The Board members want to hear from you! Please reach out to any or all of us. You can reach us by email at the following addresses: (email addresses are spelled out to discourage spam.)

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Vice President: Fae Koohestani, PhD  
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Secretary: Barbara Arnoldussen, DBA, MBA, RN  
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**Northern California Chapter Leaders**
Bylaws/Chapter Procedures Committee Chair: Nancy Katz, PhD, MWC  
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Communications Committee: Crystal Herron, PhD, ELS  
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Pacific Conference Committee Chair: Co-Chairs Mark Hagerty and Sandra Ruhl, RN  
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Program Committee: Maggie Norris, BSc  
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Letter From Our Chapter President Bridget Mazzini

Dear fellow Chapter members,

I hope you are having an uneventful fall. Not my usual salutation but amidst the drought, fires, hurricanes, and Covid surge it feels like the best thing to hope for is that you and those you love are staying safe.

One constant through the pandemic has been the camaraderie of Chapter members.

It is late August as I write. By the time you read this, I’ll have packed away the DEET and nestled into dreams of roasted root vegetable stew. Visions of booster shots are dancing in my head. With no students in my house this year, I have lost track of that fall season mile marker, which quite frankly, seems like a blessing in 2021.

Emerging from pandemic hibernation has come in fits and starts. Tendencies toward caution got set to the side as smiles and unmuffled voices of friends surfaced. It. Felt. So. Good.

Now, as news of variants continues to break, it looks like we will be settling into a long winter of masks and muted social gatherings. I keep reminding myself: this too shall end.

One constant through the pandemic has been the camaraderie of Chapter members. Our program committee has kept us connected by offering bi-monthly Aperitif Hours with creative themes. Though the pandemic kept us from take off, we enjoyed sharing photos of our dream travel destinations in a February virtual meet-up.

In April, we got to know each other a little better through a game of truths and lies. In case you were wondering… No, Fae Koohestani is not a former professional tennis player. Our June Aperitif Hour took the edge off our starvation for San Francisco culture when local poet and Chapter member Randall Mann shared his beautiful work celebrating Pride Month.

(CONTINUED)
Our Chapter held two virtual education seminars since I last wrote. In May, Chapter member Doris Davis, RN, BSN walked us through Document Quality Control, helping us to make sense of this labor-intensive process.

In August, Chapter member Snehal Mohile, MBBS, CPhT shared her expertise on pharmacology, focusing on aspects of interest to medical writers. Special thanks to Maggie Norris, Leslie Kowitz, Mark Hagerty, and Fae Koohestani as well as our presenters for their efforts to keep our Chapter connected and educated.

Keep on the lookout for upcoming events. Got an idea for an event? The Program Committee would love to hear from you:

program-chair (at) amwancal.org

In August the Board welcomed Crystal Herron, PhD, to serve as our Communications Chair. Crystal brings great energy and experience as a medical communicator and business owner and some tech savvy to our Chapter operations. Thank you and a warm welcome, Crystal!

The AMWA National Conference “Spotlight on Medical Communication: Disruption, Innovation, and Resilience” will be held virtually October 27—29. If you miss the conference, you can still catch the highlights. Watch for a Zoom invite for a Chapter conference round up. Fellow Chapter members who attended the conference will share their insights.

The Pacific Coast Conference (PCC) planning continues. Thank you to those of you who responded to the recent PCC survey: we have a much better idea of what you are interested in learning about and experiencing during this event. Stay tuned. We hope to come together in person next spring or summer at the Presidio in San Francisco. Fingers crossed. A huge thanks to Sandy Ruhl, Mark Hagerty, and Fae Koohestani.

Stay tuned. We hope to come together in person next spring or summer at the Presidio in San Francisco.
Finally, here’s a challenge for each of you. Some of you are new to medical writing, some of you are seasoned medical communicators and longtime Chapter members. Everyone has room to try something new.

What is one thing you haven’t done before that you could take on to contribute to our Chapter?

