoyed the work but that your true talent is in writing.
- Project yourself as a can-do person who will do whatever the job requires. "I shouldn't have to..." must never cross your lips. (Some scientists may feel that administrative tasks often required in medical writing are beneath them—these people are less likely to be hired.)
- It may be helpful to write out, and then practice, a short speech explaining how your training and experience give you an edge in the job for which you're interviewing. Also be sure to convey energy and enthusiasm when explaining your skills and abilities; these attributes can often help compensate for "direct experience."
- Your resume for a medical writing job is different from the curriculum vitae (CV) you would use when applying for a research position. Keep it down to 1 or 2 pages—no long lists of appointments or every poster presentation ever given. A bibliography of first-authored or major publications is generally sufficient. (But it never hurts to have a complete bibliography available for an interview—see later.) Most importantly, stress your writing skills and relevant experience in the beginning of the resume.
- The resume and cover letter are the first writing samples a potential employer will see, so make them as close to perfect as you can. Have a very good writer or editor review your resume before you send it out. Also, try to customize the resume for each position you seek by highlighting pertinent experience or skills applicable to the job description.
- Assemble a portfolio of writing samples, including all your authored publications, presentation abstracts, slide packs, a grant proposal, the abstract of your dissertation, and Web articles. Put the samples into a nice folder with tabs, to show that you understand that presenting information effectively is what a writer does.

FOR WRITERS TRAINED IN THE HUMANITIES

- Experience matters; you will not be hired into a senior medical writing position in a major pharmaceutical or biotechnology company fresh out of school.
- A small organization with a limited budget may give you a chance to show what you can do. Talk to anyone you can think of who may know of a medical writing opportunity. Networking is extremely important in tapping what is often referred to as "the hidden job market."
- You may be hired as an editor. If so, capitalize on the opportunity. A department head who knows the value of a diverse staff may recognize your strong writing skills, provide training—perhaps even a mentoring relationship with an experienced writer—and promote you into a writing position after you learn the ropes.
- Look for opportunities to do the kinds of science or medical writing that others might avoid. Consider interning or working as a volunteer writer for a nonprofit organization involved in environmental or health care advocacy, and save your writing samples.
- Recognize that there are some managers who will never hire you because they believe that only a person with a science degree can do the work of their department. Don't indulge in hurt feelings—it's not about you.
- Get involved in your AMWA chapter, come to the AMWA annual conference, and meet people. Somewhere in AMWA, there are sure to be hiring managers or their staff who will think you are exactly right for their organization. They will recognize your commitment to medical writing by the fact that you care enough to advance your education, contribute to AMWA, and deliver on your commitments.

keep up with new developments in science and medicine, particularly in the specialty areas related to their work. For writing projects, form partnerships with content experts who can supplement your own background. Be honest about your background; don't pretend to have expertise that you don't have, and be realistic about what you can learn for a particular project.

A strategy that works for writers of any educational background is to play to your strengths. Use your interpersonal skills and be perceived as a resource for other team members. Negotiating and being intuitive are often strengths of people educated in the humanities; use these strengths to help the team through difficult times. Take responsibility for the words in the materials you write while acknowledging that the scientist, medical researcher, or other content expert owns the data. You can create your own niche in an organization or freelance writing business, taking on special projects that other writers may avoid. Examples are projects that require more advanced writing skill, such as a document for which an existing model is hard to find or one that requires something other than pure expository writing.

You can gain credibility with scientists and clinicians by being able to defend your writing and editing choices. Know the rules of grammar, so you can explain that the subjunctive mood is needed with a contrary-to-fact clause not just because "it sounded better." Have a medical reference library so you can check your facts, and read the literature of general and specialty medicine. Before a project team meeting, do your homework so you will understand what you hear and can speak with confidence.

WHICH COMES FIRST?

Either a science or a humanities education can be the foundation of a successful medical writing career. The scientist must be a skilled communicator, and the writer must have a keen interest in science and an aptitude for it. People from both paths should recognize the limitations of their own background and the strengths of the others'. A medical writing department with people from varied backgrounds has a richer mix of resources upon which to draw, matching people with tasks best suited to their talents and training.

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SCIENTISTS AND WRITERS IN AMWA

Among respondents to the 2005 AMWA Needs Assessment, 57% earned their highest degree in science or health care, including science, pharmacy, medicine, public health, or nursing. Approximately 32% earned their highest degree in humanities, including English, journalism, communication, or technical writing (see *page 116*). These results were similar to those found in the 2004 Salary Survey, in which approximately one half of respondents received their highest degree in science or health care, and approximately one fourth received their highest degree in humanities.[11] The Salary Survey did not analyze the correlation between degree type and salary.

Career Pathways in Medical Communication

By Deana G. Betterton-Lewis, BA

Medical Writing Department, Schwarz BioSciences, Inc., Research Triangle Park, NC

If you have a strong interest in science and a talent for writing, medical communication offers many career opportunities. A broad overview of the field was presented at the Scope of Medical Communication open session at the 2006 AMWA Annual Conference, where panelists representing various settings graciously shared their knowledge and experience. Lois J. Baker, MS, Senior Health Sciences Editor at the State University of New York at Buffalo, served as the moderator. Melissa L. Bogen, ELS, Bogen Editorial Services, shared insights from her experiences as a freelance editor. Lori De Milto, MJ, Writer for Rent, spoke about opportunities in freelance medical writing. Jane D. Stephenson, PhD, MBA, Bristol-Myers Squibb Company, provided a snapshot of the writing department at a pharmaceutical company, and Lili Fox Velez, PhD, Associate Professor, Towson University, spoke of her experiences working for medical communication companies. This article is based on the information presented during this session as well as on additional research and my own experience.

The demand for skilled writers and editors is high, as is the earning potential, and the work can be both interesting and challenging.[1] Medical writers translate medical and scientific information into prose, tables, and figures to produce documents and presentations for a target audience. Medical editors enhance the clarity and quality of material produced by medical writers and others.

Some medical writers may have advanced scientific or medical degrees and have worked as clinicians, pharmacists, or researchers; others may have degrees in English or journalism and have worked as technical writers, journalists, or editors.[2,3] My current coworkers include a physician, former bench scientists, nurses, clinical trials monitors, and recent graduates from postdoctoral programs, as well as medical writers with advanced degrees and years of writing experience. Before becoming a medical writer, I worked in the computer industry as a technical writer for 12 years.

What job opportunities are available in medical communication?

The career opportunities in medical communication are as diverse as the individuals: medical writer, science writer, video scriptwriter, medical editor, author's editor, copyeditor, editorial assistant, managing editor, publications manager, and public relations specialist, among others.[1,2]

What do medical communicators produce?

The products created or edited by professionals in medical communication include the following:[1,2,3]

- **Medical journalism**—articles for newspapers and consumer magazines, documentaries, and health segments for news shows
- **Publications medical writing**—manuscripts for scientific journals as well as abstracts and posters for scientific meetings
- **Regulatory medical writing**—research protocols, clinical study reports, investigational new drug applications, and investigator brochures for submission to regulatory agencies
- **Marketing writing**—press releases and advertisements for pharmaceutical companies or health care institutions
- **Academic medical writing**—grants and proposals for researchers at medical centers and academic institutions
- **Continuing medical education**—educational slide kits, print courses, lecture notes, symposia materials, and Web site content to maintain or increase the knowledge and skills of medical professionals
- **Patient education**—brochures, newsletters, and handouts for patients explaining medical procedures, conditions, or treatment options[1,2]

Who hires medical writers and editors?

Employment opportunities include positions at pharmaceutical companies, contract research organizations (CROs), academic institutions, medical centers, journals, newspapers, and medical communication companies.[1,2] Additionally, many medical writers and editors work as freelances, providing services to several different companies and working on a variety of projects.[1,2] Most freelance medical writers and editors work for pharmaceutical companies, CROs, or medical communication companies first to gain experience, network with colleagues, and build a list of potential clients before becoming consultants.[2]

What skills are needed to be successful in medical communication?

Qualified candidates should have excellent writing skills and a strong background or interest in science.[1,2] The ideal medical writer or editor is detail-oriented, proactive, well

organized, able to gather and synthesize data, knowledgeable about at least one therapeutic area, or interested in learning about new therapeutic areas or indications, familiar with relevant style guides or guidelines, and able to write appropriately for the target audience.[2] For jobs in the pharmaceutical industry, candidates must understand the drug development process. Project management skills are essential, because most jobs in medical communication involve setting schedules, orchestrating review cycles, and soliciting feedback from busy reviewers and authors.

How much can you earn as a medical writer or editor?
According to the 2004 AMWA salary survey, the average annual income for jobs in medical communication ranges from $50,000 to well over $100,000.[4] How much you can earn depends on several factors: your level of education, years of experience, and the type of company you work for (eg, pharmaceutical company compared with CRO).[4] Typically, the highest salaries are earned by those with advanced degrees and many years of experience who work for pharmaceutical, communication, or advertising firms.[4] (AMWA conducts a salary survey every 2 to 3 years, and one will be conducted this April, with the findings reported later in the year.)

How can you find the right job?
The opportunities in medical communication are almost limitless. For those new to the field or looking for a change, the key is finding the right fit. The answers to some specific questions may help you narrow down the choices:

- Which area of medical communication and which type of company are the best fits for your education, experience, background, and interests?
- Would you rather be writing for a lay audience or a scientific audience?
- Do you want to be involved in reporting the results of current research on new drugs?
- Is your interest in medical devices, biologic agents, or pharmacotherapy?
- Do you want to be part of an established medical writing department with clearly defined policies and procedures and experienced colleagues, or do you want the independence and responsibility of working for yourself?

To find your answers to these questions, start by networking with colleagues already working in the field. However, the answers to some questions may only become clear with experience.

My own transition to medical writing involved a series of steps over several years. After following the advice of a colleague and joining AMWA, I attended the local chapter conference, where I learned about medical writing and started networking with experienced medical writers and editors. I took an entry-level position at an academic research organization editing research protocols, manuscripts, abstracts, and Web site content. After gaining some experience, I worked on more challenging projects—writing abstracts, creating newsletters for clinical trial investigators, writing a patient education manual, and eventually editing an entire textbook. During this time, I obtained my AMWA core curriculum certificate and completed college courses in biology, chemistry, anatomy and physiology, pharmacology, statistics, ethics, medical terminology, clinical trials research and regulations, and protocol design. Then, a position that seemed like a great fit for me became available—editing manuscripts for a mid-size pharmaceutical company. After editing manuscripts for 6 months, I transitioned to publications writing. Now, I work with investigators and clinical development staff to prepare manuscripts based on the results of clinical trials.

