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CALENDAR OF MEETINGS

INSTRUCTIONS FOR CONTRIBUTORS
The traditional motto of the United States of America is *E pluribus unum*, which means “out of many, one.” Likewise, each human body is made up of trillions of cells, each of which is an organism in its own right. Yet the human body can function as a single organism because of how these trillions of cells work together. This cooperation is possible because cells have ways of communicating with each other. This 3-part series will provide an overview of how cells within the human body communicate with each other in health and disease, and how medications can alter these communications. This first part introduces the neuroendocrine system and describes feedback loops.

**THE DISCOVERY OF ENDOCRINE GLANDS**
Ancient people knew that the testes had powerful effects on the body. Males who had lost their testes in childhood would never go through puberty. They retained their high voices, and they never grew a beard. Nor did they go bald. They also tended to grow abnormally tall. Yet nobody knew how the testes could exert their effects on the rest of the body.

Ancient people knew that some organs (e.g., oil glands, sweat glands, and mammary glands) could release substances from the body through a tube called a duct. The glands that release their products through a duct are called *exocrine* glands. During the Renaissance, anatomists started to suspect that some organs besides the testes were secreting something into the body, even though those organs had no visible ducts. Besides the testes and ovaries, these ductless glands included the adrenals, thyroid, thymus, and spleen. The mystery of how the secretions of the ductless glands could be delivered to distant sites in the body was solved in 1628, when William Harvey suggested that blood circulates—traveling from the heart, to the rest of the body, and then back to the heart.1 Substances that enter the bloodstream at any point could thus be carried to the rest of the body. The glands that release substances directly into the bloodstream are called ductless or *endocrine* glands (Figure 1).

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**Figure 1.** The endocrine glands and the hormones that they produce. Reprinted with permission from Stock Photo: Endocrine gland and hormones. ID 72324437 © Designua. Available at Dreamstime.com.
HOMEOSTASIS
In 1855, Claude Bernard discovered that the liver could secrete glucose into the hepatic vein. Thus, the liver could supply glucose to the bloodstream, even if the person had not eaten any sugar or starch recently. As such, the liver played an important role in maintaining normal blood glucose levels. Bernard argued that the human body cannot survive unless it can maintain the internal environment (milieu intérieur) around its cells. For example, abnormally high or low body temperature, blood pH, or blood sugar would be fatal. In 1926, Walter B. Cannon referred to the body’s process of maintaining this steady internal environment as homeostasis, a word that implies “staying the same.”

The body has many homeostatic systems. Disorders of these homeostatic systems can result in sickness or death. Also, many drugs have effects on one or more of the body’s homeostatic systems. These systems typically operate through a process of direct influence and feedback. The set of direct influences and feedback interactions among a set of endocrine glands is often called an axis (e.g., the hypothalamic-pituitary-thyroid axis).

THE HYPOTHALAMIC–PITUITARY–THYROID AXIS
The thyroid is a butterfly-shaped gland in the neck, just below the laryngeal prominence (Adam’s apple). The thyroid produces 2 hormones (thyroxine [T₄, which contains 4 iodine atoms] and tri-iodothyronine [T₃, which contains 3 iodine atoms]) that influence the rate of the body’s metabolic processes. These hormones stimulate the basal metabolic rate: body temperature rises, the heart beats harder and faster, stored nutrients are released from the liver and muscles, and stimulation of the nervous system leads to higher levels of attention and quicker reflexes. In children, the thyroid hormones promote brain development as well as growth.

The balance of thyroid hormone levels is critically important because too much is bad, and too little is bad, but normal homeostatic levels are just right. In healthy people, the production of T₃ and T₄ by the thyroid is controlled by the hypothalamic-pituitary-thyroid axis (Figure 2). When the amount of T₃ and T₄ in circulation is low, the hypothalamus releases a hormone called thyrotropin-releasing hormone (TRH) into the hypophyseal portal system (Figure 2, inset), which is a system of blood vessels that carries blood from the hypothalamus to the anterior pituitary gland. In response to the TRH, some cells in the anterior pituitary release thyrotropin, which is also called thyroid-stimulating hormone (TSH), into the bloodstream. The bloodstream then carries TSH all over the body. In the thyroid, the TSH promotes the release of T₄ and (to a lesser degree) T₃. Some of the T₄ will then be converted to T₃ in other tissues, such as skeletal muscle. This conversion of T₄ to T₃ is influenced by many different hormones (including TSH and adrenal hormones), as well as by nerve signals.

In a healthy person, the hypothalamic-pituitary-thyroid axis keeps T₄ and T₃ levels from falling too low or rising too high. Low T₄ and T₃ levels promote the release of TRH, which stimulates the release of TSH, which further promotes the release of T₃ and T₄. Adequate or high levels of T₄ and T₃ then suppress the release of TRH and TSH. Without TRH, the pituitary does not produce much TSH. Without TSH, a healthy thyroid does not produce much T₄ or T₃.

The T₄ and T₃ are outputs of the system. However, because of their influence on the hypothalamus, they should also be regarded as inputs to the system. This process of outputs becoming inputs is called feedback. T₄ and T₃ suppress the processes that lead to their secretion. This kind of suppression is called negative feedback. Many homeostatic systems involve negative feedback loops. However, some hormones can have positive feedback effects under certain circumstances. For example, before ovulation, estrogen has a positive feedback effect on the hypothalamus and pituitary. The estrogen produced by the ovary then promotes the release of gonadotropin-releasing hormone, which stimulates the release of luteinizing hormone, which then promotes the release of more estrogen by the ovary.

Figure 2. The hypothalamic–pituitary–thyroid axis. Reprinted with permission from Stock Photography: Hormone negative feedback loop. ID 26879632 © Alila07. Available at Dreamstime.com.
THYROID DISORDERS
If something goes wrong in any portion of the hypothalamic-pituitary-thyroid axis, thyroid hormone levels could be too low (hypothyroidism) or too high (hyperthyroidism).

Hypothyroidism could be caused by a problem with the thyroid gland (eg, because of thyroid surgery or autoimmune thyroiditis). It can also result from a lack of TSH because of failure of the anterior pituitary. It can even be the result of some problems involving the hypothalamus. For example, disruption of the hypophyseal portal vein would prevent TRH from being carried to the anterior pituitary. Also, starvation or other serious illness may cause the hypothalamus to alter the set point of thyroid homeostasis.

Hyperthyroidism usually results from a problem in the thyroid gland. However, it can also result from a TSH-secreting tumor of the pituitary. Abnormally high T4 can also occur from eating animal thyroid tissue or from taking an overdose of thyroid replacement pills.

The first step in diagnosing a disorder of the hypothalamic-pituitary-thyroid axis is to measure the blood levels of T4 and T3 and TSH. If the thyroid cannot produce enough thyroid hormone, T4 and T3 levels will be low but TSH will be high, as the hypothalamus and pituitary try to correct the problem. If the problem is in the hypothalamus or pituitary, TSH levels will be low. In cases of hyperthyroidism, the TSH will be low if the problem results from overactive thyroid tissue but high if the problem is a TSH-secreting pituitary adenoma.

NEUROENDOCRINE SIGNALING
The hypothalamic-pituitary-thyroid axis is just one example of a neuroendocrine regulatory system, involving both nerve and endocrine tissues. There are many other neuroendocrine regulatory systems in the body. Often, these systems interact with each other in complicated ways. Yet there are some general principles that can provide a basic context; they deal with the location, specificity, and timing of the signaling.

Location
As stated previously, endocrine glands release substances directly into the bloodstream. Those substances—hormones—are signaling compounds that are released into the bloodstream and carry a signal to some distant target tissue. This distance is important: you cannot regulate the temperature of your house by putting your thermostat inside your furnace. The thermostat must be distant from the furnace, so that it can measure the effects that the furnace is having in the living areas of the house. Likewise, many bodily processes are regulated by hormones released by endocrine tissue that is distant from the process in question. For example, the storage or production of glucose by the liver is regulated by hormones produced by the pancreas. Likewise, the uptake of iron from the intestine is regulated by a hormone produced by the liver.

Specificity
A signaling system must provide a signal to the target cells, but not to other cells. There are 3 basic ways to achieve this specificity. One is through nerves, whereby a nerve fiber provides a specific signal to a highly specific area of tissue. Another way is through a vascular structure (eg, the hypophyseal portal vein carries small doses of hormones from the hypothalamus directly to the pituitary). The third way to achieve specificity is through the selectivity of receptors on or in the cells of the target tissue. The presence of these receptors on or in some cells, but not others, explains why a hormone can have effects on some cells, but not others. Differences in how the subtypes of the receptors for that hormone are connected to the cell’s internal signaling systems explain how the same hormone can have different effects on different kinds of cells.

Timing
For a signaling system to be useful, the signal has to turn on and off in a timely manner. Neurotransmission is the fastest kind of signaling in the body. Nerve cells pass signals to each other by releasing chemicals called neurotransmitters into the synapse (gap) between cells. These neurotransmitters have an immediate effect. The signal is then stopped as the neurotransmitter is removed from the gap, either by reuptake, diffusion, or degradation. Reuptake means that a transporter brings the neurotransmitter into a cell. Diffusion happens when the substance simply drifts away. Degradation means that the substance is broken down (eg, by an enzyme). Because of these processes, the neurotransmitter may remain in the synapse for only a fraction of a second. The resulting neural signal thus has a rapid onset and a short duration.

Many homeostatic mechanisms, such as those affecting blood sugar levels, do not require split-second timing. However, they often need to exert an effect within a matter of minutes to maintain control over vital systems. Many of the hormones involved in these systems are called peptide
hormones because they are made out of small chains of amino acids (typically fewer than 50-100 amino acids). These peptide hormones (eg, insulin and vasopressin) tend to have a half-life of 10 to 20 minutes. In other words, half of the biological effect of that hormone is lost by 10 to 20 minutes after secretion. Some hormones (eg, follicle-stimulating hormone and luteinizing hormone) are glycoproteins, which means that they are proteins that also have sugar molecules attached. They tend to have a slightly longer half-life (eg, 3 to 4 hours for follicle-stimulating hormone).

The sex glands and the adrenal glands make several steroid hormones, including corticosteroids. The steroid hormones are fat-soluble compounds that are derived from cholesterol. They tend to have a longer half-life (eg, estradiol has a half-life of approximately 13 to 20 hours).

**TREATMENT OF ENDOCRINE DISORDERS**

Many endocrine diseases result from the over- or underproduction of some hormone. The overproduction of a hormone is often due to a functional tumor, which can often be removed surgically. Other ablative methods can also be used, such as when hyperthyroidism is treated by giving a dose of radioactive iodine, which is taken up by and destroys thyroid tissue. The patient will then require hormone replacement therapy.

The underproduction of a hormone is often treated by hormone replacement. The protein (eg, insulin) and glycoprotein hormones (eg, follicle-stimulating hormone) generally have to be administered by injection because they would be digested in the stomach if administered orally. One exception is desmopressin, which is a peptide hormone that can be administered orally or intranasally. Steroid hormones also can be administered orally, although a portion of the oral dose will be broken down in the liver before it reaches the general circulation.

Sometimes, drugs with hormone-like effects are used for purposes other than hormone replacement. For example, drugs with effects that mimic the glucocorticoid hormones produced by the adrenal glands are often used for their anti-inflammatory effects.

The effect of a hormone drug on the body’s hormonal balance can be hard to predict because the drug can have effects on various feedback loops. For example, administration of glucocorticoid drugs tends to suppress the production of corticotropin-releasing hormone by the hypothalamus, thus suppressing the release of corticotropin by the pituitary, which leads to suppression of the release of cortisol by the adrenal glands. For this reason, glucocorticoid drugs should not be abruptly stopped. Instead, they should be tapered, to allow the hypothalamic-pituitary-adrenal axis to return to normal.

**GLOSSARY**

**adrenal glands**—a pair of glands, each of which is found on top of one of the kidneys. The adrenals produce several different hormones.

**axis**—a combined system of neuroendocrine units that regulate the output of an endocrine gland (eg, hypothalamic-pituitary-thyroid axis)

**corticosteroids (also called corticoids)**—any of the steroid hormones produced by the adrenal cortex, or their synthetic equivalents

**endocrine gland**—a gland that secretes its product directly into the bloodstream, not through a duct

**exocrine gland**—a gland that secretes its product through a duct

**feedback**—the transmission of evaluative or corrective information about an action, event, or process to the original or controlling source

**glucocorticoids**—any corticoid that increases gluconeogenesis, thus raising blood glucose

**hormone**—a chemical messenger that is secreted by one tissue (an endocrine gland) but has effects on target tissue in a different organ

**neurotransmission**—a process in which a cell, upon excitation, releases a specific chemical agent (neurotransmitter) to cross a gap (synapse) to stimulate or inhibit the cell on the other side of the gap (postsynaptic cell)

**peptide**—a compound made of typically fewer than 50-100 amino acids

**steroid**—any of a group of lipids with a complex molecule containing carbon atoms in 4 interlocking rings forming a hydrogenated cyclopentophenanthrene-ring system; 3 of the rings each contain 6 carbon atoms and the fourth ring contains 4 carbon atoms

**CONCLUSION**

In a healthy person, the endocrine glands interact with each other in complicated ways to promote growth, maintenance, and reproduction. Disorders of the endocrine glands can therefore have complicated effects on the body. Medications with hormone-like effects are often used to treat endocrine disease and for other purposes. Hormones, neurotransmitters,
and other signaling molecules exert their effects on target tissues by binding to receptors that are on (or sometimes in) the target cells. Part 2 of this series will discuss the relationships between these signaling molecules and their receptors.

Laurie Endicott Thomas is the author of Thin Diabetes, Fat Diabetes: Prevent Type 1, Cure Type 2. www.thindiabetes.com

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Editors and Subject Matter Experts: Building Productive Working Relationships

By Ann Marie Queeney, BSEd
A senior Society for Technical Communication (STC) member and STC Technical Editing Special Interest Group’s Membership manager.

As a Document Specialist in the medical device industry, I edited procedures and other documentation used to operate the business, manufacture products, and comply with regulations. Like many editors, I relied on the authors to provide information that was accurate and appropriate for the audience. However, management tasked individuals with writing these documents based on their knowledge of the topic—not their writing experience, ability, or interest. As a result, the authors’ familiarity and comfort level with working with an editor varied. To improve the editing process, I worked on building mutually beneficial, productive working relationships with these subject matter experts (SMEs). We worked together to ensure the accuracy, clarity, and quality of the documents.

As with other relationships in your life, building productive working relationships with SMEs takes time, patience, perseverance, and an open mind. The rewards are worth your effort. A productive relationship contributes to quality documents. In addition, a positive environment facilitates collaboration and increases opportunities to use your editing skills. Lastly, you may also discover opportunities to expand your influence in your organization.