Here are a few ideas:

- Attend an event.
- Volunteer to help run an event.
- Share an idea for an Aperitif Hour and consider being a social host.
- Present a topic you have expertise in at an education event or the PCC.
- Moderate a round table at the PCC.
- Volunteer to plan or help with the PCC next Spring.
- Write an article for the next issue of the Pacemaker.
- Volunteer for a Committee.
- Attend the National Conference and write a Session report. No experience required and great guidance provided.

I would love to hear what challenge you are considering. Please send me a note to introduce yourself if we haven’t met and to let me know what you are up to: 

president@amwancal.org

I look forward to hearing from you.

Take good care.

With respect,

Bridget Mazzini, RN, OCN
AMWA NorCal President
Editor’s Note

After reading the draft of Bridget Mazzini’s President’s Letter, the impression that lingered was the exciting breadth of activities that we offer our AMWA Northern California members. Not just in the technical and medical aspects of our professions, but also in the broad spectrum of needs that constitute the non-professional part of our lives.

Let’s work together to strengthen AMWA NorCal!

We all need enjoyment, relaxation and camaraderie—especially now, restricted as we are by necessary protections against Covid.

Our goal for the Pacemaker newsletter is to present you with the many advantages of membership in AMWA NorCal and to urge you to participate and take advantage of them.

You are an important, an essential, part of our organization. Contributing your skills will broaden and enrich even further the scope of our offerings. In turn, you will have the opportunity to meet more people and increase your network.

I hope the articles you read in this issue will inspire you to add your own creative thinking and talents to the mix in future issues of the Pacemaker. Let’s work together to strengthen AMWA NorCal!

Send your ideas about potential topics or articles to Pacemaker editor, Mary (Mimi) Wessling:

pacemaker.editor@amwancal.org
June Aperitif Hour

We gathered virtually (favorite beverages in hand) for another creative Aperitif Hour, which coincided with LGBTQ+ Pride month in June. Our guest poet and NorCal chapter member, Randall Mann, read from his latest book—*A Better Life*, his fifth published collection.

Mann’s poems mindfully reflected his experiences interweaving themes such as aging, sexuality, biotechnology, and Bay Area gay life. The lively discussion that followed was an intimate look into his dual life as a creative man who has successfully bridged the divide between art and the corporate culture of a pharmaceutical company.

Members so enjoyed getting up close and personal with him that we went well beyond the 1 hour allotted time. In the end, Randall expressed his feelings of “having found his people” among the diverse and welcoming band of attendees from our chapter, and the feeling was mutual. If you haven’t yet dropped in to one of the Aperitif Hours, give it a try. You never know what you might find. As we like to say, “You won’t learn a thing, but you’ll learn a lot!”

Those of us who’ve shown up to these casual meet ups, have been richly rewarded by getting to know each other in ways we may not have in a business setting. Let us know if you have an idea, topic, or a pursuit that you’d like to share. One of the benefits of belonging to this chapter is the serendipity of connections. You really never know what’s beyond the cover until you look.

About the author

Leslie Kowitz, MA, ELS, is a medical communication professional with over 25 years in the bio-pharmaceutical industry. She is currently a senior regulatory submissions editor for BeiGene. Leslie enjoys transforming unwieldy documents into streamlined, consistent information, as well as spending time in her “She Shed” creating art.
The internet can be a nuisance, a spreader of wrong information, an annoyance that sucks time—but also the opposite: it can provide valuable learning experiences during these times when in-person interaction is so limited. On August 14, I, along with other AMWA NorCal members, experienced a most informative and positive learning experience: Snehal Mohile's Webinar “Basics of Pharmacology.”