To learn more about medical writing

- Read the essays on the scope of medical communication in AMWA's *Essays for Biomedical Communicators*[5,6]
- Take courses in medical writing at a local university or an online course offered by a remote university
- Join AMWA, attend chapter meetings, attend the national conference, and get involved
- Read relevant journals or magazines
- Take college courses in anatomy and physiology, pharmacology, and statistics
- Earn AMWA core and advanced curriculum certificates
- Review style guides and books on medical writing

To break into the medical communication field

- Seek internship opportunities within pharmaceutical companies or CROs, directly or through your university
- Apply for entry-level positions at CROs and academic institutions, which may be more likely to hire writers with less experience
- Apply for copyediting or proofreading positions at publishing companies or journal offices, which may be willing to hire less experienced editors with English or journalism degrees
- If you have a degree or background in English, apply for a copyediting position
- If you have a degree in journalism, try writing an article for a consumer magazine
- Volunteer to write a newsletter or Web site article or a patient education brochure for a hospital, university, or nonprofit institution (this will provide you with a writing sample, which is quite helpful)
- Take an AMWA workshop focused on the type of writing that you are interested in, such as writing articles for consumer publications, writing a clinical study report, or grant writing, to gain more knowledge and experience

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PROFESSIONAL DEVELOPMENT

AMWA offers a variety of opportunities for medical communicators to enhance their professional skills and knowledge. AMWA's educational program is a cornerstone of the association's commitment to providing high-quality continuing education for medical communicators. Individuals can earn a core curriculum certificate in 1 of 5 designated specialties and can also earn an advanced curriculum certificate. (*See page 52 for a list of AMWA members who earned a curriculum certificate in 2006.*)

AMWA also established the Professional Development Certificate (PDC) as a means for individuals to demonstrate a commitment to their professional development. Since the development of this program in 2004, several members have earned a PDC (*see page 53 for a list of recipients*).

Both the curriculum certificates and the PDC are open to nonmembers as well as members. Information about AMWA's education programs and certificates are available on the AMWA Web site (**www.amwa.org**).

Call for Short Stories
for the Prose for Papa Contest

If you write short stories, consider submitting them to the Prose for Papa competition, part of the third annual Ernest Hemingway Festival. The winner of the competition receives the following:

- Award of $500
- Recognition during the festival
- Publication of the story in the festival magazine

Submitted work must be original, unpublished short fiction (no longer than 2,600 words or 10 pages double-spaced). The deadline for submission is June 1, 2007. The stories will be judged by Daniel Orozco, featured writer on National Public Radio.

The festival will be held September 20-23 in Sun Valley, Idaho, where the legendary author hunted and wrote on and off for 22 years and where he is laid to rest. Designed to be a well-rounded celebration of the author's life in the Wood River Valley, the festival features include lectures and panel discussions by national scholars, a tour of Hemingway sites, museum displays, a film festival, and a "Hemingway in Idaho" slide presentation.

Send your entry, along with a nonrefundable $10 entry fee (made payable to SVKCVB), to

Prose for Papa
ATTN: Sue Bailey
PO Box 2420
Sun Valley, ID 83353

For more details on the competition and the festival, visit **www.ernesthemingwayfestival.org** or send an e-mail to proseforpapa@visitsunvalley.com.

Board of Editors in the Life Sciences (BELS) Certification Examinations

Sunday, April 15, 2007 1-4 PM Pacific Grove, CA (AMWA Northern California Chapter Conference) ➔*Register by March 25, 2007*	Friday, May 4, 2007 1-4 PM Seattle, WA (AMWA Northwest Chapter Conference) ➔*Register by April 13, 2007*	Wednesday, October 10, 2007 10 AM-1 PM Atlanta, GA (AMWA Annual Conference) ➔*Register by September 29, 2007*
Friday, April 27, 2007 1-4 PM Kingston, Ontario, Canada (AMWA Canada Chapter Conference) ➔*Register by April 6, 2007*	Saturday, May 19, 2007 1-4 PM Austin, TX (CSE Annual Meeting) ➔*Register by April 28, 2007*	**Contact:** Leslie E. Neistadt, ELS E-mail: neistadt@hughston.com Phone: (706) 576-3322 **www.bels.org**

Successful Medical Writing Job Interviews: An Insider's Guide

By Molly McElroy

University of Illinois, Urbana-Champaign

Extra copies of your error-free resume are neatly tucked into your portfolio, and your clean and ironed interview outfit is ready to be worn. It seems as though you've thought of everything in preparation for your interview. But yet, could you have missed something? Or is it just your nerves?

I spoke to 3 veteran medical writers—Barbara Snyder, Marianne Mallia, and Jim Yuen, who have conducted numerous job interviews—and to Heather Haley, who recently obtained a medical writing job. They shared their advice on how to succeed at medical writing job interviews.

BEFORE THE INTERVIEW

Make sure your cover letter, resume, or CV is flawless and appealing. "One grammatical slip or typographical error may not seem like much, but if you're being compared with folks who have none, it makes a difference," says Barbara Snyder, who has been the Section Head for Medical Writing at Procter and Gamble Pharmaceuticals for 11 years. James Yuen, the Associate Director of Global Regulatory Writing at Amgen, agrees. He notes that your cover letter and resume convey your attention to detail. In reviewing a cover letter, he assesses attention to detail by asking, Is the letter neat? Are there typos? How's the grammar? Is the letter concise? Is the letter easy to read or do you have to read and re-read sentences to make sense of it? Your resume or CV should also be visually appealing. "I can't tell you how many resumes I get that are visually unappealing," says Marianne Mallia, a medical writer at the Texas Heart Institute for 30 years. "I never interview those applicants, even if their qualifications meet the requirements," she adds.

Research the company or institution. "Check out the products we market within pharmaceuticals, and if we just bought or sold a product, ask about that," Snyder recommends. "Make it clear that you invested some time to make a good impression." Yuen adds, "They [interviewees] should be able to explain why they are interested in this particular job and explain why they are the right candidate for the job."

Document your previous work in a portfolio. "A portfolio is a must for any job-seeker, because it helps you quantify your job accomplishments," says Heather Haley. In December 2005, Haley started working at Eli Lilly in Canada after job searching for about 3 months. "While no one ever asked to see my portfolio, I would use it as a "prop" and purposely get the interviewers to look at it by using an example from the portfolio to answer their question."

Be prepared to answer lots of questions about yourself. "Usually we run through the candidate's CV, talking about interesting points and filling in gaps, particularly in work history and job responsibilities," Yuen says. "Questions then vary by interviewer but can cover interest in medical/technical writing, experience with regulatory documents, industry experience, team and interpersonal interactions, skills, and dealing with situations in the workplace."

Other questions that interviewers may ask are about short-term and long-term goals and how the applicants handle stress and deadlines, according to Mallia. "I always ask interviewees to give me specific examples of how they have handled difficult situations, clients, etc. I also ask about working conditions they need to do a good job." In addition, applicants may be asked about their strengths and weaknesses. "It's important to be genuine when assessing your weaknesses—it shows self-reflection and willingness to learn from mistakes," Haley notes.

Haley recounts 2 questions that took her by surprise during various interviews.

- What would your coworkers/ physician clients say about you?
- What is an example of a situation in which you disagreed with your supervisor?

Interviewers may be curious about how job candidates deal with interpersonal issues and difficult individuals. "This point is important since medical writers in this environment have to work with many others on teams to resolve issues with documents," Yuen says. Interviewees may be given hypothetical, challenging situations and asked what they would do. "Much of what we do revolves around getting people over whom we have no particular authority to do what we need, when we need it," Snyder explains.

Be prepared to ask questions. "Interviews allow candidates to size up the potential employer and the job," Yuen says. Interviewees can ask questions about how the company/institution is organized, the work environment, job expectations, what happens during a crunch time, how they will be evaluated, and how new employees are transitioned into the company. "Interviewees often are afraid to speak up in an interview, but they shouldn't be afraid to ask any question," Mallia recommends.

Be prepared to write or edit. Some institutions require their interviewees to take a writing or editing test. Haley took (and passed) writing tests as part of several interviews. "I liked writing tests since it gave me the opportunity to prove my skills," says Haley, who found that the best way to prepare for the tests was by taking some of the AMWA workshops on grammar and other writing mechanics. Some writing tests can take hours and are given prior to an interview, while other writing tests are given during the interview. For example, Mallia gives her candidates a 30-minute copyediting test on the same day as their interview.

DURING THE INTERVIEW

Present Your Best

How you present yourself to prospective employers is the most important aspect of a job interview. Create a positive impression by following the advice provided here.

Show your intelligence. "I look for someone smart, dedicated, flexible, independent, and personable who has the training or ability to do the job," says Mallia. How does she assess an interviewee's intelligence? She looks for the ability "to assimilate large amounts of new information quickly."

Earn points with honesty. "Be honest about accomplishments, without bragging, exaggerating, or taking credit for someone else's work," notes Snyder. "Be honest about areas where you know you have more to learn." Honesty is also important if you are asked about why you are leaving your current position. "Be honest about why you're looking for a different position," Snyder recommends. "But don't slam your current boss/company; remember that it's a pretty small industry and word gets around."

Dress appropriately. Appropriate attire for a job interview is a must. You should dress in traditional business attire; when in doubt, err on the side of conservativism. Men should wear a dark suit, with a pressed dress shirt and coordinating tie (nothing flashy). Women should wear a conservative dress or suit. "Attire, while not a measure of a person's competence, certainly helps make an impression," Yuen notes.

Overall, Snyder has these suggestions for creating a favorable impression during the interview.

- *Be upbeat.* A positive attitude goes a long way in an interview.
- *Show you have a sense of humor* (*if the occasion arises*). "Several years ago, I was interviewing someone and asked whether she had any special skills to bring to the job. She thought for a moment, and then she said she could clap with one hand—and showed me! (She ended up being one of my most successful new hires.)"
- *Relax and be yourself.* We know you're probably nervous, and that's OK, but don't let your nerves rule.
- *Be respectful of your audience.* Pay attention to what the interviewers are saying. Don't be too informal.