While this article focuses on on-site working arrangements, the information also applies to virtual teams.

Working Within the SME’s Preferred Style
We all have our own preferred working styles that help us perform at our best. Adapting to an SME’s working style does not mean abandoning your personal preferences or trying to be someone else. The goal is to create a mutually beneficial, productive working relationship.

Identifying the SME’s Working Style
Apply the observational skills you use as an editor to identify how SMEs interact with you and their colleagues.
Factors that contribute to an SME’s working style include the following

• Personal characteristics
These attributes, such as personality and learning preferences, make each person unique. A self-described morning person is more likely to be alert and eager to discuss a project at 7:00 AM than at 4:00 PM.

If you are part of a virtual team, it is more challenging to gain personal insights, but it is not impossible. Listen to the SME’s interactions during virtual meetings. Look for opportunities outside of regular work meetings to make a personal connection. If an SME visits your site, invite him or her to lunch or coffee.

• Cultural background
Learning more about others’ cultural backgrounds will strengthen your working relationships. Your company may offer diversity resources, such as training or online cultural reference guides.

The Hofstede Centre website offers a variety of resources on this topic. The free “Compare Cultures” tool provides information on 100 countries. The website also offers resources for purchase.

• Profession
Individuals who work in specific professions often share similar personalities and communication styles. When I started working in the medical device industry, I noticed that engineers would sketch out diagrams and process

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flows when explaining their projects to me. I used their preferred communication approach in review meetings. As a result, I often received the information I required.

- Writing and editing experience
  While authors may be SMEs, they may not have extensive writing experience or knowledge of formal editing terminology. An SME's comfort level with the editing process may affect your relationship.

  If you have not worked with specific SMEs, learn about their experience working with editors. You can help SMEs feel comfortable by explaining how you will support them and asking what additional assistance you can provide.

  When you use editing terminology, clarify the terms by providing examples.

- Organizational culture
  Although mostly unwritten, an organization's culture strongly influences how individuals interact. If you are new to an organization, take time to learn the culture.

Adapting to the SME's Working Style

Begin the discussion by asking the SME about his or her work style preferences. This topic may be new to the SME, so it is important for you to guide the conversation. A guided discussion ensures that the SME is involved with establishing a working relationship. Because the goal is to build a partnership, it is important to include the SME in the process.

Rather than asking general questions (“Do you prefer email?”), use your observations to ask focused questions. Providing an example of a potential approach allows you to explain how the proposed approach benefits the SME and gives the SME an opportunity to provide feedback.

As you develop your approach, it is also important to work within your organization's established processes and culture. Depending on your organization, these processes may be difficult to change. If you experience resistance, identify and address the reason for this resistance. If a manager is concerned that your approach to working with SMEs in his or her department may delay completion of the documents, recognize that concern and agree on actions that ensure you meet deadlines. For example, if you see that the timeline is slipping, you might agree to revert to the existing review process. In addition, when possible, changes should be introduced incrementally so that they cause fewer disruptions and are more easily reversed, when necessary, than an entire process change.

Adapting to SMEs' working styles is an ongoing process. Factors that affect your working relationships include changes in your company's organization (mergers, acquisitions, or reorganizations) and in personnel (transfers, terminations, or retirement). Review the processes you have established and adjust them as needed.

Prioritizing and Communicating Editorial Remarks

Prioritizing your review does not mean that you compromise the quality of the work. Instead, make a distinction between issues that must be addressed—those that affect understanding or compliance—and issues that should be addressed to improve the document but are not necessary for its understanding.

To draw from my working method as an example, I used emails to communicate my review to SMEs. In my email, I prioritized my comments into 3 categories:

1. Required: For Your Review
   This section identified items that affected the use and integrity of the document, such as ambiguous and unclear phrasing. The SMEs knew they must address these items, either by correcting the wording or by explaining why the text did not require revision.

2. Optional: For Your Consideration
   This section offered suggestions that covered writing style. While the SME's content was accurate, these suggestions would have improved the document. The SMEs could choose to accept or not accept the recommendations.

3. Typos and Minor Corrections
   This section identified typographical errors and misspellings.

Make a distinction between issues that must be addressed—those that affect understanding or compliance—and issues that should be addressed to improve the document but are not necessary for its understanding.

In my emails, I recorded the most serious issues first. I also used a list format, which the SMEs used as a checklist to revise their documents and record their responses.

The technology your organization uses to edit documents affects the flexibility you have in communicating your comments. Possible approaches include writing a summary that emphasizes key points of your review or adding brief explanations with your edits.

Regardless of the approach you use to communicate your review, it is important to prioritize your comments. Authors can feel overwhelmed when faced with pages of seemingly unrelated edits, which leads to the next topic: SME fatigue.

Identifying Signals of SME Fatigue

Whether you communicate your edits in a face-to-face meeting, by email, or through another method, you must be mind-
ful of avoiding overloading the SME with numerous changes, which can lead to SME fatigue and decreased communication. The keys to addressing SME fatigue are preparation and being aware of the SME’s other responsibilities, deadlines, and workload. The techniques that follow for face-to-face meetings and email communications also apply to other methods of communication.

**Face-to-Face Meetings**

Your work begins before your meeting. Come to the meeting prepared with questions and a thoroughly edited document. Editors can try to prevent SME fatigue by

- Briefly outlining the meeting’s purpose and topics at the start of the meeting. Engineers and other SMEs feel more comfortable with structure.
- Discussing the issues that require or benefit from a personal discussion upfront when everyone (including yourself) is fresh. If you end the meeting without covering all of your topics, you can provide the SME with any remaining items that do not require personal discussion.
- Completing meetings within the scheduled time. If you do not complete your review, you can ask the SME if he or she is available to stay beyond the scheduled meeting time. However, this practice should be the exception and not the rule. Many SMEs are generous with their knowledge and time, but they become rightfully frustrated when meetings extend beyond their scheduled times.

In a face-to-face meeting, you have the advantage of observing body language as an important cue signaling fatigue with the topic. Signs that SMEs are losing interest include restlessness, a stressed or tired look, and a glazed-eye look indicating they are overwhelmed. Do not ignore your instincts; if you feel that you are losing the SME’s attention, you probably are. When you see signs of fatigue, reprioritize your agenda or suggest another meeting to complete your review.

**Email Communications**

Again, preparation is key. Complete your review before emailing your comments. Just as SMEs may become frustrated with multiple meetings and follow-ups, they may also find multiple emails counterproductive and annoying.

The organization of your email is also important. Use your technical communication skills to prioritize your review. Organize the content in a way that encourages SMEs to read your comments. Use bulleted lists and avoid large blocks of text.

**Prioritizing Editing Projects**

Editors often manage multiple projects. However, sometimes projects have conflicting priorities, which may affect your relationships with SMEs. While the issues affecting a project are specific to that project, there are general guidelines for managing competing projects.

Some organizations formalize their process for prioritizing document reviews. If your organization does not have such a policy, identify the individuals with the sufficient knowledge and authority to assign priorities. A project’s priority may be an organizational issue, not an editing issue.

Communication is also important for managing projects. If you know that your review will exceed the scheduled completion date, contact the SME with a status update and options, such as extending the deadline or forwarding a partial review (which is not ideal but is sometimes necessary).

**Expanding Your Contributions**

Editors have skills they can use successfully in other initiatives. Look for opportunities where you can use your communication, organizational, and analytical skills to help SMEs be more productive. The following suggestions can help increase your contributions to an organization:

- Become a resource beyond your editing skills.
  
  *Example:* If you work with a broad spectrum of areas, use your knowledge of the company to become an organizational resource.

- Offer to present skills training.
  
  *Example:* Create a class on good writing practices.

**Conclusion**

By identifying an SME’s working style and finding ways to complement and work with that preferred style, you can transform your working relationships with SMEs into productive, mutually beneficial partnerships.

**Reference**

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ABSTRACT
Because I have recently made the transition to working as a freelance medical writer, I attended the AMWA-Delaware Valley Chapter 15th annual Freelance Workshop to expand my knowledge of this business. The overriding theme of the day’s conference—underscored by the various presentations—was that a freelance medical writer is an owner of a business, not just a writer. Three keynote speakers, as well as roundtable and breakout session leaders, shared tips and advice describing what it takes to have a successful writing business. This included details on marketing, prospecting, charging, being a professional, getting the audience to remember the message, structuring a business, considering which insurances to buy, and writing contracts. The overriding lesson for me is that freelance medical writing is a business and, as such, encompasses all the complexities needed to successfully run a business. It is taking the time to establish a strategic plan that includes the financial, legal, and marketing details necessary to be successful. At the same time, it is remembering that medical writers are professionals and that the quality of our work reflects who we are and what our freelance businesses offer.

INTRODUCTION
Last year, after more than a decade of writing and coordinating consumer publications for a Delaware hospital and healthcare system, I decided to become a freelance medical writer. I got the bug, so to speak, while I was working on my master of science degree in biomedical writing from the University of the Sciences in Philadelphia (USciences). I earned my degree in 2013, and I found that my studies helped me to better understand the diseases and illnesses our patients suffered and the surgeries, procedures, and treatments the hospital and its medical staff provided.

Beginning a freelance writing business seemed a daunting task, yet one I was determined to take on. While I am most interested in clinical trials and genetic research, I had no idea how I could sell myself as a freelance writer. My degree in English literature and my previous life as a daily newspaper editor didn’t seem like the credentials that would lead to the opportunities I wanted. I had a sense that I needed to establish a niche, but I had no idea if there would be opportunities for someone with my background. I needed to learn more about starting a freelance business, and the AMWA Delaware Valley Chapter (AMWA-DVC) Freelance Workshop gave me that chance.

The daylong conference, held in March, started with presentations by 3 keynote professionals: writers Alisa Bonsignore and Lori De Milto, MJ, and health care educator and author Brian S. McGowan, PhD, FACEHP. Following lunch, conference attendees each chose 2 of 10 roundtable discussions led by seasoned professionals. The day ended with 2 interactive, problem-solving sessions, again led by professionals in the freelance field—one for new and aspiring writers (like me), and another for seasoned writers. My focus here is to share the information that resonates most with me as I begin my new career journey.

WHAT I LEARNED
The overriding theme of the day’s conference was that a freelance medical writer is an owner of a business, not just a writer. Every presentation and discussion I attended underscored the fact that a freelance has to understand professionalism as critical to success. They have to strategically decide how much money to charge, what kind of jobs to take, where to look for clients, how to define and market their business, and what business services are necessary to buy, just to name a few.

By Susan L. Towers, MS / Freelance Medical Writer
Presenter: Lori De Milto

Because my healthcare writing background is working in the marketing department of a hospital, I most identified with the keynote presentation by writer and marketing guru Lori De Milto, MJA (Lori De Milto, Writer for Rent, LLC). Many of Lori’s clients are hospitals, and her focus is marketing rather than, say, documenting clinical trials. She is the author of The Mighty Marketer: Your Guide to Making More Money as a Freelance Medical Writer, and has a lively marketing website at www.themightymarketer.com. She has been a successful business owner for many years and shares her expertise with others. She gave marketing advice that particularly resonated with me:

• **Know what your specialty is:** We all can't do everything. Lori focuses on marketing communications for healthcare marketers and health organizations. Her comments confirmed to me that this could also be my niche market because of my nonclinical background.

• **Choose the rights prospects:** Identify your target companies and organizations (examples: professional associations, pharmaceutical companies, hospitals). Find these organizations in publications such as *US News and World Report*. Select 150 to 200 organizations to target. Your prospects are the managers and directors of those organizations.

• **Go after prospects:** Direct email is a good way to contact these prospects. Keep in mind that 90% of the time you will not get a job in the first attempt. Keep your emails short and to the point, and focus on what you can do for them. Follow up your first email in a few weeks.

• **LinkedIn:** This social media platform is an important marketing tool. Your summary should be compelling and interesting: make sure that it represents you. Review others’ profiles to get an idea of what you want. Include a professional photograph and clearly identify the best method for a prospect to contact you. Develop a targeted network, ad share relevant information, and comment on posts (don’t just “like” them). I updated my LinkedIn profile as soon as I got home from the conference.
  - **Testimonials:** What clients say about you is the best advertisement. Ask clients to post a testimonial.

• **Create a profile in the AMWA Freelance Directory:** Again, make the summary short and client-focused. I have done that, too.

• **Create your own website:** It is important to have a website where clients can find you. It should summarize what you can do for them, and should include compelling content with key messages in the subheads. Any images used should communicate your message. If you can afford it, hire a professional web designer to help you develop your website. Following Lori’s presentation, I consulted with an owner of a web design company. For the budget-minded, he recommended creating a webpage using Squarespace (www.squarespace.com), which has many easy-to-use templates for small businesses.

• **Network effectively:** Relationships are key in building a business. It is important to be a member of professional organizations and to volunteer. Be generous, help people, and share resources. Stay in contact with colleagues and potential clients.

• **Designate time for marketing your business:** This time is not billable, yet marketing your business is something that you must do regularly, even if you are busy with a client.

Presenter: Alisa Bonsignore

Freelance writer and strategist Alisa Bonsignore has been a freelance writer for more than 10 years in the San Francisco Bay Area. She serves a number of clients, including IT companies. In addition, she is director of the Society of Technical Communications and a past chair of the Educational Advisory Panel for STC and the New Educational Products committee for AMWA.

Alisa gave a lively, funny, and informative presentation, touching on such key points as the definition of what a medical writer does, how we decide how much money to charge our clients, and the need for freelances to continue learning throughout their careers.

For me, her tagline and website URL, “Clarifying Complex Ideas” (www.clarifyingcomplexideas.com), represents what we do as medical writers. I imagine that all medical writers tackle complex ideas; the names and workings of chemicals and drugs, diseases, statistics, and other medical topics that need to be simplified to be understood. We write articles and stories in ways our readers can understand. Alisa’s simple phrase has clarified my profession for me.

As I begin to take on my first clients, I have struggled with billing rates. I spoke with my CPA, who advised me on the least amount I can charge per hour based on taxes. Alisa went beyond this to provide some excellent tips—not only on how much to charge, but also on other considerations that could improve my gross income:

• **Needs assessment:** Alisa advised us to assess how much we need in gross income as we become business owners. We should work out mathematically how many hours we expect to work, and how many of those hours will be billable. We have to calculate taxes and all direct and indirect costs and expenses. These calculations should help us determine an hourly rate.

• **Hourly or by project:** Freelances have to determine whether to charge by the hour or by the project. There are benefits to both and, depending upon the size of the project and the client, we can do both. Larger projects give us the opportu-
nity to charge a project amount, basing our projected earnings on the hourly rate we would charge and the anticipated number of hours to complete the project. If we work expeditiously and complete the project in fewer than the expected hours, we have effectively increased our hourly earnings. Conversely, if we misjudge the project and require more than the anticipated number of hours, we have effectively decreased our hourly earnings. This learning process helps freelances fine-tune their project scope, providing clients with a more reliable estimate and themselves with a more predictable income.

