AMWA’s mission is to promote excellence in medical communication and to provide educational resources in support of that goal.

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Welcome New Members

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Dear Chapter Members,

I bring news of change. Recently, the overall AMWA membership approved a new, streamlined constitution, and the AMWA Executive Committee drafted new bylaws, reducing the number of representatives to the National Board of Directors. We thank Myrna Faulds, President at the time, and Caren Rickhoff, Immediate Past President, for the many hours they spent from August into December participating in teleconferences with representatives from AMWA National, deciphering the legalese in multiple documents, and explaining the nature of these changes to our Northern California Chapter’s Board of Directors and advisers. We also thank them for attending the National Board of Director’s meeting in Denver last fall; Myrna was not allowed into the meeting because AMWA National would not accept her edited, signed copy of the nondisclosure agreement.

**What This Means for Our Chapter**

Consequently, changes happened at our chapter level. To conform to the new requirements from AMWA National, our chapter retained the Bend Law Group to manage our incorporation and to serve as our agent. Thanks to it and the extraordinary efforts of our treasurer, Catherine Magill, we are now incorporated and have IRS Tax-Exempt Status (501(c)(3)). Myrna became uncomfortable with a major undisclosed change regarding reduced representation that AMWA National planned to enact, and she therefore resigned as chapter president. After serving as representative to the National Board of Directors for over one year, Caren resigned for personal reasons. To make a long story short, I took over both roles. Per our bylaws (which specify that the Vice President/President-elect assumes the role of president in case of a vacancy), I am now Acting President until October 16, 2017, and on October 17, I will become President. Prior to Myrna’s resignation, I had also agreed to replace Caren as the representative to the National Board of Directors. In that capacity, I attended the National Board of Director’s meeting in April 2016 and will attend one last Board of Director’s meeting at the Annual Conference in November 2017.

**Our Chapter Leadership**

But you know the saying, the more things change, the more they stay the same. Our chapter continues to be vibrant. The Programs Committee (Barbara Broughton and Caren Rickhoff, Co-Chairs) continues to plan and implement chapter programs. The Communications Committee (Suzanne Canada, Chair) continues to manage the chapter website, chapter LinkedIn messages, local meet-ups, and email blasts to all chapter members. This committee is also responsible for the Pacemaker. The Membership Committee (Arushi Sinha, Chair) is committed to recruiting and welcoming new members. The Jobs List Committee (Alexa Meehan, Chair) sends out notifications of medical writing jobs that are either onsite in the San Francisco Bay Area or that can be worked remotely.
Chapter Event Highlights

Highlights of the 2016-2017 year to date include hosting the Pacific Coast Conference (April 2016) in downtown San Francisco (a major effort and huge success) and a potluck at the end of July 2016. We had informal meet-ups at the Mummies and Medicine Exhibit at the Legion of Honor in San Francisco (August 2016) and at the Marin Brewing Company (February 2017). We held two educational/professional development programs: Tax Savings for Freelancers (September 17, 2016) featuring CPA Joshua Cooper, and Trends in Oncology Drug Development (January 28, 2017), featuring Roger Halualani, a cancer-consulting specialist. By the time you receive this issue of Pacemaker, Library Research Strategies (May 6, 2017), featuring reference librarian Richard Le, will have occurred. In addition, Alexa Meehan (Jobs List Chair) has sent out on average two to three notices/week to members about new postings for medical writers, and we published an edition of Pacemaker in December 2016. Our new website went live on March 1, 2017. Check us out at www.amwancal.org.

Great Things Ahead

Our chapter continues to thrive. We are here to connect with you, our members, and to support each of you on your journey as a medical communicator. Our next major program will be the Pacific Coast Conference in April or May 2018. We’re also planning other events for 2017 (stay tuned). Please join us!

And finally, finally, an appeal. We need an Acting VP who will serve until October 2017. This is a great leadership opportunity. If you are interested, please contact Nancy Katz at president@amwancal.org.
Dear Chapter Members,

We are pleased to bring you the spring edition of *Pacemaker*. Our new President, Nancy Katz, brings news of change to the national organization and within our chapter. We have great content for new and experienced medical writers, including how to get a great start on your medical writing career, ways to stay motivated and productive, and the current trends in oncology drug development. And, as always, we have more fantastic tips from the Word Witch.