"The best interviews go smoothly," Yuen adds. "The candidate shows an interest in writing and in the job, has a CV that validates the interest, and presents an image that fits in with the department and the company culture."

Avoid Common Mistakes

The stress of a job interview can lead to some common mistakes that may work against you.

Don't overwhelm your interviewer with quirks. Everyone has a quirky mannerism (or two) or can have difficulty getting the right words out, especially in stressful situations such as job interviews. Lack of eye contact and distracting personality traits (fidgeting, shuffling through papers in a briefcase, coming on too strongly) are characteristics that Yuen can find disarming in some job candidates. "One candidate sat across the desk from me but seemingly with her face in my face," Yuen explains. "The candidate came on strong, leaving me very tired after that interview."

Don't be caught speechless. Having no questions for their interviewers was the most consistently cited mistake made by job applicants. "I realize that you're going to be taking in a lot of information, but your interviewers have taken some time out of their day and really want to give you information on which to base your decision about joining the company," Snyder says. To keep from being speechless, Haley brought along a typed list of questions on her interviews.

Don't forget self-confidence. Lack of self-confidence can also dissuade interviewers. "On my first interview I was told they liked me but that I lacked confidence," Haley notes. "Of course, my challenge was to not turn that into a self-fulfilling prophecy for subsequent interviews." She asked her former employer for feedback; the employer said that the speech patterns of some Midwestern women such as Haley can make their statements sound like questions. "I tried to be more conscious in subsequent interviews of my verbal patterns."

Yuen lists these other common mistakes made by job applicants.

- Appearing disorganized
- Not talking or talking nonstop (to the point that makes it difficult for the interviewer to talk)
- Constantly getting off the topic of discussion
- Providing irrelevant materials

AFTER THE INTERVIEW

Write thank-you notes promptly to your interviewers. Thank-you notes can be handwritten or sent by e-mail. However, Mallia notes, "I always like getting a handwritten thank-you note. It takes more thought and effort, and I want an employee who will go that extra mile. I want employees who know business etiquette, as they will be dealing with a variety of personality types in their job." Snyder agrees that a handwritten thank-you note is appropriate, but Yuen notes that thank-you notes by e-mail are becoming more common. In fact, a recruiter advised Haley to use e-mail to thank her interviewers. The key is for the interviewer to receive the note promptly, preferably within 2 business days.

Be patient. The time between the interview and a job offer can vary from days to months, and interviewees must be patient in following up after interviews. "Always remember to ask about the time frame for making a decision," suggests Haley, who was told that a decision would be made 2 weeks after her interview. When 2 weeks elapsed and she hadn't heard a response, Haley called to ask, "Where are you in the decision-making process?" She was told that they were still interviewing people and that they would be in touch in another 2 weeks. A week later she received a phone call with the job offer. Being proactive in following up can give you an edge, but if you overdo it by continually contacting the interviewer, you lose the advantage.

Ask yourself, "Do I really want this job?" In the interview, you need to assess if the work environment will suit you. "You're looking over a place and deciding if you want to work there as much as you're being examined," says Haley, who chose her job at Eli Lilly based in part on the company's support of a healthy work and personal life balance. Mallia suggests that interviewees look around for what's important to them during the interview. Do people look happy? Do they look stressed? Is it quiet? Are there offices? Will they be able to do their best work there?

"You have only a few hours to attempt to figure out if you would like a job you will spend 2,000 hours a year at," Haley says. "Get the information that is important to you."

Molly McElroy is a neuroscience graduate student at the University of Illinois at Urbana-Champaign and will soon be starting her own job search.

STRATEGIES FOR A SUCCESSFUL JOB SEARCH

By Heather Haley, MA

1 **Write down the characteristics of your ideal job.** Identify the intangibles that are important to you. Do you want a boss you can freely exchange ideas with or good camaraderie among co-workers? Is commuting time or minimal travel important to you?

2 **Define your salary target range, including the minimum you are willing to accept.** Research salaries with the AMWA Salary Survey as well as with local AMWA members to develop realistic expectations based on the type of employer and your experience. It's good to define your expectations, as prospective employers will ask you about salary requirements.

3 **Don't apply for jobs if the posted salary range is below your minimum.** If you were offered this position, it is unlikely the employer will increase to meet your requests. Spare yourself the future resentment of working for less money than you are worth professionally.

4 **Keep a job searching binder.** Place every job advertisement in a plastic sleeve with your related correspondence. Keep track of date applied, follow-up conversations, and final outcome.

5 **Recognize it may be a few weeks for decisions after an interview.** A job opening signals there is more work than staff; therefore the hiring process is an additional task in an already full schedule. Be patient, but don't stop searching.

6 **Create a life outside job searching.** Consider volunteering or pursue a hidden interest. (I took a class on Persian rugs during my job search.) Do something—anything—to discourage the tendency to wait by the phone or check e-mail every hour.

Remember, a job is something you do, not who you are.

The goal of the Professional Development section is to spotlight a range of resources to help medical writers and editors enhance their skills and knowledge. The content of this section is provided for informational purposes only and does not represent AMWA endorsement. The educational programs and professional organizations presented here are among several that provide similar services and/or products.

We encourage readers to submit ideas for educational programs, professional organizations, writing/editing competitions, or feature articles. Send your suggestions to the AMWA Journal *Editor (amwajournaleditor@hotmail.com).*

Salary Negotiation: How and When to Talk About Money

By Deana G. Betterton-Lewis[a] and Molly McElroy, PhD[b]

[a]*Schwarz BioSciences, Inc, Research Triangle Park, NC;* [b]*Melbourne, FL*

Money is a subject that we are uncomfortable discussing.[1] In fact, many of us have no idea how much money our friends or parents earn; others might not even know their spouse's income.[1] Discussing money with colleagues or coworkers is even more complicated. Many companies strongly discourage employees from discussing their salaries with coworkers. It should come as no surprise that those of us with little experience talking about money approach salary negotiations with discomfort and unease.

Getting the Job

The process of getting a job involves 3 major steps: getting the interview, getting the job offer, and negotiating the salary. Through experience, the application and interview processes have become fairly routine for most of us; with each job change, we may have applied and interviewed for several positions. However, some of us have limited experience with salary negotiations. Many questions are raised during salary negotiations that make us uncomfortable: "Is the company making a fair salary offer?" "When the recruiter asks how much money I'm looking for, what should I say?" "Is it rude to turn down the first offer and ask for more money?" "If I haggle over the salary, will my new manager see me in a negative light before I even start the job?"

When Should You Talk About Money?

The issue of salary can be raised by employers at any point during the application, interview, or hiring process. Job postings sometimes prompt you to include a desired salary in your cover letter. Recruiters interested in submitting your resume to clients want to know your desired salary. During telephone screening, human resources representatives may ask about salary expectations. Department managers may pose the question during the interview. Or, at the end of a series of interviews, the human resources manager might ask how much you're earning at your current job as a segue into salary negotiation. You need to be prepared to answer these questions. However, try to defer salary discussions as long as possible, preferably until a job offer has been made or is likely. Ideally, you want the opportunity to determine whether the job is a good fit before discussing salary.[1]

How Much Money Should You Ask For?

When determining the salary to offer you as a potential job candidate, a company uses several factors, including your current salary, how much the company is paying its employees in similar jobs, and what competitors are offering for similar jobs.[2] So, it is important to keep these factors in mind when determining a desired salary range for a specific job.

What Should You Say About Your Current Salary?

Rather than stating your current salary, give the approximate value of your total compensation package.[2] This includes your base salary, actual or potential bonuses, vacation and holiday pay, stock options or profit sharing, health and dental coverage, life insurance, retirement plan or 401(k) contributions, employee discounts, and savings from having a shorter commute to the office or from telecommuting.

What Are Other Employees at This Company Earning for Similar Jobs?

This is the most difficult piece of information for you to determine. If you already know someone at the company, you might want to ask if he or she could provide you with a broad estimate of salary range for medical writing jobs within the company. Avoid asking how much money this individual makes, because you do not want to make him or her uncomfortable. Ideally, you would like this person to serve as a reference for you, and he or she might soon become your new coworker.

If you don't know anyone at the company, try networking. Ask colleagues; attend your local AMWA chapter meeting and ask if other members know about this company. Through networking, you might be able to get a feel for

whether the company has a reputation for paying well or for having other intangible perks that might matter to you, such as on-site daycare, a fitness center, or flexible work schedules.

How Much Are Competitors Paying for Similar Jobs?
Before you start the process of applying for a new job or post your resume on an employment Web site, determine an appropriate salary range for the type of job that you want.[3] There are several pay-comparison Web sites designed to assist you in determining salary ranges for jobs in selected areas of the country, such as **www.salary.com** or **www.salaryexpert.com**.[4] Web sites focused on job hunting, such as Monster.com and CareerJournal.com, also provide online salary calculators.[5] The *Occupational Outlook Handbook* from the Bureau of Labor Statistics also provides information on earnings for hundreds of different types of jobs.[6]

One of the most useful resources for determining the salary range for a job in medical writing or editing is the AMWA Salary Survey. Gray and Hamilton present results from the salary survey broken down by gender, educational degree, primary employer, job category, and geographic region.[7] Their article also provides an algorithm to help you estimate a mean salary based on these factors. For example, a female medical writer with a master's degree and 3 years of relevant experience applying for a position in the pharmaceutical industry could anticipate an estimated mean salary of $64,023 ($19,768 [base] + $16,904 [master's degree] + $3,789 [experience] + $19,768 [pharmaceutical company]). The results of the 2007 AMWA Salary Survey will be presented at the AMWA annual conference in Atlanta and will be published in an upcoming issue of the *AMWA Journal*.

How Much Flexibility Is There in the Salary Offer?
After you receive a job offer and a salary offer from your potential new employer, ask whether there is any flexibility in the salary. If so, make a counteroffer. Note that there may be more flexibility in the intangible compensation than in the base salary.[1] Determine which factors are most important to you. Is telecommuting an option? Are you planning to pursue an advanced degree, and would this employer provide tuition reimbursement? Does this employer pay for medical writers to attend professional conferences such as the AMWA annual conference or congresses in specific therapeutic areas?