• Establish reasonable turnaround times: Freelances have to make a schedule and establish a timetable for every project. A good idea is to assure the client that, while we will meet deadlines, we also will need to charge for any last-minute rush work that comes up outside the agreed-upon scope of the project. This allows us to stay focused and in control of our time and workload.

• Tips on giving a quote for a project: Provide a complimentary phone consultation to clarify the project scope.

Other notable tips from Alisa:

• Networking is important so that we can learn from others as we learn from our own experiences and mistakes.
• Listen: What are our clients telling us? Listen closely to what they say.
• Don’t say “yes” if you mean “no.” Think about what you are taking on. Do you have the time to complete a quality product in the client’s timeframe?

Presenter: Brian S. McGowan

Keynote speaker Brian S. McGowan, PhD, FACEHP, is the chief learning officer and co-founder of ArcheMedX Inc., an e-learning and learning informatics company. A member of the Alliance for Continuing Education in the Health Professions, Brian served as founding chair of the Alliance’s Emerging Technologies in Education Committee and currently serves on the Editorial Board for the Alliance Almanac. He is an author and thought leader who speaks internationally on the disconnect between learning and doing. Brian published his first book, #SocialQI: Simple Solutions to Improve Your Healthcare, in 2012.

As Brian is a true scholar of how we learn, I initially had difficulty in relating his presentation to how I am establishing a freelance writing business. I thought that his presentation would be most helpful to those already in the field of medical training and education—those who want to make sure that their students are learning what they are there to learn. Indeed, he spoke about the science of learning, and referenced several publications on this subject, including Nudge: Improving Decisions About Health, Wealth and Happiness, by Richard H. Thaler. He spoke about what he called a learning “bottleneck”—how information we receive becomes cemented into our long-term memories.

However, while Brian referred to trainers and educators, I began to see how this information was also applicable to my role as a communicator and how I can find ways to make it easier for my target audience to learn and remember the message or information I am sharing. I likened one part of Brian’s presentation, when he talked about cutting out distractions, or “extraneous load,” to Alisa’s focus on clarifying the message. I believe the information he shared is especially important for medical writers focused on improving health literacy (as in an educational role) or those ensuring their documentation of clinical trials is understandable to their audience. As I move forward in my business, having a better understanding of how we learn will allow me to do a better job for my clients.

Roundtable Discussion: Brian Bass

I chose to attend the 2 roundtable discussions that I believed would best help me in my first year as a business owner. The first was “Build It and They Will Come: Choosing the Right Structure for Your Freelance Business,” with workshop leader Brian Bass, MWC®, President of Bass Global, Inc.

Brian introduced me to the true complexity of starting a small business. As I listened to him talk about business structure and the differences between a sole proprietorship, corporation, or limited liability corporation, I decided that I would be a sole proprietor. While my CPA has helped me establish myself as such, I learned from Brian that there are no legal protections of personal assets when one is a sole proprietor. So, while I may be able to operate as such for a while, I am considering establishing an S-Corp in the future. This will cost more in annual fees and taxes but will protect my home and retirement savings in case of an accident or lawsuit. Brian also touched on insurance, which made me realize I may need to let my homeowner’s insurance company know I am operating a business at home, and that I may need to buy some kind of liability insurance.

Roundtable Discussion: Mark Bowlby

The second discussion I attended was “Negotiating a Contract: Legal Aspects and Best Practices,” with workshop leader Mark Bowlby, PhD, Principal Regulatory Writer for Synchrogenix. Mark emphasized the importance of having a signed contract between the writer and the client before a writing project begins. While I had learned about contracts in one of my master’s courses at USciences, this underscored the importance of ensuring that all details of any project I work on are agreed upon ahead of time. We discussed that contracts should define
the scope of work, pricing schedule, and anything else necessary to make the project and relationship between client and writer go smoothly. Mark noted that while there are contract templates available, there is no one-size-fits-all contract. Pharmaceutical companies have their own complex, multipage contracts. Other clients may have none at all, and it will therefore be up to the writer to create one.

Mark reminded us that we should read contracts closely and that we can make changes. Many, especially with pharmaceutical companies, will have confidentiality clauses. Often, noncompete clauses are included. Mark stressed that we should beware those clauses; often they are part of generic wording and can be problematic for the freelance writer who may be getting work from a competing company. He assured us that we can revise or remove wording as needed, and we should discuss our concerns with the client. There may also be times when we should consult an attorney before we sign a contract.

Concurrent Interactive Freelance Problem-Solving Session: Michelle Dalton
I attended the afternoon session “Challenges and Best Practices for New and Aspiring Freelancers,” with moderator Michelle Dalton, ELS (Founder, Dalton & Associates), and panelists Lalitha Priya Chandrashekhar, BS (Owner/Principal, PFG MedComm LLC), and event co-chair Karen Golebowski, MS (President and Principal Biomedical Writer, Write Rite, Inc.). The panelists shared many of their firsthand experiences and answered questions from session participants. Although by that time in the day I was quite tired and overwhelmed, I enjoyed this casual session in which Lalitha and Karen reinforced the lessons of the day through lively and often humorous tales. This session also emphasized to me the camaraderie of the freelance world and the importance of getting to know one another.

CONCLUSIONS
The day-long conference, which brought together both experienced freelance writers and newcomers, was well worth the time and money. The overriding take-home lesson for me is that freelance medical writing is a small business, with all the complexities that encompasses. It isn’t simply getting a freelance assignment and estimating what I think I should charge. It’s taking the time to establish a strategic plan that includes the financial, legal, and marketing details necessary to be successful. At the same time, it is remembering that I am a professional, and that the quality of my work reflects who I am and what my business offers.

I believe the conference is as relevant for seasoned professionals as it is for new writers. As I took part in the lunch and the breaks, I realized that many of the attendees know each other from previous AMWA-DVC Freelance Workshops and continue to support each other in their career goals and growth. The tips and advice were invaluable for me as I begin my profession, and I can see why so many seasoned writers return to this annual conference year after year. There is always more to learn and forgotten information to recall and reinforce.

I will learn more about being a freelance writer as I continue my journey this year, and I’m sure I will make some mistakes along the way as I gain experience in my newfound niche, but the AMWA-DVC Freelance Workshop has given me the tools and information I need to begin my journey with more confidence. I look forward to attending again next year, to learning more, and, perhaps, to sharing some of what I have learned.

I want to give a special thanks to workshop co-chairs and seasoned freelancers Ruwaida Vakil, MS, Jennifer Minarcik, MS, and Karen Golebowski, MS, for their tireless efforts in putting this inspiring and motivational workshop together.

Susan has more than 25 years of experience as a reporter and editor on daily newspapers and as a full-time writer and editor for a hospital and healthcare system.

CONFERENCE TIPS FOR A NEW FREELANCE MEDICAL WRITER
• Freelance medical writing is a business. Work as a business owner and consider details such as the legalities of business establishment contracts, taxes, operating costs, insurance, marketing, and building a client base.
• Carefully assess how much you should charge. This will help you decide which jobs to accept.
• Establish a niche specialization and target a client base.
• Professionalism is required! Focus on quality work, dependability, and meeting deadlines.
• Marketing is critical! Create a professional website and profile on LinkedIn.
• Learn from your mistakes.
• Network with peers and continue to learn and keep abreast of new information in your field.
AMWA member Sara D. Hauber, MA, has been a professional editor and writer since 1996. Since 2009, her specialty has been health-related journal manuscripts, with a focus on developmental and substantive editing. For the past several years, she has been working on contract as a scientific writing instructor for nursing students, and it is this work that she describes for us here.

What is your title?
I’ve been a professional manuscript editor for many years. But regarding my teaching of scientific writing, my title has been in flux. It started as “Students’ Editorial Advisor,” but students frequently thought that because the word “editorial” was in my title it meant I would edit their papers for them. So I modified it to “Students’ Editorial Advisor and Scientific Writing Instructor.”

What do you do, exactly?
In my role as a scientific writing instructor, my main purpose is to instruct nursing students, on an individual basis, how to write in scientific style. The first step in the process is the student making the decision to schedule an appointment with me. For each confirmed appointment, the student sends me a paper—either a course paper or a manuscript for publication—and I return the paper to the student with comments and feedback related to all aspects of good scientific writing: grammar, sentence structure, punctuation, flow/organization, argumentation/persuasion, APA or AMA style, etc. If the student needs help with problems that I feel are too difficult to teach in written form, we schedule a phone call so we can talk through the issue together.

Working with me is optional, but some faculty members strongly urge their students (or certain students) to schedule an appointment with me so I can review and comment on the students’ writing. I serve students at all levels of writing ability and at all degree levels, from those seeking a bachelor degree in nursing to those on their way to earning a doctorate (either a PhD or a Doctor of Nursing Practice [DNP]). Most of these students have not taken formal writing classes since they entered university, and many of the DNP students have been working in a health care setting for years before enrolling in the program and could be decades removed from writing instruction. They express great appreciation for the services I offer.

My specific activities vary from day to day, giving me the opportunity to exercise my skills at multitasking in the editorial realm. I might be figuring out the best way to teach a first-year BSN student how to write an effective topic sentence for a class paper in the morning, then explaining to a DNP student how to properly report the results of an ANOVA in the afternoon.

In addition to instructing students in this way, I also provide comprehensive manuscript editing services to faculty and graduate students. But that work is not part of my role as a scientific writing instructor.

How did you get into this kind of work?
It was luck. Immediately after earning my MA in health communication, I was assisting with research at a major research-focused medical center. I had spoken with one of the faculty there about teaching the fellows how to become better writers. Sadly, that did not pan out because that same faculty member transferred to another university. A couple of months after she transferred, however, she told me the dean at her new institution was looking for someone to help improve the students’ writing. I fit the exact need they had at exactly the right time.

Writing, and the English language, have been my passions since I was a kid. My dad and my grandmother instilled in me a love of words when I was very young. And for some
reason I’ve always been a teacher, able to explain complex situations and concepts in ways that my audience can understand. I graduated with an honors degree in English and entered the world of publishing (as an editor), but I gravitated toward teaching after a few years and left publishing to pursue other people-oriented goals. One reason I returned to graduate school, after 7 years working in a different field, was so that I could research a specific communication technique that fascinated me. But after some personal tragedies, I ended up not being able to complete my PhD studies. I feel that my current role as a writing instructor is the next most perfect fit. I get to apply all of the writing and editing skills that I have been learning and using since I was a teenager, and I get to teach very engaged, appreciative students. It’s truly a wonderful mix of 2 of my favorite things—English writing and teaching—but without the immense pressure of a faculty position.

Do you work on campus, then?
No, all of my work is done virtually. In one sense, it makes the work more difficult to do well because talking through problems face to face is sometimes much easier than instructing via written comments. But in truth, my work would be impossible for me to do if I were only meeting with students in person because most of the DNP students are scattered across the United States. They are only on campus once or twice per year.

What is the most difficult part of your job?
I find that the most challenging aspect of my job is when my advice contradicts what the student has been told by a faculty member. This has happened with regards to APA style, which, thankfully, is easy to remedy because the style guide itself puts an end to the conflict. It has also happened with much more difficult, content-related issues, such as when a student includes qualitative data in the results section of a paper but did not employ or report rigorous qualitative data analysis methods in the paper. In many cases, my hands are tied and I have to tell the student to follow the guidance of the faculty member, even though my experience and training tell me that the faculty member is mistaken. That’s definitely the biggest challenge I face in this role.

What is the best part of your job?
The best part for me is receiving the students’ genuine appreciation of what I do. When one of the doctoral students gets published in a leading journal and tells me “I could not have done this without you,” or “I learned so much from you about how to be a better writer,” that makes me feel great.

The second-best part is being totally mobile, even though relying on the Internet to do my job is often a headache I wish I could live without.

Also, my brain works on a micro and macro level constantly, and in that way this work is perfectly suited to me. It makes me extremely happy that it can be put to use, helping these wonderful students learn to be better writers.

What advice would you give to someone interested in doing what you do?
First, you must have a deep understanding of the English language and the rules of good writing. I think most editors have this understanding. In addition, you must be able to “teach” a student who knows very little about English grammar or good writing how to understand and apply any one of the millions of bits of information that you implicitly apply when you edit a piece of writing yourself. It’s not enough to be able to change a passive sentence to an active one. Rather, you must be able to explain to the student the difference between passive and active construction and then teach the student when, why, and how to change passive to active.

When it comes to teaching the doctoral students—many of whom must submit a publishable manuscript to graduate—you have to know the requirements and style of journal publications. What content belongs in the introduction? What is the proper style and flow of each section of text? How does one write about the methods? How does one report the results of various statistical tests? What belongs or doesn’t belong in a table? These questions represent one tiny fraction of the knowledge base you need to really help students write quality manuscripts. Without that expert knowledge about manuscript style and content, you could still teach the bachelors and masters students how to improve their course papers, but you wouldn’t be able to effectively teach the doctoral students. I also find that having had an extremely rigorous, research methods-focused graduate program (and advisor) helps me immensely.

What tools do you use to perform this work?
Style guides and the Internet are my best friends! I use the APA and AMA style manuals constantly. I also refer students to the APA Style Blog and the Purdue Online Writing Lab (OWL) websites for additional help. I rely on the Internet to do my job: Students schedule appointments, submit papers, and receive feedback from me via the Internet, so my work would be impossible without it.

What personal qualities do you think make a good scientific writing instructor?
Patience and understanding are crucial. It can be difficult—especially after one has been an editor for many years—to step back and realize that not many students (particularly in the hard sciences) know how to use language as well as we

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ISMPP—A Global Society for All Medical Publication Professionals

By Al Weigel, ISMPP President and CEO

“The International Society for Medical Publication Professionals, or ISMPP, is a broad-based global society that welcomes professionals from the pharmaceutical industry, communication agencies, medical journals, and medical writers to join its worldwide membership of more than 1500 individuals. Formed in 2005, ISMPP has the distinction of being the only nonprofit organization founded by medical publication professionals for medical publication professionals.

ISMPP programs and initiatives are global in scope and center on ISMPP’s mission to enhance integrity and transparency in medical publications; improve standards and best practices; and foster education, advocacy, and professional collaborations. Members with all levels of medical publications experience can contribute to ISMPP’s efforts by participating on its various volunteer committees, together with colleagues from other countries and organizations...