We would love to hear what you think about this edition of *Pacemaker* — what you like and what we can improve. Please contact us at pacemaker.editor@amwancal.org

Kind regards,

Nicola and Michele

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**AMWA Events and Education**

**Northern California Chapter Events**

Stay tuned for news of upcoming summer events!

**Other AMWA Events**

AMWA Workshops & The CORE Reference  
June 26, 2017 – June 27, 2017  
Rockville, MD

2017 Medical Writing & Communication Conference  
November 1, 2017 – November 4, 2017  
Lake Buena Vista, FL

**AMWA Live Webinars**

[http://www.amwa.org/events/event_list.asp](http://www.amwa.org/events/event_list.asp)

Microsoft Word Masterclass Part 2: Tempted by Templates  
June 7, 2017, 10 a.m. PST – 11 a.m. PST

Working With Authors Who Are Non-Native English Speakers  
July 19, 2017, 10 a.m. PST – 11 a.m. PST
If you are itching to write about the latest in medical technology or yearning to untangle the mysteries of federal regulatory requirements for a hotshot designer drug, take some advice from Dennis Bittner, PhD and medical scribe.

Bittner was the keynote speaker at the February meeting of the San Francisco chapter of the Society for Technical Communications. The topic of his excellent presentation was how to break into medical writing. Bittner became a medical writer six years ago, after many years in research, marketing, and product development in pharma and biotech companies.

In his hour-long presentation, Bittner gave details on becoming a medical writer, a field open to even those with only a modest science background but have a willingness to learn. The good news? According to Bittner, medical writing can be profitable and can provide a flexible schedule.

He divided the medical writing field into two areas, nonregulatory and regulatory. Regulatory writing requires more experience and often an advanced degree, whereas nonregulatory writing is open to those who may have just bachelor’s degrees.

But not to worry: There is hope for liberal arts people who have a bachelor’s degree and knowledge of biology, anatomy, and physiology, or a sheer willingness to learn. For these potential medical writers, Bittner recommends finding courses to improve scientific knowledge. Possibilities include extended learning, or online courses, in biology and anatomy, and in medical terminology.

Learning is important, but what was Bittner’s strongest recommendation? Networking. He urged aspiring medical writers to attend professional meetings, trade shows, or events sponsored by professionally relevant industries and societies. All offer opportunities for learning, as well as meeting people who need medical writing services.

Bittner’s suggested professional opportunities included the following:
- Writing for medical websites
- Reporting on medical conferences
- Medical marketing and communications agencies
- Continuing education and development courses

Other tips included doing pro bono work to improve your portfolio, having a website, and, of course, more networking.

Keep in mind, though, regulatory medical writing can have a steep learning curve—even for those who have a strong medical background—because the regulations and submissions requirements are extensive and complex.

Bittner's recommendations for regulatory writers included strong knowledge of a wide range of document types:
- Clinical protocols
- Clinical study reports
- Investigatory brochures
How-Tos of Becoming a Medical Writer

In addition, Bittner cautioned that it is important to know the advanced features of Microsoft Word for formatting, text tables, and appendices. A firm understanding of the American Medical Association Manual of Style is critical. Doing all of this, of course, would be easier if you could find a staff position with other more experienced writers willing to share information and mentor you.

In all, Bittner encouraged his STC audience to:
- Set your intention
- Write it down
- Decide on activities that will advance you toward your goal
- Do those activities

Author's note: And don’t forget that your local chapter of the American Medical Writers Association is a great resource, too!

For more information, check out Dennis Bittner’s website, www.dennisbittnerphd.com

Cheryl Simas is a writer and editor, and can be contacted at SimasCommunications@gmail.com

CALL FOR VOLUNTEERS

We need volunteers to fill our Outreach Chair and Nominating Committee Chair positions. Volunteering doesn’t take much time, and it is a great way to give back to our chapter, meet other members, and learn something new.

Please help the Northern California AMWA Chapter be the best it can be!
Whether you’re a freelance or salaried medical writer, working from home offers incomparable flexibility and productivity. But it can also be isolating and unstructured, which can foster procrastination, frustration, and self-doubt.