How Much Does Experience or Education Affect Salary?
Many writers and editors come to medical communications from other professions. This does affect salary potential. The AMWA Salary Survey is a useful tool for predicting how much your education degree or previous work experience affects potential salary. Results from the survey indicate that employers consistently pay higher salaries to employees with higher degrees than those without them.[7]

TIPS ON SALARY NEGOTIATION

- Be prepared to discuss salary and know the salary statistics for comparable jobs in the area.
- Defer salary discussions until the job offer is likely.
- When prompted to discuss salary, ask what the range is for this position at this company.
- When asked to state a desired salary, give a range.
- When asked about your current salary, state the total compensation package that you are currently receiving.

FROM THE **COMPANY'S PERSPECTIVE**

On when to discuss salary:

- Barbara Snyder, who hires medical writers at Procter & Gamble Pharmaceuticals, asks about salary during telephone interviews. "I always ask the candidate what salary he or she is expecting because I don't want to waste anyone's time if the expectation is clearly out of the range I'm authorized to offer," she says.
- "Salary negotiations should not take place until an offer is made," says Jim Yuen, formerly of Amgen. He also notes, "Information on salary (previous or desired) should not appear in either the cover letter to a prospective employer or in the CV."

On how much to ask for:

- Yuen notes, "Keep in mind that reputable companies do not set out to underpay their employees."
- "At Procter & Gamble Pharmaceuticals, salaries are determined by a formula that's pretty much based on the applicant's college degree and years of experience," says Snyder.
- "The salary is set based on a formula that includes the candidate's experience and qualifications," says Marianne Mallia, of Texas Heart Institute. "Typically, we like to hire at the midpoint of the salary range so that there is room for growth."
- Mallia cautions that candidates should be careful about how high a salary they request. "Candidates should always ask for more than they expect to get; however, asking for a salary beyond or at the top end of the range will often keep them from being considered for the job."

For example, male AMWA members with bachelor's degrees who responded to the survey had a mean income of $73,356 compared with $83,596 for men with master's degrees. Likewise, years of related work experience are associated with increased salary.[7] According to the predictive algorithm based on the results of the AMWA Salary Survey, each year of experience is associated with an increase in mean salary of $1,263. So, keep these factors in mind and use the algorithm to determine an estimated mean salary based on your education, experience, geographic area, and potential employer.

What Is the Take-Home Message?

Do your homework; it will pay off. Before applying for a new job, find out as much as you can about the possible salary range for that job, in that company, in that area of the country. If at all possible, determine whether the job is a good fit for you and secure the job offer before discussing salary.

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Erratum

In the last issue of the *AMWA Journal*, the byline for the profile of the Council of Science Editors (CSE) was inadvertently omitted. The Journal thanks Monica M. Bradford, Executive Editor, *Science*, and 2006-2007 CSE President, for contributing the profile of this association.

Gain writing/reporting experience and add to your portfolio by reporting on sessions at the AMWA 2007 Annual Conference for the *AMWA Journal*. If you are interested in this opportunity, send an e-mail message to the Journal Editor (amwajournaleditor@hotmail.com) and note which open sessions you plan to attend and which one you would prefer to cover. Not only will your brief report (500-750 words) help to enhance your skills but it also will be of great value to the many AMWA members who can't make it to the conference. You may even be able to earn credit toward an AMWA Professional Development Certificate with your written report. Send an e-mail message today!

Board of Editors in the Life Sciences (BELS) Certification Examinations

Wednesday, October 10, 2007
10 AM–1PM
Atlanta, GA
(AMWA annual conference)
➔ *Register by September 19, 2007*

Saturday, May 17, 2008
1PM–4 PM
Vancouver, British Columbia
(Council of Science Editors meeting)
➔ *Register by April 27, 2008*

Wednesday, October 22, 2008
10 AM–1PM
Louisville, KY
(AMWA annual conference)
➔ *Register by October 1, 2008*

Note: You must successfully complete the application process before you can register for an examination. Please allow at least 5 weeks for the application and registration process if you use the US mails. International mails may take longer than 5 weeks. Obtain an application form from the BELS Web site (**www.bels.org**).

For more information, contact Leslie E. Neistadt, ELS, Hughston Sports Medicine Foundation, Inc, 6262 Veterans Parkway, Columbus, GA 31909. Phone: (706) 494-3322; Fax: (706) 494-3348; E-mail: lneistadt@hughston.com.

Voices of Experience

By Heather Haley, MS

University of Minnesota-Twin Cities, Minneapolis, MN

➲ Interviewee: **Linda Runft, PhD**

Medical Writer II, Kendle International
Thousand Oaks, CA

AMWA: ***How did you become interested in a medical writing career?***
Linda: As a graduate student and postdoc, I found I enjoyed writing up my research results for publication. I also actually enjoyed writing my dissertation. While in academia, I also had the opportunity to be an ad hoc reviewer on several manuscripts for a peer-review journal. These experiences inspired me to consider medical writing as a possible career choice.

AMWA: ***What is your education and work background?***
Linda: After obtaining a BS in biology from the University of Washington, I worked for 2 years as a lab technician at Oregon Health Sciences University. I then went to graduate school at the University of Connecticut Health Center, where I graduated in 2000 with a PhD in Cell Biology. After graduate school, I worked as a postdoc at the University of California at Santa Barbara (UCSB) from 2001-2004.

AMWA: ***How did you job search for your first position? How long did it take you to find this position?***
Linda: This is my first job as a medical writer. I started job-hunting in the summer of 2004. I first heard about Kendle from a friend at UCSB who knew one of the medical writers in the Kendle Thousand Oaks office. I got in contact with this medical writer to learn more about Kendle and about medical writing. I later applied to Kendle when several medical writing positions opened up in October 2004. I started working at Kendle in January 2005, so the job-hunt took about 5 months. I found I used the Internet a lot in my job search. A Web site I periodically searched for medical writing jobs was "The Write Jobs" site (**www.writejobs.com**).

AMWA: ***Do you have any tips for people who are trying to approach medical writers in organizations where they want to work?***
Linda: In retrospect, I probably should have given myself more time to find a job. I started looking for a job a couple of months before the grant that funded my postdoc research ended. I was still looking when my grant ended, but luckily my postdoc advisor had money to keep me on for a few months while I continued job-hunting. I was very fortunate to have found a position as quickly as I did that involves work I enjoy doing. My job involves writing up scientific research results for publication, which interested me more than regulatory medical writing.

AMWA: ***What surprised you most when your first started working at Kendle?***
Linda: One of the first differences I noticed between the private sector and academia was the tighter security employed by private companies to protect intellectual property. In 6 months as a medical writer, I've learned more computer passwords than during the entire 5 years I was a grad student!

Linda: ***I noticed your title is Medical Writer II, indicating a nonentry level position. How were you able to negotiate this?***
Linda: At Kendle, a Medical Writer I has a BS/MS (no experience) and a Medical Writer II has a BS/MS (with experience) or PhD (with or without experience). Since I had a PhD, I started at Kendle in a Medical Writer II position. Though this is how writers are categorized at Kendle, it varies between companies.

AMWA: ***What is a typical workday like for you?***
Linda: My job involves writing up results from clinical drug trials into abstracts, posters and manuscripts for publication in peer-review journals. A typical workday usually involves reading clinical study reports, writing documents based on the clinical study reports, and attending meetings. I work in a team with 3 other medical writers. We usually meet once a week to discuss our projects and parcel out assignments. I have not yet been to a AMWA annual conference as a Kendle writer, but I know medical writers

do attend the conference and various biomedical science meetings.

AMWA: ***What do you like best about your work?***
Linda: As a medical writer, I've really enjoyed learning about how clinical trials are conducted and about the science behind the drugs being tested. I've also enjoyed getting to know the other medical writers I work with.

AMWA: ***What do you find most challenging?***
Linda: One of the biggest challenges has been developing the people skills for effectively and quickly obtaining feedback from the scientists and MDs listed as authors on a document.

AMWA: ***What resources do you recommend for someone in her or his first medical writing position?***
Linda: AMWA has been a wonderful resource—especially the core curriculum workshops. Reference books that have been valuable have included the *Merriam-Webster Dictionary*, *Dorland's Illustrated Medical Dictionary*, the *American Medical Association Manual of Style*, and the *Gregg Reference Manual*. I also use the Internet all the time to find information about medical disorders and to download papers. I use the NCBI PubMed literature search service quite a bit. I've also learned a tremendous amount through interactions with the other medical writers and medical associates whom I work with.

AMWA: ***Any additional advice for people just starting out or looking to transition into medical writing?***
Linda: The best thing I did was to talk to a medical writer who worked at the company I was interested in applying to. This gave me a very good idea of what the work would be like and the type of atmosphere I would be working in.

If you are an experienced medical writer (more than 5 years' experience) who would like to share your career thoughts and experiences with students, please contact Heather Haley at cove0033@umn.edu.

Voices of Experience

By Heather Haley, MS

Eli Lilly Canada, Inc., Toronto, Ontario

➲ Interviewee: **Melissa Cooper, MSc**
Research Communications Officer
University Health Network, Toronto, Ontario

AMWA: ***How did you discover medical writing as a career?***
Melissa: While I was doing my graduate studies, I did some research on alternative careers in science. I found the Web site **www.nextwave.org** to be very useful. It included the story of a woman who had finished her PhD in neuroscience and switched from the science track to a career as a medical writer, starting as a lay-audience writer for the Alzheimer's Foundation of Canada. As I always loved English classes in high school and I found that—oddly enough—writing my thesis was what I enjoyed most about grad school, I thought that combining my science background with writing could be a rewarding career for me.

AMWA: ***What is your education and work background?***
Melissa: I received my honours bachelor of science degree in molecular biology and genetics at the University of Guelph in Ontario. During the summers, I worked in the regulatory affairs department of a pharmaceutical company, a great place to learn about clinical trials. After I finished my undergraduate work, I completed my Masters of Science degree at the University of Toronto in the department of Laboratory Medicine and Pathobiology.
I then started my PhD in the department of Molecular Medical Genetics at the University of Toronto but, after 18 months of promising research in an amazing environment, I found that something was missing for me. When I looked into science writer positions, I found that I didn't necessarily need a PhD and that my current education was more than sufficient. One of the job opportunities I found was my Research Communications Officer position in the research institutes of the University Health Network (UHN) in Toronto, Ontario.

AMWA: ***What resources did you use while looking into science writer positions?***
Melissa: I used mostly Web resources, such as job search sites (eg, **www.workopolis.com**), and I also looked at the career sections of all of the research institutes and hospitals close to where I live. It proved helpful to look under the administrative categories. Once I expanded my search beyond categories such as "research" and "science," I found more writing opportunities.