An important resource for medical publication professionals, including medical writers, is the Good Publication Practice (GPP) guidelines. ISMPP sponsored the most recent update to the guidelines—GPP3—published in September 2015. GPP3 extended the focus on transparency and integrity of medical publications from previous versions and strived to expand its reach globally to broaden adoption of good publication practices. With this objective in mind, a Chinese language translation of GPP3 is available, and a Japanese language translation is underway.”

Keeping Up With AMWA Social Media

By Cynthia L. Kryder, MS, CCC-Sp / Freelance Medical Writer, Phoenixville, PA

In 2009, then AMWA Journal Editor Lori Alexander approached me with an intriguing idea: write a regular column about social media for the AMWA Journal. In those early days of social media, some of us were discovering the benefits of social media marketing for our freelance businesses and Lori predicted this information would be of interest to Journal readers.

Fast-forward 8 years to the present, where social media have become indispensable tools to connect with target audiences no matter what the industry. As new AMWA Journal Editor Jim Cozzarin sought ways to expand the Journal’s digital footprint, becoming more strategic in the Journal’s approach to social media seemed to be a good first step. Consequently, Jim proposed adding monthly Journal blogs to the AMWA blog schedule, which we’ve done, beginning in January 2017. And once a blog is posted, we promote the content via our social-media channels and other communication vehicles.

The blogs serve 2 purposes. First, they are a way to connect with AMWA members between quarterly issues of the Journal. Second, selected blogs will direct readers, including nonmembers, to the Journal’s Open Access articles so they can learn more about AMWA and what we have to offer. The initial focus has been to inform AMWA members of additional resources available to them through “sister” organizations. To that aim, we’ve had guest blogs from Al Weigel, President and CEO of the International Society for Medical Publication Professionals (ISMPP); Hope Lafferty, President-Elect of the Board of Editors in the Life Sciences (BELS); and Michael Willis, President of the International Society of Managing and Technical Editors (ISMTE). The reciprocal cross-promotion we receive from these organizations brings more people to our website and gives AMWA added exposure.

In case you missed the ISMPP, BELS, and ISMTE blogs, we’ve reprinted the highlights here.
BELS—The Board of Editors in the Life Sciences, an International Credentialing Association

By Hope J. Lafferty, AM, ELS, BELS President-Elect

“Let’s face it: editing is a spooky skill. I’ve been editing in one way or another most of my reading life, yet most of the folks that I work with don’t really understand what I do. I hear terms like ‘wordsmithing’ or ‘make this pretty’ or ‘work your magic’—which cast editing as an occult craft undertaken only by the few, the proud, and the anal-retentive.

It’s not just the people with whom I work. Slews of potential employers of medical and scientific editors typically have no objective way to assess editing proficiency. Editors, as well, are frustrated by the difficulty of communicating their abilities. Ad hoc tests may be used, but these are often sterile and subjective. The need for an objective test of editorial skill has long been recognized—especially in fields as specialized as science and medicine.

To meet that need, the Board of Editors in the Life Sciences (BELS) developed a process for testing and evaluating proficiency in editing in the life sciences according to internationally recognized standards. Founded by 10 scientific editors and publishers in 1991, the Board administers 2 examinations—one for certification and one for diplomate status—to evaluate the proficiency of manuscript editors in the life sciences and to award credentials similar to those obtainable in other professions...

I did mention 2 examinations. The second—and one that I encourage every AMWA member with their ELS to pursue—is the diplomate program. The diplomate program is designed for BELS-certified editors who have had extensive experience in scientific communication in English. Achievement of diplomate status indicates that an editor has demonstrated exceptional editorial proficiency, reflecting greater mastery of editorial skills and knowledge than required for certification as an ELS.”

Introducing the International Society of Managing and Technical Editors (ISMTE)

By Michael Willis, President, ISMTE

"As I write this I have just returned from ISMTE’s 2nd Asian-Pacific conference in Beijing, our first in China, attended by approximately 130 journal managing editors, editors-in-chief, and others in the journal publishing world, with a programme relevant to the day-to-day lives of ISMTE’s members: journal metrics, open access publishing, publication ethics, best practice in the journal editorial office, the China publishing landscape, and much more. The conference provided an excellent visual illustration of ISMTE’s mission statement of “empowering editorial offices around the world.”

ISMTE celebrates its tenth birthday in 2017. Ten years ago, as our founding President Jason Roberts wrote in our members’ newsletter, “For many editorial offices the work was very much an amateur effort... most of us basically had no sense of whether we were doing a good job or not.” The jobbing managing editor was typically isolated from others doing a similar role, with little resource at his or her disposal to know how to develop in the role and no grasp of best practice or what standards or criteria to use to benchmark journal editorial office and peer review performance.

Fast forward a decade, and ISMTE has made great strides to overcome this social isolation and knowledge deficit. We hold 3 annual conferences across 3 regions—North America, Europe, and Asia–Pacific—with wide-ranging programmes covering pretty much all aspects of how to run an editorial office well and updates on what’s going on in the journal publishing industry."
The networking opportunities afforded by our conferences are consistently highly rated by our delegates: for many it may be the one occasion in the year that they get to meet others doing similar work. Conferences are open to all, not just to ISMTE members, and we would love to see new faces at our Denver meeting this August or in London in November.

Aside from the conferences we publish *Editorial Office News (EON)*, our members' monthly newsletter. One article from each issue is available free to all, and I'd encourage you to take a look at these for a flavour of the content.

We are also creating a growing library of resources. including (among other things) guidance on preparing figures for publication, creating good, clear guidelines for journal authors, how to provide meaningful metrics on peer-review processes, and peer-review workflows. Naturally we hope these will be widely used and in time become industry standards.

In 2016 we published the results of a survey of our members. One significant finding was that, while many of our members work on biomedical journals, only a minority have an education in science: the great majority have a humanities background. Typically, then, our members do not have scientific expertise and subject knowledge when handling manuscripts for peer review and publication, and our core strengths and expertise are in understanding peer review and publication processes and managing these well for authors, reviewers, and editors.

If you'd like to know more about ISMTE, do check out our website, and follow us on Facebook, LinkedIn or Twitter."

You can browse current and archived *AMWA Journal* blogs at your leisure at http://engage.amwa.org/browse/blogs. Check back often; we’ll be adding something new each month.

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**Wanted for Review:**

For every issue of the *AMWA Journal*, we strive to review the best books available based, in part, on recommendations of our members. Now, the *Journal* is seeking to expand into reviews of alternative media:

- Books
- Expert blogs
- Journal articles
- Broadcasts/podcasts
- Websites

The Media Reviews section includes reviews of books, websites, and other media that are of practical value or topical interest for medical writers and editors. With that in mind...

- Have you just read a fascinating book?
- Have you come across an impactful article in one of the thousands of professional journals?
- Have you bookmarked a favorite website?
- Have you subscribed to a blog produced by a credible expert?
- Have you identified a topical and timely broadcast or podcast?

*We want YOU to write a review!* Send a brief description of the media type and source/link to Tara Ann Cartwright, PhD, at tacartwright2000@gmail.com.

*Your review may appear in a future issue of the Journal!*
CONTENT BE NIMBLE: CREATING MORE VERSATILE CONSUMER HEALTH INFORMATION THROUGH STRUCTURED CONTENT

Speaker:
Maria Essig, MS, ELS
Content Technical Manager, Healthwise Inc, Boise, ID

By Jenni Irving, PhD

When it comes to making decisions about one’s own health, the bombardment of online information is overwhelming. In her presentation at the 2016 Medical Writing & Communication Conference, Maria Essig, Content Technical Manager at Healthwise Inc, outlined the extensive efforts that Healthwise is making to undertake what she describes as “a journey to transform a large database of consumer health information and transfer it to content that is more versatile and more nimble—content that is better adapted to today’s changing world of health information delivery.”

Healthwise is an evidence-based consumer health information developer. It provides patient instruction handouts, symptom checkers, decision aids, and shared decision-making campaigns. Essig introduced their ongoing project to convert content and improve process efficiency through the use of Darwin Information-Typing Architecture (DITA) and a component content management system, while working with various developers and engineers to develop, test, and implement new tools.

The Challenge: To Help People Make Better Health Decisions

The challenge involves converting 40,000 online pages of digital consumer health information to structured content. Essig defines structured content as “modular discrete pieces of information tagged with metadata so you can find it and reuse it.”

Essig asserts that the “benefits are worth the effort.” Healthwise wants their content to be
• Modular, so that it can be used in different places
• Nonrepetitive, to benefit translation and localization
• Focused, so as to be conducive to specific questions
• Consistent across products, voice, and language usage
• Easily identified and found

Essentially, they want content that is nimble.

Essig used the example of medical test information to demonstrate the reuse of content. Blood draws, for example, are referenced continually in relation to health diagnostics. Instead of repeating the same information for readers in multiple places, Healthwise wanted to link to 1 topic page, eliminating redundancy and containing the information for easier editing.

Tools

In order to complete this task, Healthwise uses 4 main programs:
• XMetaL is a structured authoring software that allows developers to create content and use tags that indicate text structure in a more integral manner and range.
• DITA is an XML standard for authoring and publishing structured content. It allows for more specific tagging to use for topics, including specialized tags. Essig emphasized that a strength of DITA is that it is what she calls “product agnostic” rather than “product specific.”
• SDL is a component content management system for storing, organizing, and managing modular content.
• Enterprise Vocabulary Net is a metadata management system that can be used to improve search functions to ensure optimal navigation of information.

The Work

Essig said that she and her colleagues have a “work hard now, pay off later” attitude. They began by performing content analysis by hand on printouts, circling aspects and identifying certain topics, all from different products. Their goal was to take large documents and create focused chunks of information using DITA topics.

The content analysts then set out to combine the information for use across all products by creating a content model, deciding what information was required and what was optional for all document types. They could then set about creating topics to use across all of their products (product agnostic), ensuring the following changes
• Repeated language ➞ Language reuse
• Many links ➞ Fewer, more thoughtful links to only definitions and media topics
• General formatting options ➞ Semantic meanings with specified tags
• Some metadata ➞ Additional metadata including content types, aspects, and concepts
• Rigid function (product specific) ➞ Functional use (product agnostic)

The Results

Essig finished the session by highlighting the ongoing Healthwise content project’s results. “Everybody gets the information they want. They don’t have to plow through information that they aren’t interested in,” she said.

The project ensures that the information is modular and can be found, identified, and manipulated through assigned metadata. Topics can now be published individually or as part of a map to create new documents or to output to multiple channels. Doing this allows them to recreate legacy content if continued on page 73
From Silly to Serious at the AMWA Conference in Orlando!

By Kelly Schrank, MA, ELS / 2016–2017 Annual Conference Administrator

The 2017 Medical Writing & Communications Conference will take place November 1–4 in sunny Orlando, Florida, and the Annual Conference Committee, AMWA Staff, and many of your peers have been working hard on plans for a great conference. Whether you are new to AMWA or an experienced practitioner, we are sure you will find many educational and networking opportunities to enrich your learning and enhance your career.

The Location Might Seem Silly...

Orlando has such a focus on children (who are masters of silly), and Florida has its share of kitschy places (such as Gatorland), but in November, Orlando will also have the Medical Writing & Communications Conference—which will have your peers seriously seeking to learn new information and connect with like-minded medical communicators to boost their careers and businesses.

While holding our conference at a Disney Resort may seem silly, the Disney focus on magic, imagination, and making memories all resonate. There is a certain magic when like-minded people gather in one place to talk about their careers and lifestyles, the work they love, and unmet needs or unrealized dreams. Memories are made and relationships formed. And connecting with different people with different perspectives in a different environment can often spark innovative solutions to vexing problems. Your imagination runs wild with options when you’re free of the usual constraints. Consider new work or roles, talk to new people, and see where your imagination takes you.

...But We Have Some Seriously Great Sessions...

Regulatory folks will find many sessions, from introductory to advanced, covering CMC, narrative writing, clinical trials, and more. Freelances will find sessions on social media, how to choose where to focus your efforts as a freelance, the nuts and bolts of running your business, and a reboot of last year’s popular Jam Session. There are introductory and advanced sessions on health economics and outcomes research and grant writing to provide depth to your learning. We’ll have sessions covering technology, with advice on creating podcasts and science videos, using software for content repurposing, incorporating tech tools for freelances, and making Microsoft Word work for you. There are open sessions focused on science, such as the molecular biology of cancer, and Zika, which is a hot topic in Florida. Spend time with your peers at the roundtables discussing big ideas, such as scientific storytelling, the fears and frustrations of newbies, and mentoring writing teams.

Check the AMWA conference website (www.amwa.org/conference) for more information on the workshops, open sessions, roundtables, and posters scheduled to be at the conference.

...And Our Award Recipients Have Some Serious Cred(ibility)

Every year, we recognize a variety of award winners at the conference, including AMWA members who are awarded AMWA Fellowships, publication awards, and other awards. We are also fortunate to hear from speakers who are well known outside of AMWA for their contributions to medical communication, such as the Alvarez Award winner and the McGovern Award winners.
Alvarez Award Winner

Helen Osborne MEd, OTR/L
President of Health Literacy Consulting, Natick, Massachusetts, and founder of Health Literacy Month

Helen Osborne has been an outspoken advocate of the need for health literacy and plain language in communicating health information for more than 20 years. She started her career as an occupational therapist, witnessing firsthand the need for clear and understandable health information. Ms Osborne wrote a monthly patient education, health communication, and health literacy column in On Call magazine, published by the Boston Globe, for 10 years, and she has written numerous books, including the AMWA award-winning Health Literacy from A to Z: Practical Ways to Communicate Your Health Message, Second Edition, which many consider to be one of the most important health literacy texts in publication.

Ms Osborne founded Health Literacy Month in October of 1999 and, in partnership with the Institute for Healthcare Advancement, continues to spread the word about the importance of understandable health information. As president of Health Literacy Consulting, Ms Osborne helps professionals communicate health information that patients and the public can understand through her speaking engagements, consulting work, and plain language writing and editing. She is the producer and host of the podcast series “Health Literacy Out Loud,” which she started in 2008, interviewing experts in plain language and health literacy.

➲ Ms Osborne will present the Alvarez Award address on Thursday, November 2, 9:00 AM to 10:30 AM.