Mohile began with a brief description of the major areas that comprise pharmacology and a definition for each, providing a framework for the details that followed:

- Pharmacodynamics
- Pharmacokinetics
- Pharmacotherapeutics
- Pharmacy
- Posology
- Toxicology

Although some of the terminology is familiar, other areas such as posology—the study of the amount of drug that is required to produce a therapeutic effect—are less so. She made the point that any substance introduced into the body is likely to produce change. When considering drug effects, of course, the desired ones are therapeutic, but undesirable are adverse effects such as vomiting. Even worse is anaphylaxis—the severe allergic reaction that induces a sudden release of immunological mediators that can induce reactions ranging from mild, allergic-like to life-threatening.

How effectively a drug works—its therapeutic efficacy—is described by ED50, the dose of the drug that will produce half the maximal response required. This provides a way to compare the action of two drugs at a given dosage. For any drug at a given dose, the response will go through a time-dependent process during which the activity of the drug builds to a maximum and then declines to the point where it (CONTINUED)
is ineffective. For visual enhancement of our understanding, Mohile presented both ED50 and time dependency as graphs. The drug-response curves described its potency—the strength or concentration of a drug required to produce a given effect. To present a more pleasurable way to think about that concept, Mohile showed us a slide with alcoholic drinks of equal potency: a mixed drink, a glass of wine, a glass of beer… an equal pleasurable effect produced by different amounts of drinks with different potency (I’ll have the wine, thanks).

Different drugs produce effects on different cell sites through their action of receptor sites—structures on the cell membrane that allow or prevent the drug’s linking to or entering the cell as required to produce its effect. Whether a drug can exert its activity depends on molecular structures on the surface of cell: agents that allow the drug to produce its effect (agonists) or those that inhibit it (antagonists). Some cell membrane structures also allow competition between an agonist and an antagonist—a good example of how pharmaceutical effective is complex because drugs are often complex molecular structures.

Mohile then led us through the complex process by which a specific drug could move through the body via the bloodstream, go into different organs and tissues, and finally be excreted.

The first step in metabolizing most drugs involves the liver, which can proceed more or less rapidly depending on the liver enzymes. If there is an abnormal amount of liver enzyme, an adverse drug event can occur. The variation in the way that patients react to a given drug is multifactorial, depending on their age, weight, sex, and genetic makeup. The patient’s emotional state, disease conditions, and compliance with their physician’s advice about self-administration all play a role here.

Onto the issue of great importance to a patient: the safety of a drug under consideration. Drug safety is one half of the FDA consideration: safety plus efficacy. Before a drug can be tested for safety in humans, it is tested in animals that have a common basis for the effects of the drug. There are two measures: the LD50, the dose that will kill half the experimental animals, and the ED50, the dose that is needed to produce half of the maximal response in the test animals. The ratio of these two numbers, LD50/ED50, provides the Therapeutic Index, an estimate of the relative safety of the drug. The adverse effect of a drug is not always dose-dependent, one more factor to consider. (CONTINUED)
Then, a slide showing the sad effects of harmful drugs on children and an infant without proper limb development left no doubt of the importance of establishing both safety and efficacy in humans.

After these measures have been studied in animals, safety and efficacy are studied in specific patient populations in the phases I through III of the FDA approval process. If these three phases yield acceptable results for safety and efficacy, phase IV, the post-approval phase, is a close follow-up in actual patients who have been treated. The ultimate goal in patient care and clinical research is to find the right drug for the right patient at the right dose and at the right time for treatment. Safety is always the most important consideration.

Finally, Mohile provided us with a list of key factors and resources for medical writers who need to evaluate clinical research and for medical practitioners who are responsible for using the drug to treat patients.

This guided trip through the major areas of pharmacology was overall a most thorough and exacting review of an issue that is likely to affect us both as professionals and likely at some point, as patients.

About the presenter

**Snehal Mohile** is a clinical research coordinator at Stanford University School of Medicine in the Department of Urology and is responsible for managing Phase III National Cancer Institute clinical trials. She has been with Stanford University for over 2 years. Prior to Stanford she was an externship coordinator and instructor of Pharmacology in Pharmacy technology program at Foothill College. Snehal holds a Bachelor of Medicine and Bachelor of Surgery degree from University of Mumbai, India and pursued coursework in Doctor of Medicine in Pharmacology.