AMWA: ***How long did it take you to find this position?***
Melissa: The change from PhD candidate to the new position was a bit of a whirlwind, taking place over about 2 months. I have now been at UHN Research for about 2 1/2 years and I have never looked back.

AMWA: ***Can you describe UHN Research in more depth?***
Melissa: UHN Research (**www.uhnresearch.ca**) comprises 3 hospitals and 3 research institutes that are home to 465 scientists and clinician scientists and more than 1,900 staff and trainees. It is a leading-edge biomedical and health care research organization and a major teaching partner of the University of Toronto. Our researchers lead programs in cancer, cardiology, transplantation, immunology and autoimmunity, infectious diseases, tissue injury, diabetes, neural and visual sciences, musculoskeletal disease, and urban and community health.

AMWA: ***What surprised you most when you first started working?***
Melissa: The concept of style guides. An exceptional idea for maintaining consistency in-house and across the medical and research communities; however, coming from a science background, I had never heard of anything like it before.

AMWA: ***What is a typical work day like for you?***
Melissa: My job is parcelled into 3 major project areas: corporate grants, newsletters, and Web development. Depending on which project is the current priority, I may spend the day writing or editing grants or newsletter material, developing Web pages, improving usability on our Web

sites, or attending meetings with researchers or other project team members. I like the variety of tasks included in my job; it really helps to keep it fresh for me.

AMWA: ***It sounds like you write for both the general public and medical professionals?***
Melissa: Yes. My writing for the newsletters and the Web is for the general public. The grant writing can be for the general public, depending on who is reviewing the grant, but its primary audience is the scientific and medical communities.

AMWA: ***What do you find most rewarding and most challenging about your work?***
Melissa: What I find most rewarding is helping people get their message across as clearly as possible. I enjoy taking Web content or a grant proposal and making it a more effective piece of communication. I also find the production process gratifying. Creating something concrete from scratch that I can be proud of, whether it is a newsletter, Web site or grant, is something that I truly appreciate. I think this may be because of my science background, where tangible outcomes can be infrequent.

The biggest challenge at my job is gathering information from very busy clinicians and scientists to put together corporate grant proposals. This can be difficult at times, but thankfully I have learned a few tricks to encourage them to respond to me.

AMWA: ***Would you care to share 1 or 2 of your tricks?***
Melissa: One tip is to make use of e-mail subject lines. When researchers opens their e-mail inbox, they see a long list of names and subject lines. Frequently, the researchers I am contacting may not know my name, making the subject line very important. You can use it to draw them to open your e-mail, not unlike how a headline draws a reader into a story. It can also provide them with a frame of reference, such as the grant they are working on, if they have not met me before. Another trick, if you are asking them to write something for you, is to provide them with a template or guideline. As writers, we all know that nothing is worse than a blank page staring at you. By providing them with something to work from, I think it encourages them to get started.

AMWA: ***What resources do you recommend?***
Melissa: I frequently use the AMA style guide, the Canadian Oxford English dictionary, and *The Synonym Finder* (by J. I. Rodale). Issues of the *AMWA Journal* are a good resource for information about the field and the *Society for Technical Communication* magazine provides many tips on technical documentation. I am also a fan of Wikipedia (although facts must be double-checked) to get ideas for helpful analogies.

AMWA: ***Any final advice?***
Melissa: Take advantage of learning opportunities provided by your employer or offered for free or at a low cost in your area. The courses, seminars, and conferences that I have attended have truly enriched my experience and brought me up to speed in the medical writing profession.
I would also recommend attending AMWA conferences. Not only is it an excellent educational experience, my first AMWA conference solidified my decision to make the switch from science. Sitting at a roundtable discussion and listening to stories similar to mine, I felt I had found the right place for me.

See page 74 for accounts of the AMWA conference written by other beginning medical writers.

TIPS FOR WRITING COVER LETTERS

1. Always State the Exact Job Title and Code and Where You Learned About the Position
   Companies often have multiple concurrent searches; make sure you are screened for the job you want.
2. Tell the Reader Why this Job Interests You
   Enthusiasm never hurts.
   "I am excited about this opportunity to continue working with a multidisciplinary team and writing about the fascinating field of medicine."
3. Draw Specific Connections Between Yourself and the Job Description
   List 3-5 concrete examples to support how you meet the job description.
   "I have edited 10 manuscripts in the last 15 months, including a cardiology manuscript accepted to Archives of Internal Medicine."
4. Give Readers a Road Map to Your Resume
   Effectively manage readers' expectations by telling them what to expect in your resume.
   "In the attached resume, you'll find more details about my skills, professional experience, and education."
5. Avoid Long Blocks of Text
   Consider bullets or other visual elements to break up information.
6. Ask Someone to Review Your Letter
   Errors in a cover letter reflect poorly on the candidate. It's easy to miss your own errors or typos, so ask someone (with a good eye!) to check your letter.

Voices of Experience

By Heather Haley, MS

Eli Lilly Canada Inc.

Interviewee: Eve Wilson, PhD

Director of Continuing Medical Education
INNOVIA Education Institute, Columbia, MD

AMWA: *What is your education and work background?*
Eve: I received my undergraduate degree in microbiology at Texas A&M (1983) and later a PhD in microbiology from The University of Texas Medical Branch in Galveston, TX (1988). I came to the east coast to accept a Research Associateship from the National Research Council and spent 2 years on that stipend doing work at the US Food and Drug Administration (FDA) Center for Biologics Research (in immunology/diabetes). During that time, I had decided to leave research and was looking around for a career I could enjoy and was also qualified for. Science writing/medical writing seemed the best fit.

AMWA: *How long have you worked in medical writing?*
Eve: I took my first medical writing job in 1990 and worked mostly as a medical writer for the next 14 years. In 1997, I took a job with INNOVIA Education Institute (then Medicalliance) as a medical writer. INNOVIA is a medical education company that has accreditation from the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education (CME) for physicians. I was a writer here for 7 years. Last year, I accepted a promotion to a management-level position, my first.

AMWA: *What does providing CME to physicians mean? What types of writing are involved?*
Eve: In most states, physicians are required to earn a certain number of CME credits each year. They do so by accessing medical education in many formats. Typically, they earn credits through live symposia, hospital grand rounds, Podcasts, print or online materials, and other formats. Writers at INNOVIA work interactively with physician experts and other health care professionals to develop content for these various kinds of CME materials.

AMWA: *What was your first medical writing position and how did you find if?*
Eve: I got a Science Writer/Editor position for a contract company in Washington, DC. I was hired to work full time on projects for the National Institute on Alcohol Abuse and Alcoholism. I got the job interview by advertising myself in the AMWA Job Market Listing. They used to allow this as a one-time service for new members. You can advertise now only as a freelance. I got quite a few phone calls as a result of the ad; I was pleasantly surprised.

AMWA: *How does your current job differ from your first job?*
Eve: I'm not currently a medical writer—now I'm "management," so it's completely different.

AMWA: *How is being in "management" different than being a medical writer? What skills carry over?*
Eve: The biggest difference is being responsible for staff other than myself, which has been a big adjustment. One carry-over is that writing is essential to the role—but not medical writing. Another carry-over is the ability to carefully prioritize to keep multiple projects on the move.

AMWA: *What is a typical workday like for you?*
Eve: Because the CME industry is undergoing tremendous changes, no day at my job is like the previous or the next. On a given day, I may come in thinking I'll spend the morning reviewing projects for certification and end up fielding questions, from staff or the company leadership, on changes in compliance guidelines (CME is a heavily regulated area—partly because it is often funded through educational grants from pharmaceutical companies). I travel a fair amount, mainly to trade and association meetings relevant to this field. I do a lot of training on CME for INNOVIA staff.

AMWA: ***What do you find most rewarding/challenging?***
Eve: With the CME industry in flux, keeping up with the changes is an interesting challenge. In general CME is more regulated than ever before—we take direction not just from the ACCME but also from the FDA, the American Medical Association, and the Office of the Inspector General of Health and Human Services.

One of the most exciting changes in CME is a shift toward showing educational outcomes—in other words, (1) Did participants in our educational activities learn from it? (2) Did they make changes and improvements in clinical practice as a result of what they learned? (3) Did their patients benefit as a result? We try to incorporate tools into our educational activities that both facilitate and gauge learning and change.

AMWA: ***What surprised you most when you first started in the field?***
Eve: When I first looked for medical writer positions, I was pleasantly surprised at how easy it was to find a job even without much direct experience. Now I know that medical writers are generally in high demand and that it's to be expected that they come from a really wide array of background and experience.

AMWA: ***Is there anything that surprises you now?***
Eve: Some days, I am surprised to find myself in a management position! Like many people with my background, I am pretty self-directed and independent, and I really value that. But I am enjoying what I do and the role I now play in guiding INNOVIA staff (including our medical writers).

AMWA: ***When you hire a newer medical writer, what qualities and skills do you look for?***
Eve: I don't directly hire medical writers, but my input is requested in interviews. I tend to value independence and self-direction. Also, I think the best medical writers we've had are those who love to learn and are eternally curious about medicine and science. I weigh the quality of writing samples and/or writing tests very heavily—in my opinion, medical writing should be precise, succinct, clear, as free of jargon as possible, and accurate.

In the CME world, we also tend to look for expertise in specific therapeutic areas (say in cardiology or neurology) that fit the areas we do our work in. Experience in multiple therapeutic areas is always a plus. Experience in CME per se is not necessarily that critical, but experience in education would be a real asset.

AMWA: ***What are the best ways for a newcomer to establish himself or herself as a medical writer?***
Eve: As corny as it may sound, I would start by joining AMWA or the Council of Science Editors and learn as much as you can about being a really good writer. Get some great AMWA courses under your belt and get some writing experience under your belt. I was fortunate in having written some research articles and had them published.

AMWA: ***What are the qualities of a really good writer to you?***
Eve: The best medical writers to me are those who can

- Find the information they need
- Digest complex information
- Understand what subset of the information is most important to pull out for the intended target audience (eg, what's important to a physician in a specialty area vs. what's important to a primary care physician or a nurse practitioner)
- Communicate the information accurately and at a level that is appropriate for the target audience

And as I mentioned earlier, independence and a passion for science and medicine are excellent qualities in a medical writer.