McGovern Award Winners

Steven Woloshin, MD, MS, and Lisa Schwartz, MD, MS
Professors of Medicine and Community & Family Medicine and Co-Directors, Center for Medicine and the Media, Dartmouth Institute for Health Policy & Clinical Practice, Geisel School of Medicine, Dartmouth College, Hanover, New Hampshire

This year, AMWA is honored to have 2 winners of the McGovern Award: Steven Woloshin, MD, MS, and Lisa Schwartz, MD, MS. Together, Dr Woloshin and Dr Schwartz have conducted extensive research to help improve the communication of medical evidence to physicians, journalists, policymakers, and the public. Their work has 2 main approaches: improving the quality of messages that present health information to people and preparing audiences to make sense of the messages they receive. They have coauthored 2 books—Know Your Chances: Understanding Health Statistics and Overdiagnosed: Making People Sick in the Pursuit of Health—and their essays have been published in The New York Times, The Washington Post, and the Los Angeles Times. For more than a decade, they have organized and led a health journalist workshop, “Medicine in the Media,” with the National Institutes of Health and have taught at the Massachusetts Institute of Technology Medical Evidence Bootcamp. They are also founding organizers of the international Preventing Overdiagnosis meeting (sponsored by Dartmouth, BMJ and Consumers Union, and Oxford and Bond Universities). They have also collaborated with the FDA’s Center for Drug Evaluation and Research to develop better prescription drug information and with the National Cancer Institute to develop better presentations of cancer statistics.

➲ Dr Woloshin and Dr Schwartz will present the McGovern Award address on Friday, November 3, 4:00 PM to 5:00 PM.

A Silly Place, but Serious Learning and Networking!

You can come to the Medical Writing & Communications Conference with serious intentions—to learn, to make connections, and to bring back important information to your teams—but you will still have time to indulge your silly side a bit and relax with your peers. We hope you embrace the full experience, but this means you’ll need to make your plans soon.

Register early to save—regular registration rates are available through October 1. Staying at the Walt Disney World Swan and Dolphin will provide the best conference experience, with sessions in the same building and the opportunity for informal networking everywhere you look. The hotel block is still open, but don’t wait…this is Orlando, and your options will be more limited and expensive as the conference draws nearer.

Don’t miss out...that would just be Silly!
Understanding how historical events have affected food and drug law and how current developments in the public and business landscape continue to shape US regulatory policy is of ever-increasing importance to medical communicators who currently work or are interested in exploring opportunities within this industry.

Medical communicators in the regulatory field are acutely aware of how the most significant changes in legislative policy have been driven by a response to tragedy or public outrage. This condition is most readily observed in those laws that govern drugs, medical devices, and biologics. The 1906 Pure Food and Drug Act itself was created in response to public outrage expressed after the publication of Upton Sinclair’s *The Jungle*, a book about the unsanitary conditions of the meat packing industry.1 This Act formed the beginning of the United States Food and Drug Administration (US FDA) and remained in place for decades, although by the 1930s it was widely recognized by legislators as obsolete. Then, in 1937, tragedy struck when a chemist produced a liquid formulation of sulfanilamide, a drug used to treat Streptococcal infections, by mixing it with ethylene glycol to produce a more palatable form. Unfortunately, ethylene glycol (known today as antifreeze), while sweet, is also extremely poisonous, and the new formulation resulted in the deaths of more than 100 people.2 “The incident hastened the final enactment in 1938 of the Federal Food, Drug, and Cosmetic Act (FDCA), the statute that today remains the basis for FDA regulation of these products.”2

Surely, however, we have learned from our history and—more than 100 years later—we no longer need such tragic circumstances in order to pass needed regulations, right? Unfortunately, no.

In 2012, a multistate outbreak of meningitis that resulted in 722 cases and 64 deaths was traced back to the New England Compounding Center (NECC).3 A compounding center or facility mixes, combines, or alters ingredients of a drug to create a medication tailored to the needs of an individual patient.4 These facilities are not allowed to produce large batches to market to physicians or clinics; as such, they are exempt from laws regulating drug manufacturing facilities. As these facilities are typically a pharmacy or at the very least supervised by a pharmacist, state pharmacy boards have the primary responsibility for the day-to-day oversight of the operation; the FDA does not scrutinize these facilities to verify the products are safe and effective.

Unfortunately, NECC was manufacturing product in bulk quantities and marketing it to clinics without it being linked to real patient prescriptions (patient names included Silver Surfer, Octavius, and Mickey Mouse).5 Worse yet, proper sterilization procedures took a backseat to increased production. Product that was supposed to be sterilized for a minimum of 20 minutes was only sterilized for 15 minutes in order to produce 2 extra batches a day.5 Air and surface samples had detected contamination, but employees were ordered to forgo decontamination of the rooms so as not to incur downtime for production. These same employees were also ordered to falsify documents suggesting that the rooms had been cleaned.5 These issues still may not have put the public at risk if NECC had followed the requirement to conduct tests to ensure the finished product was sterile; unbelievably, the facility chose to ignore that requirement as well.5

For a 7-week period starting in June 2012, more than 6,500 vials of injectable steroids were shipped to customers around the country. In August 2012, a 56-year-old autoworker from Smyrna, Tennessee, was diagnosed with community-acquired meningitis, given antibiotics, and sent home. However, after the patient’s continued decline (eg, headaches, agitation, seizures), the hospital ran a test for a rarer form of meningitis caused by fungus.5 The results came...
back positive for Aspergillus fumigatus, “a fungus that looks like a monstrous dandelion and is usually found in decaying organic matter, like a compost heap.”6 The source of the infection was contaminated steroid injections produced by NECC.5

The NECC meningitis outbreak sickened and killed patients in 20 states before all product could be recalled. Fourteen executives, owners, and staffers were arrested for a wide assortment of crimes including racketeering, fraud, conspiracy, and violating federal drug laws; 2 executives (Glenn Chin and Barry Cadden) were charged with murder.5

After the NECC tragedy, Congress passed the Drug Quality and Security Act on November 27, 2013.7 Title I of this law, the Compounding Quality Act (CQA), requires additional oversight of compounding pharmacies in several ways. Section 503B of CQA created a new entity known as an outsourcing facility, which is much larger than a traditional compounding facility and can supply compounded medications to hospitals. Outsourcing facilities are required to report adverse events (AEs) on all compounded medications to the FDA twice a year and are subject to current Good Manufacturing Practice (cGMP) requirements and FDA inspection.

Facilities that fall under Section 503A of CQA (ie, non-outsourcing facilities) are exempt from cGMP requirements as long as they comply with the conditions of this section.7 Some of these conditions include the following: the facility compounds products “for an identified individual patient based on the unsolicited receipt of a valid prescription,” the facility “does not compound regularly or in inordinate amounts...any drug products that are essentially copies of commercially available drug product,” and the facility “does not advertise or promote the compounding of any particular drug.”8

In addition, CQA puts new penalties in place for such activities as intentionally falsifying a prescription for a compounded medication and failing to report AEs. It also requires cross-communication between state pharmacy boards and the FDA. State pharmacy boards must inform the FDA when they send a warning letter, impose sanctions, or revoke or suspend the pharmacy license of a compounding facility.7 In turn, the FDA must inform the state pharmacy boards if the compounding facility is found violating Section 503A of FDCA. This Act puts into place safeguards that are meant to protect against the type of tragedy that unfolded in 2012.

The NECC story paints a clear picture of how legislation is affected in the face of tragedy and reminds us that these kinds of events are not a part of our distant past.

“We are not makers of history. We are made by history.”

– Martin Luther King

References

2. FDA Consumer Magazine, June, 1981. FDA Website: http://www.fda.gov/aboutfda/whatisfda/history/productregulation/sulfanilamidedisaster/default.htm

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required, and they have information that is flexible enough to be reassembled and customized for each purpose (eg, for reviews and product publications).

That’s the journey that Maria Essig and Healthwise are taking, using different skills and expertise to make this venture happen, and making sure that content is nimble for better health decisions.

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RESOURCES

Healthwise Inc. www.healthwise.org/
Recently, a friend of mine complained that he keeps getting email messages offering him “digital toilet paper coupons.” I am glad that I am not on that email list, because that email would drive me nuts. I have spent many years copyediting medical text. Thus, when I read “digital toilet paper coupons,” I had the following unwelcome thoughts: Is the ad referring to digital coupons for toilet paper or coupons for digital toilet paper? If it meant the latter, does the word digital refer to numbers or to fingers? 

A noun string is a series of nouns and other words that somehow modify the final noun. Noun strings can be hard to read, partly because they are hard to parse. To parse means to break a phrase, clause, or sentence down into the parts of speech (nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjections) and to analyze how those words are related to each other syntactically. Some noun strings are ambiguous, which means that they have 2 or more possible meanings.

As I explained in an earlier article, ambiguity can be semantic or syntactical. Semantic ambiguity results from words that can have more than one meaning (eg, “digital” can mean numbers or fingers). Syntactical ambiguity results from problems in the structure of the sentence (eg, “digital” could modify “coupons” or “toilet paper”). Syntactical ambiguity is a common problem in English because English is an analytic language, which means that it has remarkably few inflections. We do not mark our nouns and adjectives for gender or case, and we do not mark our adjectives for number. We can use some nouns as if they were adjectives (attributive nouns). We can also use some nouns as verbs and some verbs as nouns. For this reason, a noun string in English does not always give you enough grammatical clues to allow you to parse it correctly.

Noun strings are common in technical writing because they can be a terse way to express a complex idea. Some writers frequently use noun strings on purpose, as a way to minimize word count. Unfortunately, the noun strings are often ambiguous and can therefore be misread. Even if they cannot be misread, they may be hard to parse. When you force a reader to slow down to parse a noun string, you interrupt the flow of information into the reader’s mind. It would be better to break up the string so that the meaning of the text is immediately clear.

Whenever I encounter a noun string that is longer than 3 words, I think about possible ways to break it up. Here are some tips and tricks:

• Find the main noun, which is usually at the end of the string.
• Omit needless words.
• Hyphenate compound modifiers.
• Add some prepositions and articles if necessary.
• Consider turning some nouns into a verbal form.
• Consider using the possessive form of some nouns.
• Consider using abbreviations.
• Try to think of a single word that can replace a string of words.

As you can see from the following examples, there can be more than one way to fix a noun string. In the first example, you can see that the main noun “scheme” is at the end of the string. You can break up this noun string by using prepositional phrases. To avoid a monotonous string of prepositional phrases, consider using a possessive.

A hospital patient health and wellbeing monitoring scheme
A scheme for monitoring the health and wellbeing of hospitalized patients
A scheme for monitoring hospitalized patients’ health and wellbeing
In the next example, the main noun “techniques” is also at the end of the noun string. Note that “real-time” refers to the timing of the detection. For that reason, I tried to associate “real-time” with detection, rather than with “ultrasonographic.”

- Real-time ultrasonographic blood flow detection techniques
- Ultrasonographic techniques for real-time detection of blood flow.

In the following example, the noun “evaluation” is turned into the participle “evaluating.”

- Employee competence level evaluation procedures
- Procedures for evaluating employees’ competence

In the following example, there is a prepositional phrase (“over the counter”) within the noun string. Because this prepositional phrase is being used as a compound modifier, it should be hyphenated. If you cannot use the abbreviation “OTC,” you might use the word “nonprescription”:

- An over-the-counter drug adverse events monitoring program
- A program for monitoring the adverse events associated with over-the-counter drugs
- A program for monitoring the adverse events associated with nonprescription drugs

By parsing your own writing you can identify and remove ambiguous noun strings, clarifying your meaning and improving the flow of information to the reader.

Reference

As Well, and As Well As
By Laurie Endicott Thomas, MA, ELS

As and well are simple, common English words. Like many simple, common English words, they can create pitfalls for writers. These pitfalls result from the fact that as and well are used to make some common phrases that function as a single word:

- As well is a multiword adverb that means “also.”
- As well can be used as part of an idiom: might as well.
- As well can also be used as an adjective, in the expletive construction “It’s just as well...”
- As well as is a multiword preposition that means “in addition to.”
- As well as can also be a phrasal connective that is used in making comparisons.

Careless writers often make mistakes when they use as well and as well as. Some of these mistakes are grammatical. Others are related to meaning.

As Well, Also, Too, Either
As well, also, and too have similar meanings. The main difference is that also often appears before the verb, but as well and too usually appear after the verb:

- Bring your laptop. Bring a pencil and some paper as well.
- She speaks Spanish and German. She also speaks French.
- He’s handsome. He’s smart, too.

Also can also serve as a conjunctive adverb, like moreover, if it is put at the beginning of a clause or sentence:

- This drug is expensive. Also, it has many side effects.

Too can sometimes appear directly after the subject. In that situation, it should be set off with commas:

- I, too, have some misgivings.

Too does not always mean also. Too can mean to a higher degree than desirable, permissible, or possible:

- Papa Bear’s porridge was too hot, but Mama Bear’s porridge was too cold.

Either is used after a statement that adds a negative thought to another negative thought:

- He does not smoke, and he does not drink either.

Also and as well imply addition. Also can also imply addition. When using those words to imply addition, make sure that you clarify what is being added to what.

- He is having coffee, too.
  (Does that mean that more than one person is having coffee, or that he is having coffee as well as having something else?)
IN THE SERVICE OF GOOD WRITING

Just As Well, Might As Well

It is just as well means that some event or situation is fortunate, and that the likely alternative could have been worse:
- It is just as well that she did not take that job. She has since received a better offer from a company closer to home.

If you say that you “might as well” do something, it means that there is no reason not to do it:
- While you are waiting, you might as well check your email.

As Well As

As well as has a meaning that is similar to and. However, as well as is a multiword preposition, not a conjunction! When you use and to connect 2 subjects, you end up with a plural compound subject, which means that you must use the plural form of the verb:
- Cystic fibrosis and celiac disease are common causes of malabsorption.

In contrast, when you use as well as to connect 2 subjects, you do not create a plural compound—you simply add a prepositional phrase that does not affect the number of the subject. The verb will agree with the subject, even if it is singular, and regardless of the noun used in the prepositional phrase. If the as well as prepositional phrase comes between the subject and the verb, set it off with commas:
- Penicillin, as well as the cephalosporins, are β-lactam antibiotics.
- Penicillin, as well as the cephalosporins, is a β-lactam antibiotic.
- Malabsorption, as well as improper diet, leads to vitamin deficiencies.

You do not have to put a comma before an as well as phrase that appears at the end of a sentence:
- He is allergic to pears as well as to apples.

If the complement of as well as is a verb phrase, the verb in that verb phrase usually takes the -ing form:
- The surgeon explored the abdomen, as well as removing the appendix.

Note, however, that if the as well as phrase is linking a verb phrase to an infinitive phrase, the verb in the verb phrase should be a bare infinitive (the verb stem, without to):
- The nurse had to record his vital signs as well as to give him his medication.
- The nurse had to record his vital signs as well as give him his medication.

As well as implies addition, but it is not a substitute for and. Do not use as well as instead of and before the last item in a series. Instead, use as well as to add obvious information, after you have listed some less-obvious information:
- The β-lactam antibiotics include the cephalosporins, the monobactams, the penems, and the carbapenems, as well as penicillin.
- The β-lactam antibiotics include the cephalosporins, the monobactams, the penems, and the carbapenems, as well as penicillin.