About the author

**Mary (Mimi) Wessling**, MS, PhD, ELS, is a translator and historian of science and medicine with emphasis on medical ethics, immunology, and epidemiology. She has translated two books on the History of Medicine from the German.
Book Nook: This Is Your Mind on Plants

Is the day-to-day human existence so stultified, so dull, so mundane, so depressing that it is tempting to succumb to ingesting mind-altering substances to add pep to your day? Hey, how about a double latte chock full of that stimulant, caffeine? Or a hit of OxyContin, even though the back pain it was prescribed for has been long-gone? Or giving in to that New Age friend of yours and taking a ride on that magic carpet ride fueled, of course, by mescaline.

If you get just a few pages into This Is Your Mind on Plants, you’ll get the idea that author and would-be opium poppy cultivator Michael Pollan is all-in on the idea that drugs are a part of life and so get used to it. He owns up to his daily use of a couple of plant-based stimulants—caffeine-stoked coffee and tea—to, as he says, “clear the mental fog, sharpen my focus, and prepare myself for the day ahead.”

Gosh, what ever happened to sober living? Well, it does exist in the sense that Pollan takes a sober, calm look at the tortured and inconsistent view of drugs and drug use in the United States. He starts off detailing how there’s no ironclad definition of what a drug is. He muses — sugar? chicken soup? artificial sweeteners? He says even the Food and Drug Administration has given up on a definition and, instead, hides behind circular logic—“articles other than food” that the FDA recognized as drugs. Huh? And “illicit,” says Pollan, is whatever the government decides it is. Heroin? Yup? OxyContin, not so fast —a doctor prescribes it so it passes muster.

A clear-eyed view of drugs, Pollan says, has been clouded, in part, by the relentless war on drugs that peaked in the late 1990s. Some drugs were viewed as undermining the American way of life and anyone associated with them could have the book thrown at them— fines, imprisonment, property seizure—for even the intent to make and distribute drugs. (He uses the example of poppies, where it’s all in the intent.)

(CONTD)
Now that the war on drugs is in its waning days and decriminalization is in the air, Pollan believes it’s the right time to figure out what’s really going on in the world of illicit and even licit drugs and our relationship to them. Pollan examines the three principal categories of plant-based drugs—morphine (opium poppy); caffeine (coffee, tea, and their leaves), and mescaline (peyote, San Pedro cacti)—through a prism of history, anthropology, botany, biochemistry, and personal experience.

Pollan chose the first person singular voice to tell this tale and the reader follows along with him on his journey through the perils of cultivating opium poppies—he deleted part of his 1997 essay for Harper’s Magazine on growing poppy flowers because he was afraid he would run afoul of the law; these sections are resurrected and appear in the book, however.

Many readers would cringe at his account of withdrawing from caffeine and entering into, at first, the world of dull, enervating grayness. Could we agree with the theory that coffee and tea stimulated European minds to come up with the Enlightenment? It’s a thought. And we can tiptoe along with Pollan as he approaches and then tumbles into the world of awe whose doors are flung open by mescaline, thanks to the time he spent with Native Americans, as well as with a “medicine carrier” in a ceremony that involved a cactus that contained mescaline.

As a July New York Times review put it so succinctly: “Pollan turns to his own narratives of gardening and self-experimentation. As he does, he also masterfully elevates a series of big questions about drugs, plants, and humans that are likely to leave readers thinking in new ways.”

About the author

Michele Anderson began as a pre-med person and ended up as an editor. She spent a few years doing law (she’s licensed to practice in New York state), then veered off into the food business (catering, food writer) and ended up as a news editor (S.F. Chronicle). She lives in San Francisco and is now a freelance editor.
Word Witch Tutorial: Navigation Pane Tools

Most writers who work on complex documents (multilevel headings, generated TOC, autonumbered tables) use the Navigation task pane at least sporadically, to check a heading level or execute a Find action. Some other tools found there are worth investigating in the interests of improving effectiveness in our editing processes.