AMWA: ***What resources do you recommend for a writer in his or her first position?***
Eve: I trained myself in writing and editing starting way back, in graduate school. I relied heavily on the Robert A. Day books—*How to Write and Publish a Scientific Paper* and *Scientific English*. I would recommend taking as many of the basic courses at AMWA meetings as possible—there is nothing better than a strong foundation.

AMWA: ***Any last advice for people just starting out or looking to transition into medical writing?***
Eve: Don't limit yourself—the medical writing field has never been broader. Now there are opportunities with newspapers, government agencies, journal publishers, medical associations, online services (eg, Medscape), pharmaceutical companies (with a range of possibilities from new drug submissions to patient education materials), and medical education companies.

Voices of Experience

By Joni St. John

Interviewee: Jessica Ancker, ELS, MPH

AMWA: ***What is your current position?***
Jessica: I am currently a PhD student in the Department of Biomedical Informatics at Columbia University. My primary responsibility is to conduct research on how to express probability and risk information in nonword formats, such as graphs and interactive educational computer programs. I also teach statistics for journalists at the Columbia Journalism School and a course, Designing and Editing Tables and Graphs, at the University of Chicago, Graham School. I'm also a workshop leader for AMWA.

AMWA: ***What is biomedical informatics and how did you become interested in this field?***
Jessica: Biomedical informatics is the study of optimal ways to use complex health-related and biology-related information. It involves philosophical questions such as "What is information?" as well as pragmatic ones such as "How can we help people use it most effectively?" I had never even heard about the field until about 3 years ago. At that time, I was looking for an area in which I could develop some of my own research. I was interested in how to communicate health and medical information and, specifically, in understanding how people reason about numbers. The biomedical informatics department offered a course about how cognitive science could explain some aspects of human reasoning about complicated information, and that's what got me interested in this field.

AMWA: ***What is your current research project?***
Jessica: I am currently developing an interactive computer game that will be used to help patients understand their risk for a particular disease or condition. Even though there has been a lot of research done in this area, people still misinterpret individual risks. It is hard for people to understand what the numbers mean. When people are told that they have a 10% risk of something happening, do they really understand what that means? Some of the previous work in this area has focused on describing risks with words, and others have focused on using graphics, such as bar charts and stick figures. My work involves using a more interactive approach. We have already developed a prototype for the interactive game and have been testing it in focus groups.

AMWA: ***In addition to teaching people about the risk of a condition or a disease, are there other areas that would benefit from your research?***
Jessica: I think our research will also help in developing materials for general health education and informed consent.

AMWA: ***Do you currently work with any medical writers?***
Jessica: One member of our research team is a full-time medical and health writer. Her primary responsibility is to develop materials for a health education Web site in Harlem, NY. As part of this work, she also does research on local resources for health consumers and outreach to community groups, as well as coordinating research meetings and taking meeting minutes.

AMWA: ***For what positions in the medical writing and editing field would one need a good background in biostatistics?***
Jessica: It would help anyone in this field to get a little background in statistics because it helps people understand how knowledge is produced in medicine and science. Almost any medical writer/editor can benefit from understanding how research is designed and from learning how to look at numbers in scientific articles. Some professionals might also need a deeper understanding of statistics. For example, authors' editors and people working in regulatory documentation might need to create or edit tables and graphs and work on articles that rely heavily on quantitative information.

AMWA: ***How would a medical writer/editor gain a good understanding of biostatistics without having to take several classes in statistics?***
Jessica: I would recommend that anyone who is interested

in this area take AMWA's Statistics for Medical Writers and Editors. This course is designed to introduce complicated ideas in a clear and easily understood fashion. (It's currently taught by Tom Lang and Bart Harvey, who are great teachers, as well as by me). A more in-depth 3-day course is offered through the medical editing certificate program at the Graham School of General Studies. Another great resource is *How to Report Statistics in Medicine*, by Tom Lang and Michelle Secic. I don't necessarily recommend that medical writers take biostatistics courses at a university, because the material is likely to be heavily math-oriented and often not relevant to medical editors/writers.

AMWA: ***What is your educational background?***
Jessica: My undergraduate degree is in the history of science. I also have a master's degree in public health, focusing in biostatistics.

AMWA: ***What positions in the medical writing and editing field have you held?***
Jessica: Before I worked in the medical editing and writing field, I worked for several newspapers as a general reporter covering politics, crime, and other local news. My first position in the medical editing/writing field me was at a university where I worked as an editor for the medical school alumni journal and for a newsletter in the technology field. My next position was as an author's editor at the Cleveland Clinic Foundation. I found this job through a relative (my sister-in-law, Joan Affleck) who is an AMWA member and noticed the job listing in the AMWA "pink sheet." At the Cleveland Clinic, I learned a tremendous amount from my boss, Tom Lang. I also had an opportunity to develop and teach medical writing classes for the physicians. My next position (after I earned my master degree in biostatistics) was in a Columbia University research group, where I spent about half my time as a medical writer and the other half working in biostatistics.

AMWA: ***What position in the medical editing and writing field did you find the most fulfilling?***
Jessica: Each position has given me an opportunity to learn new things. As an author's editor, for example, I found that I was learning new stuff every day. Because I worked with physicians from different fields, I had to develop a broad medical vocabulary. This type of vocabulary can come in handy for medical writers/editors throughout their career. My job at the Cleveland Clinic helped me discover that I also really love teaching, so all of my work teaching AMWA workshops over the years has been wonderful.

AMWA: ***What do you think is the most challenging aspect of medical writing and editing?***
Jessica: As medical writers/editors, we need to act as a mediator between the person who is creating the knowledge and those who need to read about that knowledge. Many experts find it hard to interact with newcomers to their field. It's like their brains take a shortcut, and they forget what it was like the first time they learned about their field of expertise. One good example of this is doctors. During their training, doctors learn to use a highly specialized vocabulary, and then many of them forget how to use ordinary language to communicate with their patients. So a major challenge for medical writers is to become familiar with the content area without losing the perspective and vocabulary of the layperson.

AMWA: ***What qualities do you think a good medical writer should have?***
Jessica: One of the most important qualities to have is the eagerness to learn new skills and ideas. Also, having an appreciation of the scientific process is important. Writers/editors who can understand a researcher's goals and point of view are better skilled at preparing the work for a professional audience or translating it for a general audience. Of course, having excellent basic language skills is always a plus.

AMWA: ***What advice would you give to a newcomer to the field of medical editing and writing?***
Jessica: It is important to learn and to develop as many new skills as possible. Everything will come in handy at some point. One very useful skill-building task is to apply a scientific perspective to your own writing by testing its effectiveness with actual readers, in a sort of informal peer-review process. I often do this by giving a draft of something that I have written to my husband, who is a professional writer but not an expert in scientific matters. I can then ask him where the explanations or language were confusing and use that feedback to make changes.

AMWA: ***What mistakes have you seen made by newcomers to the field of medical editing and writing?***
Jessica: One of the problems that I experienced early on as an author's editor was that I was not sensitive to the norms for different scientific communities. Each community uses a particular jargon or format for communicating their information. For example, journals in nursing often expect an extensive literature review in the introduction, whereas articles in medical journals often have a much shorter introduction and a more extensive discussion section. I worked on an article for a nursing journal but imposed the medical formatting, and the article was rejected with a stinging note that the authors needed to learn more about how to write. (Ouch!) So it's important for medical writers/editors to learn to appreciate these differences.

Voices of Experience

By Joni St. John

➲ Interviewee: Kristie Holt, MPH, CHES

Current Position
Owner, Principal Consultant, HER Consulting (Health Education Resources)

Educational Background
Bachelor of Science, Exercise Physiology
Masters of Public Health, Community Health Education
Certified Health Education Specialist

AMWA: ***How does a medical writer/editor become a Certified Health Education Specialist and how important has this certification been to your work?***
Kristie: The National Commission for Health Education (**www.nchech.org**) offers the Certified Health Education Specialist credential. To be eligible to sit for the national CHES exam, individuals must have a bachelor's, master's, or doctoral degree in health education (or a degree and a specified number of hours of acceptable coursework) from an accredited institute of higher education. After an individual has passed the exam, he or she must earn a minimum of 75 continuing education units every 5 years. Some employers require that health educators be CHES-certified or at least CHES-eligible. Credentialing provides an important safeguard that all CHES-certified individuals have demonstrated certain core competencies and are committed to professional development. Local and state health departments, medical communication firms that specialize in patient education, and universities are very familiar with the credential and what it stands for. I believe it puts even more credibility behind my name.

AMWA: ***How did you become a medical writer, and what positions have you held in the medical writing/editing field?***
Kristie: Early in my career, I headed a disease management and patient education materials development division of a large health care system. The type of writing was very diverse; we created materials intended for the health care providers as well as low-literacy patient education pieces. I then went into academia; this is when I became more experienced with grant writing and writing for peer-reviewed journals. My position with the university allowed me to collaborate with various government agencies and nonprofit community-based organizations. I very much enjoyed acting as a consultant on the projects that interested me the most and then moving on to another, completely different project.

AMWA: ***How did you find your first position as a medical editor/writer, and what advice would you give to a newcomer with regard to finding his or her first position?***
Kristie: My first job came from a job bank from a professional organization for health educators (SOPHE, Society of Public Health Educators). I strongly encourage active membership in professional organizations that are closely linked to your field. I think one of the most important skills for anyone considering writing health or patient education pieces is the ability to write with cultural competence. This means being culturally sensitive and being able to write for low-literacy audiences. Really take the time to know your target audience; understand that there may be a difference between what your research shows they need to know and what their perceived health needs are, and that it is important to address both. Use literature reviews, focus groups, interviews, etc, to get to know your target audiences before you begin writing for them. Future employers will be impressed with your ability to understand and write for different audiences.

AMWA: ***Why did you decide to create your own business?***
Kristie: There were 2 main reasons. First, after having my third child, I had 3 children under the age of 6. This made showing up at a typical full-time job at 8 AM seem impossible, impractical, and entirely undesirable. Second, I loved the idea that I could take on a variety of shorter term projects with varying degrees of difficulty, and choose the topics that seemed interesting. For example, one week I could be working on a pandemic flu piece, and the next week I could be writing about breastfeeding.