To stay in this business for the long haul, we need to minimize loneliness and existential crises and immerse ourselves in the best parts of writing – creating, learning, connecting, and teaching. Of the myriad ways to do this, I favor the practical. Here are some tips, tricks, and free or low-price software that have helped me stay afloat. I hope they help you, too.

**Eliminate distractions.** Writing from home eliminates the accountability that co-workers provide. If you’re struggling with distractions, start with the basics – limit yourself to checking email about once an hour. Set a timer if necessary. If you’re constantly checking your phone, put it in another room, or set it to “do not disturb,” making exceptions for emergency calls.

Writers who find Microsoft Word’s many icons distracting might consider an option like iA Writer, a desktop application that, for $9.99, provides a blank screen and a plain-text editor. Dictation, syntax, and night-mode options help justify the price. I find iA Writer helpful for longer projects when it’s easy to get lost in my copy. I also use website blockers to limit minutes on Facebook and other time-sucking sites. Good options include OneFocus ($9.99) and Block Site (free).

**Overcome writer’s block.** Still stuck or dreading the screen? Try stepping away entirely. Print your draft or notes, pick up a pen, and head to the couch. I tried this recently for a mind-numbing case of total writer’s block and ended up writing an entire feature article by hand. It turns out that handwriting engages different neural circuitry than typing,¹² so if one method isn’t working for you, try the other.

Another quick fix for writer’s block is to switch fonts. Small, single-spaced, serif fonts can be hard to read and edit, even if you zoom in. If you’re feeling fatigued or losing your train of thought, try writing in a separate document with a wide-spaced, sans serif font, such as Gautami. Then cut and paste into your client’s template. This simple trick nearly doubles my writing speed and endurance.

If you’re still stuck or overwhelmed with a project, contact an AMWA colleague who specializes in the topic area. All of us know these feelings and most of us love helping one another. If it’s hard to ask for help, or if you end up taking up more of someone’s time than you intended, send a handwritten thank-you note and gift card.
Cut stress and boost productivity. Coherence and focus fade the longer we work. This is not an individual weakness – unlike machines, human naturally fluctuate. Taking breaks instead of powering through “ebb tide” can help you feel much more relaxed and productive, but you need to make the break count. To do so, leave the screen, the chair, and even the house. At minimum, get up, drink water, stretch, and breathe or meditate. Stay off all screens to rest your eyes and mind.

Blocking blue light also helps reduce the physical stresses of writing. Blue light strains vision and breaks down melatonin, which can be especially problematic for writers who work after sunset. To minimize these unhealthy effects, try blue-light blockers. A year ago, I installed the free software program f.lux, which cuts blue light from the screen and can be set to match interior and exterior light levels. I’ve slept better ever since.

Tackle loneliness. It’s easy to sink into a routine of writing at home – it’s free and offers the benefits of a large screen (if you have one), and endless tea and coffee. But productivity can quickly turn to crippling isolation.

If you’re starting to feel lonely, I suggest getting out of the house as soon as possible. Try a fitness class or a gym or lunch date. Try writing in coffee shops or at the library. Consider co-work spaces, but be aware they can be costly and tech-centered.

Another option is to find other writers to work with. Formal and informal groups for writers are abundant in the Bay Area (check out Facebook and Meetup), and are springing up elsewhere. They meet and write in coffee shops, and I’ve found them incredibly helpful. Genre does not matter – it’s the support and camaraderie of writing together.

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References

What’s New in the World of Oncology Drug Development

Hint: Think ‘immuno’

If you ever wondered why developing a cure for cancer is such a challenge, you would have gotten a cogent and detailed explanation from Roger Halualani in his excellent talk on drug development. Halualani gave an eye-opening overview of key issues in his presentation, “Trends in Oncology Drug Development,” at a well-attended luncheon hosted by the Northern California Chapter of American Medical Writers Association at Michaels at Shoreline in Mountain View earlier this year. From the why’s and the what’s of cancer and cancer research to the complexities of drug development, Halualani’s presentation offered a road map to the often-maddening twists and turns in the quest to cure (or at least control) cancer.