As well as introduces information that the reader or listener already knows or expects, after the sentence has given new or unexpected information. For this reason, you can use as well as to acknowledge what your readers already know or can easily guess, after pointing out something that they might not expect:
- The male hormone testosterone is found in men as well as in women.
- The male hormone testosterone is found in women as well as in men.

Note that as well as is not always a preposition. Sometimes, it is a phrasal connective. When it is used as a preposition, it introduces the -ing form of the verb (or sometimes the bare infinitive, as explained above); but when as well as is used as a phrasal connective, it introduces an independent clause (which has a noun-verb transaction). Notice the difference in meaning:
- She sings as well as dances. (She sings, and she dances.)
- She has to sing as well as dance. (She has to sing, and she has to dance.)
- She sings as well as she dances. (She is just as good at singing as she is at dancing.)

When using as well as to imply addition, make it clear what is being added to what:
- Lee has been married to Sam as well as Violet.
- Lee has been married to Sam as well as to Violet.
- Lee, as well as Violet, has been married to Sam.

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Africa is widely believed to be “ground zero” for the global HIV/AIDS epidemic. South Africa supposedly has the largest percentage of people living with HIV/AIDS in the world. But in the decades since the first HIV/AIDS outbreak, Africa’s population has exploded to more than 1 billion people, and South Africa’s has nearly doubled. Why did the predicted “African Holocaust” never happen? Why hasn’t HIV/AIDS claimed more South Africans? These questions are explored in Chris Jennings’ book, *HIV/AIDS in South Africa: The Facts and The Fiction*.

According to Jennings, the aim of this South Africa–focused “qualitative work,” which is supplemental to his book *HIV/AIDS: The Facts and The Fiction*, is to challenge common misconceptions about the HIV/AIDS epidemic so that “resource allocations and health care interventions work to serve the benefit and not the detriment of populations in need.” Based on data compiled from more than 3000 journals and reports, the book is a valuable resource to policy makers and health care professionals working in the field of HIV/AIDS in both South Africa and other countries.

In 2009, the Joint United Nations Programme on HIV/AIDS (UNAIDS) reported that 5.6 million South Africans were infected with HIV/AIDS. However, this statistic (as Jennings emphasizes) is based on estimates, not surveillance, which is the process by which authorities systematically collect, analyze, and interpret data on disease. Because surveillance data are rarely widely distributed, discrepancies between surveillance data and estimates are rarely publicized and, consequently, rarely challenged.

In South Africa, this discrepancy is stark. In 1997, UNAIDS estimated that 2.9 million people were living with HIV. Yet Statistics South Africa (the government agency responsible for collecting, producing, and disseminating mortality statistics) reported only 136,000 HIV/AIDS–related deaths between 1997 and 2008.

“If the mean survival rate is 11 years, a lot of these people should have died by 2008,” Jennings states. Why does Jennings believe this discrepancy exists? Outside of high-tech hospitals in urban areas, there are few testing facilities. People who are immunocompromised and susceptible to opportunistic infections due to malnutrition or other diseases (such as tuberculosis and malaria) are nevertheless reported as cases of HIV infection based on symptoms (like rapid weight loss and diarrhea) recorded by local physicians.

Where testing is actually conducted, the medical assays used are highly sensitive (as compared to less sensitive but more specific HIV tests), which may generate high numbers of false-positives and widen the discrepancy between estimated and surveillance data.

Jennings’ meticulous research and clear data presentation make a strong case for how misconceptions regarding the prevalence of HIV in South Africa are perpetuated, leading to billions of dollars being invested in HIV while the “big killers” such as pneumonia, tuberculosis, diarrhea, and malnutrition are neglected.

The book’s impact is dulled by Jennings’ mechanical style and reliance on letting the data speak for itself. Without including the experiences of physicians, patients, and policy makers who are struggling to obtain resources for neglected diseases—while HIV/AIDS–focused nongovernmental organizations are comparatively flush with cash—the book is less compelling and less likely to enter the public discourse than it would be otherwise.

**Reviewer:** Stefanie Howard

Stefanie is an Acquisitions & Development Editor for BioMed Central (part of SpringerNature) in New York, NY.

**References**


This book recounts the stories of 6 of the most important visionaries and innovators in ophthalmology, whose lifetime work revolutionized the medical practice in their field and is saving the eyesight of millions of people today. This book is a testimony to their personal and professional lives and their perseverance and endurance in the face of criticism and ridicule as they sought to prove their ideas to the world.

*Saving Sight* is not only a great reference for ophthalmologists, ophthalmic surgeons, academics in the medical field, clinical researchers, public health advocates, and health care professionals, but is also an engrossing read for the general lay audience, particularly for patients with eye diseases.

Every chapter opens with a recent patient case encountered at Dr Lam’s office, then delves into the history of the brilliant ophthalmologist who invented the specific techniques or tools that Dr Lam is using today.

The first hero is Dr Harold Ridley, to whom we owe the intraocular lens. “It is a pity, doctor, that you cannot replace the cataract with a clear lens,” Dr Ridley tells one of his students, a memory that later triggers his major discovery.

Charles Kelman’s phacoemulsification technique revolutionized cataract surgery and inspired major innovations in other fields of medicine. (This technique involves ultrasonic emulsification and suction removal of the cataract lens, providing a clear field for replacement lens implantation.) As Lam notes, “Because he was the first in medicine to remove tissue through a small incision, some have credited [Kelman] with inspiring the revolution in small incision laparoscopic surgery.”

The binocular indirect microscope, indispensable today in the correct diagnosis and treatment of eye diseases, is credited to Charles Schepens, the “father of modern retinal surgery”: “To a retinal surgeon like me, Charles Schepens is the Thomas Edison, Charles Lindburgh, and Henry Ford of our field.”

Before Arnall Patz, MD, premature babies affected with retinopathy of prematurity were condemned to a life of blindness; now there is a treatment option.

Avastin and Lucentis, breakthrough medicines currently used in treating wet macular degeneration and numerous cancers, are the result of research by ophthalmologist Judah Folkman.

It was in Colombia that Spanish ophthalmologist Jose Barraquer developed a new technique for refractive surgery; 50 years later, Barraquer’s work became the inspiration for LASIK surgery, a simple procedure that now cures myopia with laser-like precision.

The book ends with the heartwarming story of Louis Braille and his alphabet, which “opened the eyes” of millions. This volume is rich in statistics and clinical journal references. Complicated surgery techniques are simplified for the lay reader with powerful analogies and clear illustrations.

Perhaps the most interesting aspect of the book is how it explores the sociopolitical and historical contexts that shaped these individuals’ lives and affected the course of their discoveries.

Dr Andrew Lam connects with the reader with a touching humility: “The first time I saw the retina through the indirect ophthalmoscope, I gasped. It was incredibly beautiful. There had only been a few similar awe-inspiring moments . . . the first time I saw a beating heart and held it in my hands during cardiac surgery.”

With its realistic portrait of the medical profession and clinical research, its human approach to patient treatment, its criticism of today’s US medicolegal system, and its in-depth analysis of healthcare economics, “Saving Sight” is strikingly relevant and is a highly educational book for physicians and patients alike.

**Reviewer:** Marielle Fares, PharmD, MBA, CCGP

Marielle is a scientific editor and medical writer in the health care, pharmaceuticals, and clinical research sectors in Washington, DC.

**Reference**

Ebola: The Natural and Human History of a Deadly Virus
David Quammen
New York, New York, W. W. Norton & Co, 2014; Paperback and digital formats, 128 pages, $9.48 (paperback), $9.01 (digital)

This book is set up as a sort of mystery in the making, as it introduces the Ebola virus and recounts the eerie presence-and-absence cycle that continues to affect people in different parts of the globe, irrespective of their race, color, or creed. It begins with an introduction that asks a number of questions, only some of which are answered in the remaining text via scientific findings, dumb luck, and as-yet-unknown factors.

The narrative begins in February of 1996 in a small village located in the central western portion of Africa, and it describes the devastating chain of events related to the Ebola virus infections that followed the butchering and eating of a chimpanzee. Months later, a very determined biologist, J. Michael Fay, spent months trekking by foot across known areas of Ebola eruption, a more than 2000-mile biological survey. With many local crews from across a vast region, he collected thousands upon thousands of samples in search of different possible carriers, links, or clues that would explain the biological path of Ebola and why it is such an elusive virus. Through the author’s eyes, the reader begins to understand the sequence of events leading to the initial outbreak and its aftermath.

Quammen moves on to discuss the concept of spillover and the patterns of other Ebola outbreaks that occurred from one side of the African continent to the other. He describes the many scientists and workers with whom he has come into contact and explains the story as if the reader is with him, traveling through the jungle, feasting on less-than-appealing food, and capturing and cataloguing many different birds, animals, and even some plant life. All the while, he discusses outbreaks in multiple towns and the commonalities of fiercely high death tolls, prevalent symptoms, and urgent questions about the virus. Quammen always comes back to the host reservoir of the virus, the identification of which is still an unsolved problem, but in the process also touches on scientific perspectives from a variety of individuals, from highly decorated virologists to ecologists to people working in the World Health Organization and the Centers for Disease Control and Prevention (CDC). He also describes the story of a CDC worker who was accidentally stuck with an infected needle and examines the very real repercussions of such an unlucky occurrence.

The author relies on the assumption that the scientific acumen of the reader will allow him or her to gain a strong grasp of the topics, science, and geography surrounding the Ebola virus. As such, this book is a fascinating read for those already interested in the topic; it is a more challenging read for those with little scientific background or previous knowledge of the virus. He takes a reality- and science-based approach to his writing, which is evident in his discussions on determining the host reservoir, the inclusion of direct questions asked by scientists, and the provision of a host of references at the book’s end. As the Ebola virus continues to elude even the most capable of the world’s scientists, this book provides intriguing insight into what is being done to learn more about the virus and how the resulting findings may affect the future.

Reviewer: Deborah Anderson, PhD, MS, MT(ASCP)
Deborah is a medical writer in the medical, pharmaceutical, and video space in Bucks County, Pennsylvania.
Why would you turn down work from a current client? How often have you done this? How did you handle it without losing the client?

It is rare that I turn down a project from a current, ongoing client with whom I have a great relationship, who pays well and on time, and whose projects are generally interesting. However, it has indeed occurred a number of times over the last 20 years. I believe that the only reason I have ever done this is when I simply cannot meet the client’s deadline because of my other commitments. Usually, I will try to accommodate, or negotiate the deadline so that I am able to accept the project. Sometimes I suggest another consultant/writer; sometimes the client has others they can call on. I have never lost a long-term client because of my inability to take on a specific project. Note, however, that turning down a project from a new, prospective client is riskier because there is a good chance that they will find someone else and not come back to you. As it happens, I have turned down new clients far more frequently than ongoing clients—primarily because of deadline conflicts, but sometimes because the initial qualifying conversation reveals that we are actually not going to be a good mutual fit. I also have turned down projects when the prospective client pays too low—unless I have a very open schedule at that moment and find their assignment intrinsically interesting.

—Cathryn D. Evans

I never turn down work from a current client unless I’m going to be away and absolutely cannot do it. Freelances need to be available when our clients need us, except for special circumstances like vacations, emergencies, sickness, and perhaps, occasionally, looming deadlines for other clients. I notify my clients at least a month before a planned absence from work, with a reminder the week before I leave. That way, they can plan to (1) send me the work earlier so I can complete it before I leave, (2) hold the work until I return, or (3) hire another freelance.

If you truly don’t have time to do a job for a client you want to keep, try negotiating the deadline. Explain that you would love to work on the job but aren’t available until a certain date. A good client will accept this and either wait for you or give this job to another freelance and offer you the next one. If you lose the client over this, then that’s not a client you want to be working with anyway. Of course, you can’t turn down jobs too many times without losing even with the best clients.

—Lori De Milto

One secret to successful freelancing is sometimes turning down work. Every project is a chance to make an impression, and I want to showcase my best work at every opportunity. Therefore, not saying yes to every project is the best decision to preserve my work-life balance and quality of service. I know from experience that overloading myself with work can lead to unnecessary stress, late nights, blown deadlines, or unhappy clients. As such, I do not say yes to underpaid assignments, assignments with insane deadlines, dreadful assignments, or assignments when I am really sick. I value my business, and I treat myself as a human being, not a machine.

Whether it’s because I’m busy or because I simply don’t want a certain project, I turn down work several times a month. I use 2 strategies to turn down freelance work without losing the client:

1. I have responses ready, depending on my interest in the project.

   “I wish I could take this project, but I’m booked until next Thursday. Can your project wait until then? If so, I’d be happy to discuss further details.” This reply shows the client that I’m interested in the project and that I’m available to work on it after a certain date.

   “After reviewing the details you have provided, it looks like I’m probably not a good fit for your project.” This reply indicates that I am not interested in the project but does not burn any bridges.
2. I always offer to refer other freelances to the client.

“Unfortunately, I won't be available on Monday to help you, as I will be completing another assignment. Later in the week will work, like Thursday. If that's not useful, I know a few excellent medical editors and writers with whom I have worked who might be able to help you out. Let me know if you would like their contact information.”

Referring other freelances accomplishes several goals. I potentially solve the client's problem of needing someone to take on the project, and I tap into my network. The client will remember I tried to help and will come to see me as a problem solver. The colleagues I refer may obtain an assignment or, at the very least, another prospect they can contact for future work. These colleagues know I refer work to them and they refer work to me, so it's a mutually beneficial relationship.

Just this week I referred a bunch of people to a client. Her reply: “You're amazing! I created a folder for the referrals you sent me and have reached out to most of them. Thank you again.”

—Melissa Bogen

What types of insurance should a medical writer have? Do all medical writers need errors and omissions insurance?

Obviously, you need health insurance. No matter how you get it—through a partner, on the individual market, or through an association—make sure you get it. I was able to get small business health insurance before the Affordable Care Act by incorporating my company and hiring my husband as a full-time employee.

Next, I strongly recommend disability insurance if you or your family are at all dependent on your income. If you break an arm, get a bad infection that lands you in the hospital for a month, develop cancer that requires extensive treatment that leaves you too wiped out to work...well, you get the picture.

If you have young children, you should also have life insurance. Again, if something happens to you, then your income is completely gone.

I also suggest an umbrella policy. This policy extends your personal homeowner/auto insurance to provide additional liability coverage. It's pretty inexpensive and provides important peace of mind.

I also have business liability insurance. The only reason I bought this is because one very large client insisted. Otherwise, I would not have it.

Regarding errors and omissions...check any policies carefully. I've never had it because I've always heard it doesn't provide the kind of coverage that would be meaningful for the kind of writing we do.

—Debra Gordon

As a freelance medical writer you should, of course, carry health insurance as well as liability insurance on your office/property so that you have insurance to cover the injuries if a person working in your office is injured.