Select Heading and Content

Place the insertion point on the heading of interest in the Navigation Pane and right click. This action presents a menu of actions to be applied to this section only. The most frequent use of this menu is probably Delete, to delete the complete (sub)section, including the heading paragraph. Print Heading and Content may be useful in some situations to generate a printed or PDF rendering of a (sub)section.

The most versatile tool in this menu is Select Heading and Content. The right side of the screenshot shows the document in Page View and the width of the document window reduced. The shading shows that the section is selected. From here, the user can apply any command that operates on selected text, such as Spell Check (or hide from Spellcheck), apply paragraph and font formatting, and you know the rest.

About the author

Maggie Norris, BSc, ELS, has been a medical writer and a member of AMWA Northern California for more than 25 years. She is serving as Program Chair in 2021. She has served as chapter president, vice-president, immediate past president, newsletter editor, and membership chair; and was on the organizing committee of the AMWA NCal Asilomar Conference. Known to some as “the Word Witch,” she has presented original seminars on advanced Word functionality for managing complex documents and on EndNote for medical writers.
Document Quality Control (QC)—a necessary evil.

Or is it? Our May educational topic presented by Doris Davis, RN, BSN, elicited lively discussions and a deeper understanding of what document QC is all about.

First, let’s define document Quality Control: A comparison of a document to the data and/or source reports from which they originated. For example, a document that commonly gets a QC review is the Clinical Study Report (CSR), although other documents in the drug development process also get QC reviewed.

Sources for data within a CSR include:
- Protocols
- Case report forms
- Safety reports
- Protocol deviations

Some regulatory writers would prefer no one scrutinize their work; however, having documents reviewed by an experienced QC professional ensures output of the highest quality. We perform a “QC” to avoid potential risks, such as drug approval denied by health authority, continuing research on unverifiable results, but most importantly—risks to patients’ safety.

What does it take to be successful as a QC-er?

As professionals who work in the field of medical writing, we collectively have a broad range of skills and roles. Such diversity is apparent when we converge at an AMWA conference—writers, editors, QC reviewers, instructional designers and more. For those new to the field, you may wonder how to become a QC-er. Davis shared her experience about what companies look for in that role.

Attributes of a QC reviewer
- Keen eye for detail
- Familiarity with the document(s)
- Asks questions when something is unclear
- Must gracefully persist if something seems “off”
- Ability to communicate tactfully with author
- Respect for timelines
- Calm under pressure
- Must not be involved with authoring or editing of document content
- Patience!

(CONTINUED)
When to do the Quality Check?

Perform the Quality Check only when the internal review has been completed and the document is considered final. You can stop laughing now! Anyone who works in this field knows that just when you think a document is finalized, someone will request a change or late data is added. When this happens, make sure the change doesn’t affect other parts of the document or isn’t mentioned in other documents. Always confer with the key contact (usually the author) to ensure the change is agreed upon before making those changes. Once you have agreement from the author, then ensure all instances are updated. Remember, it’s better to ask questions upfront than to have a Health Authority (HA) discover a discrepancy later.

Starting the QC process

Whether you work as a freelance QC auditor or are part of an internal team, these tips will help make your process as smooth as possible:

- Put together an audit plan outlining the process and timeline.
- Know how to document discrepancies.
- Know all the components you need to accomplish the task.
- Be persistent in getting essential source documents.
- Keep key contact person updated of progress.
- Get information on IT support 24/7.
- Stick to the timeline or beat it!

Communication is key

Because the QC step comes at the end of the submission process, stress levels can run high as people try to meet deadlines.

Tact, diplomacy, and open communication are critical for a QC reviewer. Show team members that you care and have a plan. People will respond favorably the more they feel your commitment to the work and the team.