Halualani is a principal at Epiphany Partners, a Bay Area epidemiology research and consulting group to the pharmaceutical and biotechnology industries, with a focus in cancer and related diseases.

Why Cancer?

Cancer is a worldwide economic burden, at $900 billion. In the U.S. since 1960, cancer has been the second leading cause of death. Statistics illustrate why everyone has an interest in developing a cure: Over 40% of men and women may develop a malignant tumor, and there is a 20% chance of dying from cancer. If you do not fall into one of these categories, chances are that you know someone who does.

What Is Cancer?

For a cell to undergo continued, unregulated growth and become cancerous, it must do six things:

- Ignore cell cycle checkpoints
- Be insensitive to homeostatic anti-growth signals
- Evade apoptosis (ie, normal cell death)
- Stimulate angiogenesis (ie, forming new blood vessels) into the tumor as it grows larger
- Sustain limitless replication, ie, increase telomere size (a region of repetitive nucleotide sequences that cap and protect the ends of chromosomes)
- Invade surrounding tissues and undergo metastasis, which can result in organ failure due to the diversion of nutrients to the tumor from the rest of the body.

Although only six traits were listed, each may occur in more than one way due to redundant biochemical pathways in a given cell — which presents a problem in drug development, according to Halualani. In a healthy scenario, cells use biochemical pathway redundancy as a safety net to ensure that functions needed for life happen. However, when cells are cancerous, this redundancy can also enable them to use more than one pathway to achieve their goal of uncontrolled growth, confounding the effectiveness of cancer treatments that aim for a single target. The problem, according to Halualani, is that oncology drugs may affect only a portion of the tumor. For example, if a drug targets X, the drug will affect some cells in a tumor. However, the tumor may also have cells that use Y to enable the cell to bypass cell-death signals and permit uncontrolled growth.
What’s New (cont’d)

Cancer can also evade drug treatments on a DNA level, thanks to the epigenetics of variable gene expression and cell function in different cell types in the same genetic sequence, as well as the mysterious, but demonstrably important regions of non-coding DNA, where the central dogma may not even apply, according to Sanjana et al. As a consequence of this genetic variability, individual tumors may contain a heterogeneous population of cells that can involve 50 unique mutations. Furthermore, this mutation profile may evolve into new mutations over the lifetime of the tumor. If a tumor has many mutations in different regions and the tumor metastasizes, then any each new clone of the tumor that migrates to other regions of the body may have a different expression profile, posing a problem when a small portion of a tumor is biopsied.

Oncology Drug Development

Because cancer was viewed as uncontrolled cell proliferation and growth, early treatments sought to kill cells that exhibited this behavior, even healthy ones with a high proliferation rate. Chemotherapy began with a World War I poison and such generalized cytotoxic treatments as are still used today, especially for tumors with genetic mutations, according to Halualani. The metric for the effectiveness of these early treatments was tumor size — did it shrink or not? About 15 years ago, however, oncology drug development shifted to targeted therapies that used small-molecule inhibitors or monoclonal antibodies intended to block a cell-signaling pathway. But such therapies could still result in indiscriminate cell death and unpredictable adverse effects and effectiveness. Tumor size did not always shrink with these newer targeted therapies, so the metric for therapy effectiveness shifted from tumor size to progression-free survival before relapse or overall survival of the patient. Halualani described examples of early targeted therapies, such as Genentech’s Avastin, which was meant to block angiogenesis and to starve tumors. However, it turned out that Avastin did not decrease angiogenesis in patients, but it did stabilize blood flow and allowed for increased drug access to the tumor.

Between 1980 and 2011, cancer survival rates have increased 16.3% in the U.S. An exceptionally effective drug that Halualani mentioned is Gleevec®, which has showed a dramatic increase in the survival rate of chronic myeloid leukemia patients, from 6% to 50%. However, drugs for lung, pancreatic, and ovarian cancer have seen a small improvement in survival, with no more than a 4% increase in survival. Drugs for liver cancer demonstrated a moderate increase in survival, from 2.9% to 12.4%.