As far as “product liability” or other liability is concerned, this depends on (1) the type of writing you do, (2) the type of client/industry you work for, and (3) the agreements/contracts you have signed. The answer here is not a simple one. My recommendation is that you (and all freelance writers) think carefully about what you are committing to in your contracts before signing them—and if you have agreed to accept liability for medical content and/or potential personal (patient) injury that might ensue related to specific medical education or information you will provide in your written piece, then be sure you have an attorney look over your contracts and help you decide whether it is prudent to sign and, if so, what kind of insurance you should purchase. You may be paying from $500 to $1500+ per year for insurance that you do not or should not need. Moreover, please make sure your insurance agent understands the kind of writing you do and the liability you generally agree to accept, and definitely read your insurance policy in detail to ensure that the fine print does not eliminate coverage if it turns out that you stated or implied medical expertise that you do not have by degree or credential.

Product liability insurance covering the accuracy and completeness of medical content of written material should not be necessary if you are a not a bylined author but are writing material for a client—whether a physician, scientist, pharma/biotech company, agency, hospital, publisher, or managed-care company—who makes the decisions about content, structure, and background material to be included and who, of course, has unilateral editorial control. In such cases, it is the client who should accept 100% liability—not you the medical writer—because you are, essentially, acting as a midwife to help the birthing of the client’s article, book, monograph, or other written piece. You are not the creator or the bylined author; you did not come up with the idea, conduct the study, collect data, or analyze results; and you are not writing from your own medical expertise and internalized knowledge. I have specific wording in my contract to make sure that the client understands I will not accept liability for the medical and scientific content (or the accuracy of their data) because I am not the physician and the material is being provided, directed, and approved by the client’s scientific or medical expert(s).

On the other hand, if you are a bylined author (MD, PharmD, RN, or otherwise) writing from your own medical or
scientific expertise, it would be prudent to make sure you are properly insured. As a named author, you are fully responsible for everything in the article, its accuracy and completeness, the references you chose to cite, etc, and should accept 100% liability.

Errors and omissions insurance used to be necessary primarily if you were doing print and/or audio-video production and might need to redo a high-dollar job (tens of thousands of dollars) because of an error. Today, I believe errors and omissions insurance is broader that this, but I neither carry nor intend to carry such coverage. Whether you need errors and omissions insurance or other liability insurance is up to you and your attorney.

For those who work in pharma/biotech, keep in mind that contract research organizations (CROs) and other service agencies are required by the pharma/biotech company to accept liability for everything they do for the client, including clinical studies, protocols, study reports, New Drug Application (NDA) summaries, articles for publication, and other written materials, because that is the agreement/contract they have made with the pharmaceutical or biotech company. Moreover, they are being paid millions of dollars to accept this liability. Most medical writers are being paid far too little to consider accepting that kind of liability, and the agencies should not expect it of them.

Fortunately, medical writers are rarely involved in these kinds of lawsuits. Finally, a word to the wise: always read your contracts very carefully—and revise them as needed to make sure you are not accepting medical liability inappropriate for the actual work and expertise you are providing. Do not be snowballed into signing something just because it is their “standard” contract and liability wording.

—Cathryn D. Evans

Let me start with this full disclosure: I am not an attorney or an insurance expert, and I do not play one on TV.

When I started my freelance business in 1989, I had the good fortune of being able to carry over a long-term disability policy from my previous employer. My employer had nothing to do with my ability to carry over the policy: this was something I arranged with the insurance company for me to take over the payments. Long-term disability insurance is something you don’t ever want to have to use, but I’m glad I have it. From what I understand, these days it is very difficult if not impossible to start your own long-term disability policy. So if you have one with your previous employer, I highly recommend you call them and discuss your options for continuation.

The “big” insurance freelances talk about errors and omissions insurance, or E&O. The proper name is actually professional liability insurance, but it’s all the same. Professional liability insurance protects individuals and companies that provide advice and/or services and insures against liability claims arising from negligence (errors and omissions). I have long held the opinion that freelances do not need professional liability insurance, but my thoughts on this subject have changed in recent years.

My old thinking went like this: freelances work with guidance and input from clients, and once documents leave our hands, who knows what further changes are made over which we have little or no control. Ultimately, our liability for the content is likely nil as long as we are not doing anything egregious. Add to that your business structure as a recognized business entity, and you should have all the liability protection you need. I always recommend freelances consider establishing themselves as a “recognized business entity” (ie, a limited liability company [LLC] or S-Corp) rather than default to the simpler sole proprietorship, because being a recognized business entity provides legally recognized separation between your personal life and your professional life, thus theoretically providing greater protection of your personal assets in the event of a lawsuit.

My new thinking goes like this: when lawyers get involved, they shoot everyone, then separate the bodies into piles of those who were guilty and those who were innocent. Either way, you’re dead. My point is that, even if you are not ultimately liable of wrongdoing, if you are named in a lawsuit you will still have to pay to defend yourself. I have read about many small businesses (and small business owners) that have been destroyed financially by having to defend themselves against suits for which they ultimately were exonerated. Professional liability insurance policies typically provide some protection against out-of-pocket expenses for legal defense.

The cost of a professional liability insurance policy depends primarily on your exposure to risk. Underwriters will look at such things as your gross billing, the types of clients with which you work, and whether you subcontract (a factor that single-handedly increases your risk exponentially).

Another type of insurance freelances should consider is “general liability” or “business liability” insurance. General liability insurance protects your freelance business against claims for bodily injury (eg, the FedEx delivery person slips and falls delivering a business package to your home or office), property damage (eg, you cause a car accident while driving to a business meeting), and personal injury (eg, you are walking through a client’s building on your way to the conference room and your umbrella suddenly opens and puts someone’s eye out).

Like professional liability insurance, the cost of a general liability insurance policy depends on your risk exposure. If you have clients coming to your office or you are often driving to meet with clients, you will have more general liability risk
exposure than if you conduct all your business remotely and have only the occasional FedEx delivery person coming to your business.

Before you run out and buy general liability insurance, however, talk to the insurance broker with whom you have your homeowner’s insurance policy. Many homeowner’s insurance policies offer a relatively inexpensive rider for home-based businesses.

Several years ago I made the investment in both professional and general liability insurance policies for my freelance business. The main reason I did this is because I had an opportunity to work directly for a pharma client who required that my business carry these insurances. I built the cost of the policies into my estimate (not as line items, of course). They were paid for with the job, and the insurance stayed with me for every other project as well.

I am now especially glad I have professional liability insurance because it wasn’t until I began researching the policies that I realized they cover expenses for legal defense. I have now also been able to do work with other large companies who require professional liability and general liability insurance because I already have the policies in place. So I’m making more money as a result of having the insurance, and the added work I get as a result of having the insurance pays for the insurance.

—Brian Bass

How often do you ask your clients for feedback on work that you have submitted? What is the best way to do this: Survey? Comments? Testimonial? Other?

Some clients provide more feedback, solicited or unsolicited, than others. With new clients, I ask for feedback when I submit the draft and often also at the end of the project, usually by email. For clients I’ve been working with for a while, I ask for feedback only if I’m working on a different type of project. I usually ask for feedback by email because that’s how my clients prefer to communicate.

Surveying clients to get their feedback on your performance is a terrible idea! Most clients would be uncomfortable providing quantitative information (e.g., on a scale of 1 to 10 how did I perform on this project?), and perhaps also qualitative information, in a survey.

What clients say about us—testimonials—is far more powerful than what we say about ourselves. But testimonials aren’t the way to ask for feedback because feedback can be positive or negative, while testimonials have to be positive. I only ask for testimonials when I know that the client is happy with my work, and I use these to market my services, not evaluate my performance.

—Iori De Milto

I do not ask for feedback often enough. I have a bad habit of turning something in and then completely forgetting about it until it’s time to send an invoice or revisions come in. I’m trying to be better about it.

I think the best way is simply to send an email when you send the invoice asking if everything is ok, reminding them that you’re still available for revisions, telling them how much you enjoyed working on the project, and reminding them that you’re available for more work.

I think a survey is a good idea when you batch clients together. For instance, send it to all your clients once a year. That helps maintain their anonymity but gives you a good sense of any trends or issues you need to address.

—Debra Gordon

When I email a project back to the client, I always say “any feedback is most welcome.” Like anyone, I love to hear compliments, but this invitation also gives clients an opportunity to comment on what they want done differently in the future, so that I can update my style sheets and learn more about their preferences.

When clients are happy and take the time to tell me how pleased they are with my work, I thank them for telling me. I keep a “kudos file” with all the positive emails so I can read them on a day when I need words of encouragement.

If the comment is particularly glowing, I’ll ask if I can use it as a testimonial, which can be a standalone Word file or a LinkedIn recommendation. Very important: I do not ask for LinkedIn endorsements, which have limited value because they involve just a click and can come from people who do not know me very well.

Most clients say yes because I ask them when they’re thinking about me and my excellent work. I ask for a 3-sentence recommendation and offer to draft it for their approval. I’ve taken the hard work off their plate by offering to transcribe their comments, and specifying a maximum of 3 sentences reminds them I’m not seeking a full-page letter.

—Melissa Bogen
“It is not the strongest or the most intelligent who will survive but those who can best manage change.”

–Leon C. Megginson

As a medical communicator for more than 30 years, I’ve witnessed the evolution of our field firsthand. When I began life as a medical editor, I had to verify references by immersing myself in the dusty shelves of the Harvard Medical School library, number (and renumber) the references manually, and format them without the benefit of macros. Back then, technology was in its infancy, social media were nonexistent, “open access” had a different meaning, and words were king. Going back even farther, to the birth of AMWA more than 77 years ago, medical writers were primarily physicians and regulatory writers, and the major focus of AMWA education was how to communicate science more clearly.

The world for medical writers today is vastly different. Every day there is a new electronic gadget designed to help us do our job better, a new social media platform to facilitate the exchange of information, another predatory publisher, or an appeal to replace words with images. Today’s medical writers come from a variety of backgrounds and work in a range of settings. Our ever-changing professional world creates new demands as well as new needs. As much as I loved losing myself in those dusty library shelves, I know that to remain relevant, I must adapt.

Over the past few years, AMWA leaders and other stakeholders have brainstormed about how the medical communication industry has changed, what challenges these changes present to our members, and what opportunities the changes create for our association. At this year’s spring Board of Directors meeting, we engaged Board members in a discussion of trends in medical communication. We were fortunate to have members at the table representing various medical communication settings, allowing us to have a robust exchange. Ensuring that we are familiar with trends in the industry will allow AMWA to develop resources and educational content that will help our members to adapt, remain relevant, and enjoy success in a constantly changing industry.

Some of the trends we identified crossed medical communication settings and fell into categories of general trends (new technology, products, and opportunities), evolutions in writing and publications, the next generation of medical communicators, and new competition for AMWA (Figure 1). We also identified trends

**General Trends**
- Infographics/data visualization
- Social media
- Wearable devices
- Artificial intelligence
- Health technology assessments
- Health economics and outcomes

**Writing/Publications**
- Plain language movement
- Patient-centered publications
- Predatory publishing/open access publications

**Next Generation of Medical Writers**
- Many don’t consider themselves “medical writers”
- First wave of graduate–trained medical writers entering workforce

**Competition for AMWA**
- For–profit companies in education/training space
- International medical writers

Figure 1. Trends in medical communication
specific to types of medical communication that represent the most common factions of our membership: regulatory writing, scientific publications, resources for patients and the public, public relations, grants, and continuing medical education (Figures 2 and 3).

We first identified many of these trends in 2015, as part of AMWA’s Strategic Planning Initiative, a yearlong process that my 2 predecessors reported on in this column. At that time, we surveyed members to determine what they thought were the most important or relevant trends affecting their experience as medical communicators. (Respondents were allowed to select as many as 3 choices.) According to the results of the survey, the following were the top 5 trends:

• Continued increase in outsourcing of writing and editing (41%)
• Influence and use of social media (31%)
• Changing reading patterns driven by electronic media (31%)
• Research and publication takes place in an expanding global environment, especially China and East Asia (29%)
• Increase in variety of technologic tools for medical writers (24%)

It’s clear that these trends have important implications for AMWA members and other medical communicators. They also present opportunities to our association. As the leading resource for medical communicators, with a mission to provide educational resources that promote excellence in medical communication, AMWA is dedicated to developing programs and resources that help meet the evolving needs of medical communicators. It is no longer enough for our education to focus on writing and editing skills. Our Online Learning catalog (http://www.amwa.org/page/Online_Learning) currently contains more than 80 educational programs and resources, many of which focus on topics related to these trends, such as health economics, clinical trial transparency, plain language, health literacy, social media, and technologic tools. Our Medical Writing & Communication Conference in November also features many sessions on these topics. We continue to seek experts to help create additional educational activities addressing these trends and other identified members’ needs. If you or a colleague have expertise to share, I urge you to reach out to AMWA headquarters. I also encourage you to think about presenting at meetings of our sister organizations; doing so helps enhance AMWA’s reputation in the greater medical communication community. Help us reach those medical writers who don’t realize they’re medical writers!

In related discussions, the Board explored ways to enhance AMWA’s visibility among employers of medical communicators. Some employers are strong supporters of AMWA, sponsoring the annual conference, requesting onsite training, and encouraging membership in AMWA. But many others don’t recognize the value of AMWA membership. How do we change that? As an important first step, AMWA created an Employers Resources page as part of the new AMWA website (http://www.amwa.org/page/Employer_Resources). We plan to build this page by adding more content targeted to employers, such as defining the value of medical writing and editing as well of AMWA membership and education, creating value propositions for different employers and decision makers, and adding employer testimonials. We are also compiling a list of employers so we can market AMWA to them directly.

I am so pleased that we were able to devote time at the Board meeting to these strategic discussions that are vital not only to addressing members’ needs but also to enhancing AMWA’s standing in the medical communication community. If you are aware of trends in your particular niche in medical communication, please feel free to send your thoughts to me at lori@editorialrx.com. If I don’t respond immediately, you may find me among the dusty shelves of the nearest medical library—just for nostalgia’s sake.