Choose your words and tone carefully to get the best outcomes (eg, “Can you tell me where I can find …” instead of a “you didn’t provide me with …”).

(CONTINUED)
Be aware that timelines can change, but often the QC-er must stick to the original date, meaning less time for your work. Be up front with your manager or key contact and ask for more time, if necessary. The whole point of QC-ing is to reduce errors and ensure accurate data, which requires proper attention.

**Be up front with your manager or key contact and ask for more time, if necessary.**

At the end of the process, Davis recommends expressing appreciation to authors and other team members, which goes a long way to ensure your name is at the top of their lists when the next document QC project comes along. Fostering these important relationships with professionalism turns an activity often seen as the necessary evil into the necessary quest for excellence.

About the presenter

**Doris Davis** has done GCP Compliance Auditing for 20 years. Prior to that, she was a Clinical Research Associate and an RN, BSN (specializing in Oncology, Bone Marrow Transplant and Critical Care). She enjoys reviewing documents and often finds things that others have missed. She felt honored to be asked to present to AMWA on Document Quality Control. She helped us understand why quality control is important, and added a little humor when the client says ‘it’s final’ (of course that means that they are still making revisions during QC process).

About the author

**Leslie Kowitz**’s bio appears earlier in Pacemaker.
During the annual membership meeting in February, our Chapter members were treated to an enthusiastic presentation from Crystal Herron, PhD, ELS about Plain Language and its positive effect on readability. Herron’s passion for clear, direct communication was evident in her presentation. When it ended, I was energized about putting plain language practices into my daily work.

Herron began her talk with this comment: “Scientific and medical writers often understand the value of using plain language to communicate with a lay audience. But when writing for experts, they may fear that plain language will offend their reader. Let’s debunk this misconception with data supporting why plain language and readability benefit all readers. We’ll also talk about the top 5 contributors to readability and how you can target them to improve your writing.”

What is plain language?

According to plainlanguage.gov, an official site of the US government, plain language is communicating so your audience can understand the first time they read or hear it. Does that sound like most scientific communication out there? Well, Herron thinks it should be.

Herron categorized what prevents writers from embracing plain language into 3 buckets—misperception, lack of training, and the “curse of knowledge.”

Misperception

Could it be that doctors and scientists think they must write that way to be taken seriously? Herron debunked the myth

“Nothing in science has any value to society if it is not communicated well.”

—Anne Roe, The Making of a Scientist (1953)
that educated readers expect a complex vocabulary or writing style lest they feel the material was “dumbed down.” Nobody ever complains that an article was too easy to understand!

**Lack of training**
The truth is that although many professionals in medical science are experts in their respective fields, most have not had any courses in writing past high school. So, they perpetuate papers that are not reader-centric, but full of difficult sentence structures and technical jargon. Writing clear and concisely takes a lot more work and training than many people in the sciences have in their tool set.

**Curse of knowledge**
This bucket contains the cognitive bias that happens when we assume others know what we’re talking about—that they possess the background information to make perfect sense of our writing. Herron illustrated this bias by describing an insightful tapping study (Nelson 1990) in which a tapper finger-taps 3 tunes on a desk and estimates the probability a listener will guess it correctly. Well, the tapper figured about 50% would guess correctly, but only 2.5% did! That’s powerful imagery to remember as we’re drafting or editing our writing.

**Target reading levels**
Citing sources such as the Centers for Disease Control (CDC) and the National Institutes of Health (NIH), Herron explained that the recommended reading level (grade level) is 2 to 5 grades lower than the target audience and even lower when reading under stress (worldwide pandemic, overloaded schedules, lack of time). So, if we target our writing to be understandable to those with a high-school level biological background, many educated readers could find the sweet spot of understanding.

Unclear science writing is a problem. Herron cited sources showing most research papers are written for specialists and 22% of scientific abstracts have a reading level beyond college graduate level—well beyond the recommended level. But we as medical communicators are poised to make lasting contributions to improving the readability of critical medical information not just to those in the field but to the world at large. Yes, I’m on the bandwagon!