AMWA: ***What resources were the most useful to you when you decided to start your own business?***
Kristie: Joining a local chapter of a national business owners organization was invaluable. I joined NAWBO—National Association of Women Business Owners. It offers various weekly and monthly networking and educational opportunities. I found that many businesses were interested in offering monthly wellness newsletters or e-health messages for their employees. I also became a member of the local Volunteer Center. I knew that by becoming involved, I would have access to all the local branches of national non-

profit organizations; most of them produce health education materials for the public and outsource grant writing. Additionally, I made it a point to pick up each and every brochure I came across—at the drugstore, grocery store, doctor's office. I contacted the publisher and let them know I was available to freelance or serve as a "content expert" to review materials for medical accuracy and cultural sensitivity (I sometimes offered to do this gratis, just to get my foot in the door). I made sure my comments were thoughtful and always suggested a new piece that could be developed in the future!

AMWA: ***What is a typical work day like for you?***
Kristie: Because I live in California and work with several clients from different time zones, I typically wake up early so that I can participate on conference calls. By 6 AM, I am either responding to e-mails or on the phone. I will usually break around 7:30 AM to get my older kids fed, dressed, and off to school. On the days that I stay in the office, I will then write for 2-3 hours. I never write for more than 3 hours at a time, as I lose interest, creativity, and focus. I usually exercise for an hour and then take care of administrative tasks, such as billing, calendaring, marketing, setting up appointments, etc. I set aside 2 days a week for "out of the office" work. This involves face-to-face meetings with clients to discuss new and ongoing projects and delivering slide presentations that I have developed. I do not have a secretary or assistant, so I handle all of my administrative tasks myself; this can be very time-consuming. Every night, Monday through Sunday, I am back on the computer from 9 pm until midnight. I am always researching topics, doing literature reviews, and reading.

AMWA: ***What are the advantages/disadvantages to owning your own business?***
Kristie: The advantages are that I can decide to accept or not accept any offer. I can also set my own hours around my personal and family obligations like volunteering at my children's school or serving on the executive board of a nonprofit association. The disadvantages are that while you are engrossed in one project, you have to be looking for your next one. Costs such as health, life, and dental insurance are very high for the self-employed.

AMWA: ***What are some the difficulties you encountered while you were starting your business?***
Kristie: I think it is important to find your niche. Figure out early on the type of writing that you can do well and efficiently. Your time is your greatest resource when you are self-employed. At first, I wanted to be very appealing so I took on some projects with high learning curves. The projects were so time-consuming that I actually lost money doing them! It would have made more sense for me to invest in some courses, rather than self-teach.

AMWA: ***How did you find your first clients?***
Kristie: I met my first clients by joining local chapters of national organizations like AMWA, SOPHE, and NAWBO and by going to their meetings and networking events. I also contacted many large medical communication firms by e-mail and the phone, letting them know that I was available for work. I started attending and presenting at several professional conferences. Even participating with a poster presentation is a great way to meet potential clients.

AMWA: ***What are the most rewarding/challenging aspects about your job?***
Kristie: The most challenging aspect is the variety of topics that I have to become adept with in a very short period of time. For example, to successfully complete one project, I had to learn everything there was to know about HIV/AIDs-related opportunistic infections (pathogen, medications used, treatment, side effects, signs/symptoms, etc), and translate the information into terms that would be acceptable and easily understood by HIV-positive high-risk youth in less than 3 days. The next week, I was writing about the uses of pasteurized human breast milk for preterm babies. It was very rewarding to see a community HIV/AIDS educator deliver the curriculum I wrote to high-risk youths. It was equally rewarding to hear the testimonial of a mother of a preterm infant who received donor milk and thrived in the neonatal intensive care unit.

AMWA: ***Why did you decide to specialize in patient education materials and training curricula, and how did you receive the necessary training in these areas?***
Kristie: One of the core competencies of being a health educator is the ability to plan and develop written health education materials. Any Masters of Public Health in Community Health Education program would prepare graduates for this task. New graduates in the health sciences field will most likely find that an entry-level health educator position will require these skills. I believe you become a better writer by writing and reading.

AMWA: ***What are some of the current projects you are working on?***
Kristie: I am currently working on a lead poisoning prevention, a foodborne illness prevention, and several weight management titles. I am also working on a workplace ergonomics assessment tool and am writing 3 grant applications for 2 different nonprofit associations.

AMWA: ***What resources have are the most useful to you in your work?***
Kristie: The *APA Style Manual* and the Centers for Disease Control and Prevention Web site have been very helpful. I use the local health department's Web sites to gain epidemiologic information, which is good for understanding my target populations. I use the *Diagnostic and Statistical Manual of Mental Health* (DSM) quite a bit as well.

Voices of Experience

By Heather Haley, MS
Haley Writing Solutions, Cincinnati, OH

➲ Interviewee: Lawrence Giraudi, MSc

Medical Writer, Allied Research International-Cetero Research
Toronto, Ontario

What surprised you most when you first started in the field?
Glazed looks at cocktail parties. I had great difficulty in explaining the field of medical writing without having people completely zone out and start looking for the pretzel bowl. Now I hook them by giving commonplace examples of products from our craft, like the insert in a bottle of acetaminophen, and follow up with woeful tales from the world of human drug trials. Now, the pretzels are stale before they even think of nibbling.

What was your first medical writing position and how did you find it?
To be honest, I never imagined that medical writing was a potential career; I knew only that I loved writing and I had a curious science degree behind me. To celebrate graduation, I traveled to Italy for a few weeks and hoped to find inspiration for a fulfilling and rewarding career path. Little did I know that an innocent-looking newspaper clipping was waiting for me at home, advertising a writing position at a medical device company that was developing an HIV genotyping platform. Without any experience, I beat out 7 other applicants based solely on the strength of my writing samples, one of which was a fictional piece with which the lab director tearfully connected. I joined AMWA as quickly as possible to begin some formal professional development and have thoroughly relished every moment of my career since.

Is there anything you wish you had known starting out that you know now?
Everything! You start out, hopefully, with at least a little specific knowledge and thinking you can write well. Then you realize you don't really know all that much, and there's always room for improvement in your writing. After a few years, you get to a tenuous steady state where you balance what you know with an increasing confidence in how you can write about it.

What is your education and work background? How long have you worked in medical writing?
I have an MSc in molecular biology, and I've been a medical writer for 9 years. I'm currently working at a contract research organization, where I help to develop clinical protocols and reports, informed consent forms, presentations, and manuscripts.

How does your current job differ from your first job?
I've always contended that an adept medical writer should be able to make the switch from one position to another without missing a beat; skill with words and conveying messages will trump knowledge of a therapeutic area every time. So that means I am the biggest difference between my current job and my first job. Interaction with a variety of people and functions, from scientific experts, regulatory authorities, sponsors, patients, physicians, and even other medical writers, has given me a better understanding of my role as a medical writer, and how I might affect the "big picture." As you progress in your career, you gain insight into your own abilities but, more importantly, you can also use your experiences to further refine your own identity and, ultimately, deliver a better product.

What is a typical workday like for you?
Because I am handling from 5 to 8 writing projects at any given time, a typical workday consists of perusing the latest project timelines, prioritizing the day's tasks and liaising with the relevant internal and external functions to keep the projects moving. Plus, I do some actual writing! Thankfully, I work with an amazing group of people who realize the importance of enjoying your working hours, so there is never a dull moment.

What do you find most rewarding/challenging?
The challenges and rewards of this job go hand in hand; you cannot avoid the challenge if you're expecting any

reward. I was once tasked with developing a product summary from a disorganized and incomplete array of original research findings, draft abstracts and posters, and even some archived lab books. Two comments from the executive-level review of that product summary have stayed with me my entire career. The first, stated with raised eyebrows, was "No one in this company could have written this thing," and the second, once they knew I had produced it, was "That kid can turn sow's ears into silk purses." The reward for the days I spent scouring through paper and electronic records and talking to scientific and regulatory experts was a validation that I was on the right track, in the right field, and that I knew what I was doing.

Is there anything that surprises you now?
There is no piece of biomedical communication, however cunningly written, superbly designed, or fantastically crafted, that cannot be obliterated by a 3-year-old taking a stegosaurus for a walk across your keyboard.

Can you elaborate on the stegosaurus incident?
I had spent the day preparing a final draft of a protocol, addressing various sets of reviewer comments from previous drafts, a few e-mails, and even a faxed copy of an investigator's scribbles. My son had come up to my office to see me, bringing his favourite dinosaur, Steggy, along for the ride. I swear I left him alone for less than a minute, as I had to answer a phone call in the next room. But a victorious "Rrraaawwwrrr" brought me rushing back in to find a blank screen with strange raspberry smudges and a field of vanquished paper clips jammed in my keyboard. Did you know they can double for microraptors? An elated Steggy was surveying the carnage from his perch atop my monitor. My work was gone, the file somehow deleted during the dino rampage and not a back-up to be found anywhere. Six tedious hours of painstaking document re-creation lay ahead of me, but at least I had a smiling child to get me through it. I don't take any chances now; whenever I am interrupted, be it by my director, a colleague, or even an inquisitive throwback to the Mesozoic, I ask for a moment of patience and take the time to properly save my work. I know it all seems to be common sense, but you won't appreciate the impact of losing a file until it happens to you. It will one day, likely when you can ill afford the time. Consider yourselves warned.

When you a hire a newer medical writer, what qualities and skills do you look for?
A genuine interest in writing is likely the most important factor. If they can't demonstrate a working knowledge of sentence structure and patterns, they'll be hard pressed to convince me they can produce clear and concise copy. It is relatively easy to teach someone about Good Clinical Practices and the International Conference on Harmonisation guidelines, but teaching that same person to care about writing is a whole other issue. I also look for someone who can quickly adapt to the new role without simply accepting the status quo as gospel. Finally, the personal fit of the candidate within the existing team must always be considered.

What are the best ways for a newcomer to establish himself or herself as a medical writer?
I often say that I stumbled into the field by accident, but I realize that, perhaps unknowingly, I was eminently prepared for it. I had a collection of writing samples to showcase how a complex subject could be described in clear and concise language. Remember that writing samples can come from anywhere, and my portfolio at that time consisted of a draft manuscript, excerpts from my thesis, a couple of essays from my graduate courses, an article published in the campus newspaper, and a few pieces of award-winning fiction. Any writing that has been through some sort of peer-review process will carry additional weight. I also paid attention to the physical construction of sentences and paragraphs, both my own and those of others, which helped develop the critical skill of self-editing. Early in my postgraduate studies, I established a network of contacts across several therapeutic areas, which was of great utility during my studies and in the early phase of my career. Above all, you need to know yourself and understand the tremendous weight that your words can carry.