Between 2010 and 2015, Food and Drug Administration has increasingly approved cancer drugs, and now, nearly a third of drugs in development deal with cancer. Most of these cancer drugs are targeted therapies, and not radiotherapy, hormonal agents, or cytotoxic drugs. Currently, about 80% of drugs in development are first-in-class therapies, but 73% are in the new category of personalized medicine, whereby a drug targets a genomic marker of a patient’s tumor. With the rapid increase in cancer drugs in development, however, about 75% of drugs fail in the preclinical-to-Phase II phases of clinical trials. Computer models are inadequate because cancer cells use unpredictable mechanisms to grow. Research done on mouse models is not easily translatable to humans, because, among other reasons, humans have a much higher mutation rate than other animals.

Halualani addressed drug development cost at each phase. Costs are high for a number of reasons, but one factor is the number of patients who can participate in the different phases of a clinical trial. Patients who participate in an early phase cannot be included in later phases for the same cancer.
What’s New (cont’d)
Participants in later phases of a clinical trial must be newly diagnosed patients.

Immuno-Oncology
The current shift in oncologic drug development is focused heavily on an immunological approach, referred to as immuno-oncology (IO). The two types of immunotherapies are passive, which does not require the patient’s immune system to work, that includes antibody treatments; and active, which depends on the patient’s immune response, such as vaccination or activation of an anti-tumor, T-cell-mediated response. The reason why IO is a hot topic now is that this form of therapy is systemic, targeted, durable, and potentially universal for many cancer types. The IO agents in vogue now, according to Halualani, are those that target the immune checkpoint process, such as Yervoy® (which reactivates T-cells by inhibiting the tumor-induced expression of CTLA-4) and Opdivo®, Keytruda®, and Tecentriq® (which inhibit PD-1 and PD-L1 binding to permit T-cell-mediated killing of tumor cells).

Although IO therapy is gaining popularity, showing billion-dollar growth in the last five years, this treatment has potential complications. Since tumor cells are ultimately derived from healthy ones and can, thus, express the same target proteins, one potential drawback of IO therapy is that both healthy and cancerous cells may be targeted by a T-cell-mediated attack. Adverse effects of an autoimmune attack following IO therapy have not yet been seen, but they are still theoretical possibility. Another possible complication is “pseudo-progression” whereby tumors appear to get bigger in diagnostic in IO therapy; however, this tumor volume increase is due to activated T-cells binding with the tumor. Also, IO therapy can take some time to show benefits, sometimes up to six months. Even so, survival rates with IO therapy have increased. In sum, IO has much room for growth and holds great promise for the development of effective cancer treatments.

Where Are We Heading?
The future of oncology research and drug development seems to be heading toward a personalized approach that depends on the ability to identify which biomarkers are expressed by an individual patient. The problem is, how do you identify those patients who would respond to certain types of drugs that target particular biomarkers? Two diagnostic methods available, fluorescent in-situ hybridization (FISH) and immuno-histochemistry (IHC), are can identify the expression of biomarkers in biopsied tissue and are most effective when used together. Unfortunately, the problem, Halualani said, is that insurance companies will usually cover IHC, but not FISH. Other issues, according Halualani, include problems with exclusion criteria and drug pricing (highlighted a recent article by Kesselheim et al. that addresses inflated drug prices in the U.S.). Although precision medicine is the current trend in and yields great promise, there are significant hurdles to overcome to classify cancer as a chronic disease rather than one that is terminal. The development of effective IO therapy methods and the efforts of the many smaller companies to develop novel agents for this current trend in cancer treatment definitely offer an exciting new horizon.


Viviana Davila, PhD (neuroscience), is a freelance writer and communications specialist. She can be reached at davilav@gmail.com
Welcome New Members

Wendy Wolfson  Leah Quintana
Jessica Chabot  Jonathan Plumb
Jason Carnegie  Teresa Steininger
Joshua Schectel  Rachel Hood
Cindi Hoover  David Hare
Melita Stearns  Margie Rossi-Holman
Wendy Berke  Janis Leonoudakis
Jeannette Noyes

Northern California Chapter
In late February, a group of Northern California Chapter members gathered at the Marin Brewing Company in Larkspur to make connections, enjoy each other’s stories, and snack on onion rings and fried calamari. The prospect of networking can feel daunting, but this meet-up was a wonderful opportunity to gain inspiration and advice from experienced colleagues and provide encouragement and ideas to new and transitioning medical writers. With backgrounds spanning creative writing and journalism to biochemistry and clinical medicine, the members had a remarkable diversity of knowledge and experience, and many business cards were exchanged. Many thanks to Myrna Faulds for envisioning and organizing the event. And thanks to everyone who crossed a bridge or hopped a ferry and braved the wilds of Marin County to support your colleagues. Here’s to more meet-ups in the future!