Using the following key concepts has the power to change the medical communication landscape over time: word and sentence length, punctuation, jargon, and passive voice. As ...

*we can envision a future where science is available to everyone.*
a community of medical writers and editors, we’re acutely aware of each of these factors. But with enough evangelists putting them into practice, we can envision a future where science is available to everyone.

**How to increase readability**

These tips will help you increase readability in your work.

**Keep words short**

Short words are clear and direct (aim for 2 syllables). Choose common words over the more technical term (eg, ‘kidney’ vs ‘renal’).

**Shrink sentences**

Shorter sentences are more readable than longer ones. Mixing shorter and longer sentences creates interest, and there’s a way to use both to include clarity (short) and rhythm (long). Aim for no more than 25 words in a sentence and ensure each sentence makes one distinct point.

**Stick with periods**

The period is the most essential punctuation in writing, while everything else reduces readability. Aim to use periods as the primary punctuation. I got a wake-up call from this tip!

**Use familiar words**

Medical communication is filled with jargon, scientific terms, and acronyms. Depending on your type of writing and audience, some of this is hard to avoid. However, build on what your readers already know and ensure all new terms and acronyms are defined. Make the reader’s job easy by creating a clear pathway to understanding the content.

**Favor active voice**

Active voice is clear and direct. In addition to being more compelling to readers, active voice also uses fewer words than the passive voice. If you must use passive voice, do so intentionally.

When you find one of your subject matter experts has presented you with a draft using all passive voice, try a sample to convert to active voice and demonstrate the difference. Chances are your expert will agree the writing is much stronger.

(CONTINUED)
Science as a global topic

Medical communicators are at the confluence of science and its web of reach throughout the world. The work we do will be read by researchers, medical practitioners, regulators, journalists, patients, and the public at large. Like a message in a bottle thrown into the ocean, we have no way of knowing where it will ultimately land. So, write in ways others can understand clearly. We can expand our reach to that many more people.

About the presenter

Crystal Herron is a BELS-certified Editor in the Life Sciences and founder of Redwood Ink, a biomedical communications company. For nearly a decade, she has strived to help scientists and clinicians publish their findings, secure funding, and otherwise share their work. With a goal of making the reader’s job easy, Crystal advocates for using plain language to describe complex concepts in a clear and compelling way.

Crystal also has nearly 15 years of experience as an educator. She has taught physiology to students ranging from high school to graduate and medical school. She also mentors faculty, residents, and students on medical and scientific writing. Over the last 7 years, she has designed and led interactive workshops and seminars to educate researchers at all levels on effective scientific and medical writing.

Before founding Redwood Ink, Crystal was a scientific editor at a prominent university in California, and she worked in various roles in clinical research. She earned a BS in mathematics and a PhD in biomedical science.

About the author

Leslie Kowitz’s bio appears earlier in Pacemaker.

For those who want more information about plain language, or about the studies cited in Herron’s presentation, please see the references on the next page.
Plain Language Seminar References


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How did you get into medical writing?

Halfway through my postdoctoral fellowship, I realized that pursuing an academic career will not make me satisfied in the long run. I enjoyed identifying biomedical problems to find a solution for, writing grants and manuscripts, and training students, but not being involved in the politics around science that had hindered my research findings to find their way to patients’ bedside.

So after researching a variety of career paths in higher education, non-profits and industry to see which one matched my interests, I decided to pursue a career in medical writing. This path allowed me to contribute my science background along with experience in writing a variety of biomedical documents towards focused efforts aimed at advancing the frontiers of medicine and ultimately helping patients.

Tell us how you got involved with AMWA.

I learned about AMWA while I was researching career paths outside academia. As soon as I landed my first medical writing position in the Bay Area, I joined the local chapter, attended local events organized by NorCal AMWA and later attended my first AMWA National Conference in San Diego.

What, in your opinion, are the key features every member should make use of?