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Slate of Candidates for 2017–2018 Election

By Kathy Spiegel, PhD, MWC® / 2016–2017 AMWA President–Elect

Each year, the slate of AMWA officers is chosen by the Nominating Committee, which consists of the President-elect (who serves as chair) and 6 voting members who are not members of the Executive Committee (EC). The Nominating Committee receives from AMWA headquarters the names and biographies of all members who meet the criteria for the 3 elected offices: President-elect, Secretary, and Treasurer. The Nominating Committee also receives any EC Interest Forms submitted by candidates (the forms are sent to qualified candidates, giving them an opportunity to express their interest in serving in an elected officer position). Members of the Nominating Committee discuss the potential candidates and select 1 candidate for each position. The names of these candidates are then presented to the Board of Directors for approval at its spring meeting. The following candidates were approved by the Board of Directors at its spring 2017 meeting:

President-elect: Cyndy Kryder, MS, CCC-Sp
Secretary: Hilary Graham, MA
Treasurer: Julie Phelan, MD, MBA

The President-elect automatically assumes the office of President at the annual business meeting held during the annual conference of the following year. The 2017–2018 AMWA President will be Kathy Spiegel, PhD, MWC®. Kathy served as Secretary in 2015–2016. Previously, she had served on the Constitution and Bylaws Committee from 2012 through to her chairing of the committee as Secretary. Her previous EC positions include Chapter Relations Administrator (2012–2013) and Chapters/Membership Administrator (2011–2012). She has served as a member of the Education Committee, for which she served as chair of the Regulatory Education Subcommittee and as a member of the Advanced Education Workgroup. At the chapter level, she has been the President-elect, President, and Immediate Past President (2008–2013) of the Michigan Chapter, and she has also served as a Chapter Delegate (2009–2011). Her annual conference activities include roundtable leader (2009); special interest session coordinator, open session moderator, and open session panelist (2011, 2013); and workshop leader (2012, 2015, 2016). She was awarded an AMWA fellowship in 2015. Kathy received a bachelor’s degree in chemistry from Duke University and a doctorate in pharmacology from Cornell University Medical College. She is a Regulatory Writing Senior Manager at Amgen Inc., working from her home in Sharon Township, Michigan, where she also serves as chair of her local Planning Commission.

President-Elect

Criteria: “The president-elect (1) must have served on the EC for a minimum of 2 full years and (2) must be a current member of the EC when his or her name is being considered by the Nominating Committee.”

Candidate: Cyndy Kryder, MS, CCC-Sp, an AMWA member since 1993, currently serves on the EC as Secretary (2016–2017). She served as Member Resources Administrator from 2013 to 2016. She is editor of the Social Media section of the AMWA Journal, a position she has held since 2010, and has written more than a dozen articles for the Journal. Currently, as Secretary, she chairs the Constitution and Bylaws Committee after having served as a member of the committee. At the chapter level, she has served as Secretary (2008–2009, 2009–2010), President (2011–2012), and Chapter Delegate (2010–2013) for the Delaware Valley Chapter. At the annual conference, she has presented open sessions (2009, 2010, 2011, 2013, 2014, 2015, 2016) and roundtables (2009, 2010, 2014), and she chaired the Nonphysician Book Awards Committee in 2012 and 2013. She also collaborated with
Lori Alexander to develop an AMWA online learning activity about careers in medical communication. She was awarded an AMWA fellowship in 2016. Cyndy transitioned to full-time freelance medical writing 26 years ago. She writes promotional, educational, and scientific pieces for professional and lay audiences in various therapeutic areas and for a wide range of media. She also assists companies in publication-planning efforts.

**Secretary**

**Criteria:** “The secretary must have served on the EC within the 3 years immediately preceding his or her consideration by the Nominating Committee.”

**Candidate:** Hilary Graham, MA, an AMWA member since 2009, is in her fourth year on the EC, currently serving as Chapter Relations Administrator; she previously served as Awards Administrator in 2013–2014. She has continuously served at the chapter level since 2010 in a number of roles that include President (2012–2014), Conference Coordinator (2012, 2014), Chapter Delegate (2011–2014), and Director at Large (2014–2017) for the Southwest Chapter. She served as editor for the Around the Career Block section (2013–2016) in the *AMWA Journal* and has also written articles for the *Journal*. At the annual conference, she has been a workshop leader (2012–2014). She is Senior Manager of Scientific Marketing at Luminex Corporation in Austin, Texas. She is working toward a doctor of philosophy in technical communications at Texas Tech University. She was awarded an AMWA fellowship in 2016 and was named a Woman to Watch by Medical Marketing & Media in 2017.

**Treasurer**

**Criteria:** “The treasurer must have served at least 1 year on the Budget and Finance Committee within the 5 years preceding his or her consideration by the Nominating Committee. It is also desirable for the treasurer to have served on the EC before assuming the office of treasurer.”

**Candidate:** Julie Phelan, MD, MBA, an AMWA member since 2009, currently sits on the EC as Treasurer and chair of the Budget and Finance Committee (2016–2017). She has previously been a member of the Budget and Finance Committee (2015–2016), the Communications Committee (2014–2016), the Social Media Committee (2012–2014), and the 2015 Salary Survey Task Force and the Salary Survey Writing Group. On the chapter level, she was President of the Greater Chicago Area Chapter (2014–2016), serving previously as President-Elect (2013). She has also served as the Membership Chair for the chapter (2012–2014) and as Chapter Delegate (2013–2016). Julie is President of Biomedisys, Inc in Chicago, Illinois.

**Procedure for Additional Nominations**

According to AMWA’s bylaws (Article III.2d), additional nominations for President-elect, Secretary, or Treasurer may be made by any member whose dues and special assessments are current, provided that any such nomination is submitted in writing to the Secretary of AMWA at least 30 days before the annual business meeting (which will take place November 4, 2017, at the AMWA Medical Writing & Communication Conference in Orlando, Florida). Any individuals so nominated must meet the criteria outlined in the bylaws (Article III.1.a through III.1.d) for their names to be placed on the ballot. Such a nomination must clearly state the qualifications of the candidate, must be signed by 50 members in good standing as of the date of the receipt of the nomination, and must be accompanied by a letter from the candidate stating that he or she is willing to serve if elected.
AMWA Board Modernizing Governance Documents and Structure

As technologic, economic, social, and legal changes continue at a rapid pace, AMWA must be flexible and nimble in order to be relevant, successful, and sustainable.

By Cynthia L. Kryder, MS, CCC–Sp / 2016–2017 AMWA Secretary
Lori Alexander, MTPW, ELS, MWC® / 2016–2017 AMWA President

It is customary for associations to periodically review their association governance to determine whether it continues to meet their members’ needs. This periodic review is important because a governance structure that served the association well in the past may no longer be satisfactory in meeting the needs of the association and its members in the present or in the future. Trends in association management indicate that many associations review and revise their governance structures every 5 to 10 years. This allows the associations to be better positioned for change and to react quickly when change occurs.

AMWA leaders are working to fulfill their roles as stewards of the association, guiding AMWA toward a sustainable future by ensuring sound, legal, and financially responsible governance. These principles underlie the recent changes to the Constitution, the proposed updates to the Bylaws, and the implementation of a Chapter Affiliation Agreement.

Changes to AMWA Constitution
AMWA’s revised Constitution was submitted to AMWA members for ratification during the first week in February, with ballots to be received by March 6, 2017. The ballots were counted on March 16, 2017, and the results were reported to the AMWA Board of Directors (Board) at its April meeting and announced the following week in the AMWA blog (http://engage.amwa.org/blogs/cynthia-kryder/2017/04/12/the-results-are-in). The new Constitution was approved with 96.3% of the vote (Figure 1).

The Constitution and Bylaws are distinct, albeit related, documents. The vote to approve the Constitution does not affect the proposed changes to the Bylaws.

Changes to AMWA Bylaws
As with the Constitution, AMWA’s Bylaws have served us in good stead for many, many years. However, over the years the Bylaws have not kept up with changes in current laws governing nonprofit associations, with changes in association best
practices, or with how AMWA functions today. AMWA’s leaders have proposed changes to the Bylaws to address this disparity. Most of the proposed revisions are considered a “legal tune-up,” ensuring that the Bylaws are in proper and current legal form. Other changes are meant to simplify the language and ensure consistency between the Bylaws and AMWA’s Constitution. Still other changes are designed to remove operational details that are more appropriately addressed in policy and procedure manuals—which can be more easily adapted to align policy and practice by simple consensus of the Board, rather than by subjecting the implementation of minutiae to formal voting procedures.

An important objective of the proposed governance update is to enable a flexible, nimble governance structure to support the best possible AMWA for members, leaders, and the profession. One item in the proposed new Bylaws is designed to modernize AMWA’s governance structure by streamlining the current structure (Figure 2).

The current Administrative Review Committee (ARC) consists of the elected officers (President, President-Elect, Immediate Past President, Secretary, and Treasurer) and the Executive Director (ex officio, nonvoting). The current Executive Committee (EC) consists of the ARC and the Department Administrators. The current Board consists of the ARC, the EC, and the Chapter Delegates.

As such, the current Board comprises 33 members, which is twice the size of the boards of similar organizations. According to Leading with Intent: A National Index of Nonprofit Board Practices, over the years, nonprofit board size has decreased to a current average of 15 members; 80% of boards have fewer than 20 members.¹

Under the proposed governance structure, the ARC would be renamed the EC, but its composition would not change. The proposed Board would be composed of the EC and at least 6 additional at-large Directors. The proposed Bylaws allow flexibility to increase the number of at-large Directors by up to 5 additional members if needed to conduct the work of the Board. At-large Directors may serve in similar roles as current Department Administrators, that is, they would serve as liaisons to committees and other working groups.

Also under the proposed governance structure, the Chapter Delegates would become part of the Chapter Advisory Council (a new body being established to ensure continuity of collaboration, information, and resources between national governance and chapter governance). At the time of writing, the Chapter Advisory Council Task Force, led by Jen Minarcik, Delaware Valley Chapter Delegate, is developing recommendations with regard to the size, makeup, and responsibilities of the Chapter Advisory Council, along with recommendations for representation on the Board, under AMWA’s proposed new governance structure. The Task Force will present these recommendations to the current Board, who will decide on the final composition and responsibilities of the Chapter Advisory Council.

The most successful boards are strategically composed, taking into account “skill sets, leadership styles, and diversity of thought and background.”¹ The proposed new AMWA Board would represent various medical communication settings, as well as diversity in other aspects of AMWA’s membership (eg, years of experience, geography). The flexibility in the composition of the Board will also enable AMWA leaders to nominate Board members who are best suited to help achieve
AMWA’s priorities and goals for a given year. With this smaller group, it will be essential to ensure that the composition reflects the needs of the organization and that Board members possess the following qualities:

- Passion for AMWA’s mission
- Professional and analytical skills
- Vision and strategic thinking ability
- Leadership skills
- Ability to work in a team setting
- Commitment to and time for Board service

This proposed Board structure will empower the Board to function efficiently and effectively; enable Board members to be the big-picture, visionary leaders they need to be; and allow AMWA to derive maximum benefit from the talents and expertise of Board members.

During March and April 2017, AMWA members had an opportunity to review and comment on the proposed changes to AMWA’s Bylaws. The Board will consider the submitted comments in their final deliberations. The Bylaws changes now reside with the Board for final review and ratification, per established, standing procedure.

Implementation of New Chapter Affiliation Agreement

Government and banking regulations for nonprofit associations such as AMWA have become more stringent over the past decade, especially with regard to monetary transactions. As one example, banks are now required to conduct annual reviews of their clients’ businesses to ensure that money received is being used for the organization’s mission.

Because AMWA funds chapters through a portion of member dues, AMWA must demonstrate that the money it sends to chapters is being used to further the AMWA mission. Chapters must demonstrate that they are using their money to fund mission-driven activities (education and meetings). If not, AMWA is at risk for losing its nonprofit status.

An agreement between chapters and the parent organization is standard practice, and, on the advice of its attorney, AMWA has implemented affiliation agreements with chapters. The purpose of the Chapter Affiliation Agreement is to protect both chapters (and their leaders) and the national organization; a formal agreement with chapters is necessary to protect chapters and AMWA from potential liability. The chapter agreement ensures that members benefit from their chapter (see Box).

Many of the requirements outlined in the Chapter Affiliation Agreement have been in place for decades. For example, AMWA has always required chapters to establish themselves as independent entities with formal governance bodies and documents, to submit semiannual reports on activities, and to keep adequate financial and corporate records. The Chapter Affiliation Agreement also includes terms that cover modern issues such as confidentiality and protection of member information and fulfilling requirements of new state and federal laws for nonprofit organizations. Many chapters have been operating successfully under these requirements for years. Other chapters have struggled to keep officer positions filled, to fulfill administrative and governance obligations, and/or to host educational or networking activities.

Chapter leaders had the option of not signing the Chapter Affiliation Agreement and instead dissolving their chapters and transitioning to a regional networking groups that allow for the continuation of local activities but alleviate the governance and administrative tasks that are required of a chapter. Networking groups allow members to participate in local networking events coordinated by volunteers in areas with concentrations of AMWA members. Of AMWA’s 20 chapters, 4 chose not to enter into the Chapter Affiliation Agreement. AMWA leadership has established the Chapter Transition Task Force to collaborate with members in these former chapter areas to help continue networking events and maintain a positive member experience. If desired, new leaders in these former chapter areas may choose to reinstate their chapter status in accordance with AMWA procedures.

We recognize that change can be difficult, especially when practices and documents have been in place—and seem to have served well—for so long. But we would not be fulfilling our obligation to AMWA if we allowed our governance docu-
ments and structure to remain as they are; the risk is too great. As officers of AMWA, we have an obligation to ensure that AMWA complies with laws and best practices for nonprofits. To do otherwise is irresponsible and jeopardizes the future of AMWA for all of us.

Reference

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References
Instructions for Contributors

Unless otherwise noted, submit manuscripts and suggestions for content to the Journal Editor at JournalEditor@amwa.org.

FEATURE-LENGTH ARTICLES
Feature-length articles include topical features, original research in medical communication, and Science Series articles.

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The AMWA Journal invites manuscripts on areas of interest to medical communicators, including topics within such broad categories as regulatory writing, continuing medical education, patient education, medical marketing/advertising, public relations, medical journal management, publication ethics, health policy, etc. The AMWA Journal especially encourages the submission of articles on the theoretical underpinnings of specific types of medical communication. AMWA Journal readers are primarily practitioners (not academicians), and application of theory to practice is an essential component of manuscripts. Word Count: 3,000 words (plus an informative abstract of 250-300 words)

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The Science Series accepts manuscripts that provide an overview of a specific anatomic or physiologic topic (eg, body system), disease or condition, diagnostic method (eg, laboratory tests, imaging systems), or type of treatment (eg, devices). Word Count: 3,000 words (plus an informative abstract of 250-300 words)

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Profiles of Professional Organizations
These profiles help readers discover or better understand organizations that address specialty niches and may therefore be a useful supplement to AMWA membership. Word Count: 600-1,000 words

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These articles provide overviews of educational programs designed to enhance the knowledge and skills of medical writers and editors. Word Count: 600-1,000 words

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Commonplaces is devoted to the exchange of ideas between teachers of medical communication and practitioners. Contact Commonplaces Editor Lora Arduser (ardusell@ucmail.uc.edu) with article ideas.

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