Do you keep samples of your writing work? You've worked for a couple of companies over the years, how do you handle the samples issue as you progress in your career?
Just as a ball player's current salary is based at least in part on past performance, a medical writer must be able to prove his or her ability through published writing samples. Confidentiality is always the biggest stumbling block to ensuring that you maintain a healthy portfolio from job to job, and there a few ways you can deal with it. If it's in the public domain, it's absolutely fair game. The obvious example is published manuscripts, but what about that informational patient brochure you produced, or maybe that press release that contains your brief summary of efficacy from a clinical trial? Even within confidential documents you can find tracts of acceptable material (eg, a review of relevant literature for a therapeutic area). It's always best to clear these types of samples with your legal or regulatory affairs department, hopefully before you leave your current position. Still need to beef up your portfolio? You can produce a short review (500 to 1,000 words) on a relevant topic that is current and maybe getting some coverage in the general press. It won't be peer-reviewed, but at least it will showcase your research and writing skills. I always provide full transparency as to the source of all my writing samples. Giving details as to the context within which the piece was created will provide your interviewer with the right framework to review your work.

I've always admired your impressive network of contacts. Since personal contact often falls on the back burner with our demanding jobs, do you have any tips or tricks for maintaining a network?
Networking is a significant part of this profession. While you steadily add to your network throughout your career (through Internet networking tools, professional associations, attending AMWA events, etc.), there should always be a spike in network size whenever you leave one position for another. Be sure you give your contact details to everyone you used to work with, because they will eventually move on, as well, and suddenly you might have contacts in 50 different companies. And, assuming you have a stellar reputation, this provides incredible flexibility in terms of future career opportunities. Maintaining your network can be as easy as a quarterly review and periodic e-mails to reinforce connections. Finally, please don't develop an elitist network. While it is important to keep in touch with directors and vice presidents, don't forget people like administrative assistants, information technology professionals, and human resources representatives who do much of the 'real' work. In the end, you never know who will be in a position to help you when you might need it.

AMWA: What resources do you recommend for a writer in his or her first position?
AMWA, without hesitation.

Any last advice for people just starting out or looking to transition into medical writing?
It is an incredibly diverse field with unending possibilities for gainful employment. If you can marry that with a passion for communicating biomedical issues to a range of audiences, you'll never regret your career choice.

Board of Editors in the Life Sciences (BELS) Certification Examinations

Friday, May 2, 2008 • 9 AM–12 PM
The William & Ida Friday Center for Continuing Education, Chapel Hill, NC
(AMWA Carolinas Annual Conference, May 2-4, 2008)
➔ *Register by April 27, 2008*

Saturday, May 17, 2008 • 1 PM–4 PM
Hyatt Regency Vancouver, Vancouver, BC
(CSE May 16-20)
➔ *Register by April 27, 2008*

Wednesday, October 22, 2008 • 10 AM–1 PM
TBA, Louisville, KY
(AMWA Annual Conference)
➔ *Register by October 1, 2008*

Note: You must successfully complete the application process before you can register for an examination. Please allow at least 5 weeks for the application and registration process if you use the US mail. International mail may take longer than 5 weeks. Obtain an application form from the BELS Web site (**www.bels.org**).

For more information, contact Leslie E. Neistadt, ELS, Hughston Sports Medicine Foundation, Inc, 6262 Veterans Parkway, Columbus, GA 31909. Phone: (706) 494-3322; Fax: (706) 494-3348; E-mail: lneistadt@hughston.com.

Voices of Experience

By Heather Haley, MS

Haley Writing Solutions, Cincinnati, OH

➲ Interviewee: Sunil Patel

Medical Writer, Drug Safety, Onyx Pharmaceuticals, Emeryville, CA

What is your education and work background?
I went to Rice University, where I double-majored in biochemistry/cell biology and English. Then I entered the doctoral program in pharmacology at the University of Michigan-Ann Arbor, but after a year and a half, I surrendered to destiny and spent the next semester writing a thesis so I could leave with a master's degree. I spent a few months working as a textbook sales associate at Michigan Book and Supply during my job search, but I don't think that really helped me become a better medical writer. Everything I needed to know about being a medical writer, I pretty much learned by doing.

How did you find out about medical writing as a career?
During my pharmacology PhD program, I realized that I didn't want to spend the rest of my life in a lab. Several of my professors agreed that I was too creative to be stuck in the rigorous land of experimentation. I decided to leave the program and pursue a career in science writing; I even wrote some articles for the *Michigan Daily*. But then I realized that science writing was a difficult field to break into and it wouldn't end up being very lucrative for me. I turned to the Internet to see what the pharmaceutical industry had to offer. I first came across medical science liaisons, who seemed to be responsible for communicating science to various parties. When I saw that those jobs were out of my league because I was fresh out of graduate school, I clicked around the Internet and stumbled on the existence of medical writers. Medical writing seemed like a field that would engage both sides of my brain, just like science writing, but would also afford me the ability to eat.

How did you job search for your first position?
I finished my master's thesis in May 2005, but I don't think I began actively looking for a job until June. My interview with Onyx was in February 2006, and I started work there in March. So that's about 9 months from start to finish, give or take. It could have gone on much, much longer if I hadn't known someone at the company. Networking is essential.

Initially, I signed up at several job search Web sites and biotech-specific job search sites; Medzilla (**www.medzilla.com**) was the most useful to me. Every day, I found new positions and e-mailed my résumé and cover letter; at times, I was notified that companies had pulled my résumé from the site themselves. I sent out dozens and dozens of e-mails with very little response, since all the positions required prior experience, and I had none. I also went straight to pharmaceutical company and contract research organization Web sites and submitted my résumé there. If I found a phone number, I called. I remember one phone call to a recruiter that resulted in my being dug out of a big pile and put on top; calling gets you noticed. I found out about one position from the cousin of an online friend. I asked a previous interviewee from an article to pass my name along. I did several phone interviews and talked to a few recruiters, but, again, everyone was looking for someone with more experience. Job hunting was a grueling, thankless process that only ended when an uncle who worked at Onyx heard that I wanted to be a medical writer at a time when Onyx needed someone to write safety narratives. I was flown in for a day of interviewing and then brought on as a medical writer intern. Onyx hired me as an employee 6 months later.

Can you explain more about being a medical writer intern at Onyx? I haven't heard of this before.
That's because it's not a real position! They created the title for me because they had never had an inhouse medical writer before; it's a very small company (100-200 people). I was essentially a consultant, paid by the hour with no benefits. This worked to my advantage when I had 4 reports due within days of each other and ended up working 26 days in a row (plus 2 nights), clocking a crazy amount of overtime. Once I proved my mettle (and after they determined the best group/department for me to be in), I became a full-fledged employee. I'll admit mine is a special case, but I

think the lesson to be learned here is that if you have skills that a company needs, they will find a way to use them.

What surprised you most when you first started working?
How much of the job was just copying and pasting! Coming from an academic background and having majored in English, I was instinctively worried about plagiarism, but there is no need to reinvent the wheel with every new report; you can just paste in the old report and update the appropriate fields and numbers. The other surprise was how ungrammatical some of the original documents were. Although these documents got the message across, much of the "standard" verbage could be difficult to parse for the uninitiated reader. In addition, some of the material had been written by people without a strong grasp of the English language. As I updated the reports, I made sure to insert serial commas and hyphens where they were needed in addition to clarifying some of the more confusing language that, despite being seemingly acceptable to the industry, I didn't want attached to *my* name.

What is a typical work day like for you?
Is this a trick question? I cannot even *conceive* of a "typical" work day. Work as a medical writer seems to alternate between weeks of so little activity you run out of ways to fill the time and weeks of intense flurries that keep you so busy you're surprised when 5 o'clock rolls around. Work comes in waves because reporting requirements set certain dates and deadlines, and you're usually responsible for multiple trials.

If there were a typical day, it would begin with checking e-mail for new adverse event reports. Since I have drug safety responsibilities, when I have a new adverse event, I enter it into the safety database and send off a sponsor assessment form. Then I get to work on whatever documents need working on, be they Annual Safety Update Reports, medical monitoring plans, or dozens of safety narratives. I generally work alone, but if I need clarification, I can usually walk a few feet to my boss' office and ask him a question or send an e-mail to him or someone in another department. If I'm feeling particularly industrious, I'll have lunch at my desk while continuing to work; this is especially easy if I'm just reviewing a document for someone and making edits and suggestions. In the afternoon of this hypothetical day, I probably have a meeting to be kept abreast of what's going on in our trials so that I'm aware of any impending reports. I try to make sure I've completed something by the end of the day and achieve a sense of finality.

What do you find most rewarding and most challenging?
The most rewarding aspect of my job is that, working in drug safety, I know I'm benefiting patients by helping to ensure that a drug is safe. I feel important and useful because I know that the documents I work on are submitted to regulatory authorities around the world. It's a far cry from helping people find their textbooks.

The most challenging part of my job is the fact that I am always learning as I go along, adapting to new tasks by building on what I've done before. This constant learning is more of an ordeal because of the necessity of multitasking; I am often working on multiple reports from multiple studies at the same time, and I have to keep everything straight in my head.

What resources do you recommend?
Google! Seriously, I have learned so much from Google. Adverse event terms, generic names for drugs, interpretations of lab tests, etc. The *AMA Manual of Style* is, of course, essential, and I've also found the AMWA grammar workshops helpful as resources. (Just yesterday, I flipped through my workshop materials to remind myself of the difference between "due to" and "because of.")

Any final advice?
Learn as much as you can and always let people know you are open to new projects! The more you know how to do, the more valuable you are. Remember, the reason we even have jobs is because most people *can't write*. And here we are, getting paid to mess with words. It's a pretty sweet gig.

Board of Editors in the Life Sciences (BELS) Certification Examinations

Saturday, July 5, 2008
9:30 AM–12:30 PM
Sydney, Australia
➔ *Register by June 14, 2008*

Saturday, October 4, 2008
1 PM–4 PM
Bridgewater, NJ
➔ *Register by September 13, 2008*

Wednesday, October 22, 2008
10 AM–1 PM
Louisville, KY
(AMWA Annual Conference)
➔ *Register by October 1, 2008*

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