AMWA provides an amazing breadth and depth of resources, certificates, educational content and networking opportunities. This allows members to either find what they are looking for to start or advance their career or at least get started on the right path towards meeting their needs depending on the stage of their career. For me the key features are educational content and opportunity to connect with many knowledgeable writers across different disciplines. AMWA members are very kind in sharing their experiences and knowledge with others, which you can always rely on.
What type of medical writing or editing do you do?

As a full-time medical writer, I work on regulatory documents in a bio-pharmaceutical company. The company’s objective is to develop therapies for either cancers which are no longer responding to current treatments or rare cancers without any treatments. I also do freelance writing and editing to help students and professors with their thesis, dissertations, resumes/CVs, presentations, grant applications and publications.

Could you please share an anecdote/epiphany from your tenure?

As much as I was excited about switching my career path to medical writing, I soon found myself disappointed: there was not much room to be creative in either coming up with ideas/topics to write about or giving nuance to my writing to make it more interesting. I had to follow strict templates and instructions.

Besides this reduced level of creativity, I found the job much less challenging compared to my research and teaching responsibilities in academia. While questioning my decision in the first year of my regulatory medical writing, I attended a presentation by the family of a cancer patient whose life was extended by just six months, but this short time was enough to give him the chance to see his daughter graduate from high school.

As hard as it was to hear the story of this young family—a mother with two young daughters—it reminded me of the main reason I switched my career: to see a more immediate impact of my work on patients’ lives.

After that event, I found ways to be more creative at my full-time job and also resumed my freelance writing to fill the remaining gap.

What do you love to do during your free time?

Besides reading books or listening to podcasts or music, I write calligraphy, paint and occasionally do needlework. Recently, I have started a few artwork projects that combines all three of my hobbies. I am excited about how this new experimentation would evolve over time.

(CONTINUED)
**What should others know regarding AMWA?**

Regardless of the area of medical writing one may pursue, I highly recommend considering AMWA as a one-stop resource and a reliable support. Start with AMWA and all it offers, and I am sure you will either find what you need or find someone who can direct you in the right direction. In a way, it can be your second essential tool besides your computer!

**Would you share any insights you gained personally or professionally as a result of living during a pandemic?**

Professionally, I witnessed how rigid and hard-to-change managers had to adapt to the unexpected situation the pandemic presented them. I hope they would appreciate their newly-acquired skill and rely on it more frequently after the pandemic is over. Personally, it taught me more about myself. I considered myself as someone who can be a social butterfly and a hermit crab. So contrary to many of my acquaintances, I was not worried about living alone during the pandemic and resisted any offer for living with my close friends and family.

However, after 15 months and in spite of participating in a variety of Zoom gatherings with family, friends and AMWA colleagues, I noticed how much I was affected by not having people around me. The pandemic taught me to be kinder toward myself and question my understanding of myself.

**Finally, a message for our members?**

I encourage everyone to dedicate at least a few hours a year to volunteering in our chapter. The Chapter welcomes you, your help and ideas, and there are so many ways you can contribute. Reach out to any Chapter leader and offer your ideas, talents, and skills, or simply ask what you can do to help. Remember that you will be the winner at the end as you will receive more than you can possibly contribute. Besides gaining access to the wealth of professional knowledge and experience among members as well as honing your leadership and social skills, you will have access to a wealth of wisdom and care among Chapter members which is priceless.
Welcome New Members

AMWA Northern California members who joined between June 2021 and September 6, 2021:

Ellen Iverson
Kriegh Moulton
Laura Mulholland
Jodi Paik
Stephany Panlilio
Anna Romanowska-Pawliczek

Irene Cortes-Puch
Albert Sek
Ruchika Srivastava
Melanie Stroud
Amanda Gilliam Valentic

Thanks for reading Pacemaker. We encourage you to contact us and look forward to hearing your ideas. Our emails are listed on the Chapter Website and on the first page of this newsletter.