By Rachel Alt, MD. Alt is a freelance medical writer and emergency medicine physician, and has been an AMWA member for nearly a year. She can be contacted at rachelaltmedical@gmail.com.
For writers and reviewers of regulatory and other complex documents, efficient navigation techniques can save time and improve the document development and review processes. The Go To function is a valuable tool on PCs for moving the insertion point (cursor) to a specific content element or type of content element (tables, figures, and equations are examples of “content elements”) during editing and review. Go To can also be used to troubleshoot the sequence and consistency of a series of content elements.

The Go To tab of the Find and Replace dialog box contains tools that move the cursor to a content element the user specifies, such as a certain page, section, or bookmark; or to the next or previous item in a series of content elements, such as figures or tables. See the sidebar (below, right) for a list of content elements.

In Screenshot 1, the tools in the Go To tab comprise the Go to what menu for the type of content element to find; the Enter text field on the right, where the user inserts information to locate the specific element of the selected type; and command execution buttons, at the bottom right. The specific information required in the Enter field depends on the content element selected; the configuration of the command execution buttons depends on the text in the Enter field. See below for a sample of the kinds of searches that can be executed through Go To.

Procedure

- Tap F5 to call up the Go To tab.
- Select the type of content element from the Go to what menu.
- Insert appropriate text in the Enter field. The text above and below the field element.
- When your search is complete, click Close.
- **Power user tip:** To return immediately from the target element to the original location, tap Sh + F5. See the Word Witch Tutorial Go Back (Pacemaker, December 2016).
- **Power user tip:** The dialog box remains open until the user closes it. During a review meeting, consider leaving it open so you can execute other searches.

Go To Page

Screenshot 1 shows the Go To Page. Enter a specific page number, or “+” / “—” (plus or minus) with or without a number. (Use the hyphen character for the minus sign.)

- Enter “4” to go to page 4.
- Enter “+4” to move 4 pages ahead of the cursor position.
- Enter “—” to go to the previous page relative to the cursor position.
- Enter “+” (or leave the field blank) to go to the next page relative to the cursor position.

These steps apply similarly for most of the content element types in the Go to what menu.
Go To Comment. Note the drop-down arrow to the right of the Enter field.

When the Comment content element type is selected, the configuration of the Enter field changes to a drop-down menu at the right that lists the reviewers who have inserted comments into the file; Any Reviewer is the default choice.

To jump to the next or previous Comment, click Previous or Next. Alternatively, choose a specific reviewer from the menu and click Previous or Next. Click Next repeatedly to proceed through all comments or the selected reviewer’s comment.

Go To Table

When Table is the selected content element type, insert + or — and click Go To to move to the next or previous table relative to the cursor position. Click Go To repeatedly to move to tables sequentially. Enter a number and click Go To to move to the corresponding table.

But be aware, as always, that Word is extremely literal. If, for example, the user enters 3, Word will find the 3rd table in the file, which may not be the one the user has designated “Table 3” (which is part of the autonumbered table caption paragraph). In complex documents, table formatting is frequently used for tabulated text elements, which do not necessarily have autonumbered captions. The same is true for the element type Graphic, which finds “picture” items, whether or not they are preceded by autonumbered captions.

Beyond the Basics

Efficient navigation is, in my opinion, a skill that everyone involved in developing and reviewing long documents should work on.
CALENDAR OF MEETINGS

Drug Information Association (DIA)
Global Annual Meeting 2017
June 18-22, 2017
Chicago, IL

International Society of Managing and Technical Editors
August 10-11, 2017
Denver, CO

RAPS Regulatory Conference
September 9-12, 2017
National Harbor, MD

World Conference of Science Journalists
October 26-30, 2017
San Francisco, CA

Please Tell Us What You Think!

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Would you like an email-based newsletter?
Do you have something to contribute?

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