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The Pathologist’s Role in Medical Care: Part II: Overview of Surgical Pathology*

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Abstract

Part I of this 2-part series described the various subdivisions of pathology and how pathologists work behind the scenes to contribute to patient care. Part II spotlights the pathologist’s role in the diagnosis and evaluation of tissue samples and is intended to provide an overview of some basic procedures in surgical pathology.

Almost all tissues removed from the body at surgery undergo pathologic examination. The range of requirements, demands, and strategies for pathologic evaluation varies widely among disparate types of specimens but basically includes 2 parts: gross and microscopic examination. Gross examination refers to evaluating the specimen with the naked eye and recording measurements, pertinent features, and any abnormalities. Only minute specimens are processed whole for microscopic examination; all other specimens require dissection and selection of relevant features for processing. Thus, a crucial part of gross evaluation is deciding which portion(s) will be submitted for histopathologic study.

Microscopic examination requires the pathologist to interpret a complex array of patterns that distinguish normal from abnormal tissue. The latter includes vast categories of benign, premalignant, and malignant disease. The pathologist must identify and assess histopathologic changes, which are often subtle, to provide information to help guide patient treatment. The surgical pathologist’s contribution ranges from documentation of normal tissue and structures to more complex evaluation of disease and intricate assessment of such parameters as tumor type, extent, and margin involvement.

Surgical pathology, like any other field of medicine, requires data collection and assimilation, discernment, judgment, and decision making. Many members of the health care team contribute to timely, accurate, and relevant surgical pathology diagnosis, including pathology assistants, histotechnologists, and consulting pathologists, as well as clinical colleagues who share information such as clinical impressions and pertinent patient histories.

Part I of this article described the distinction between anatomic and clinical pathology, various subdivisions of each branch of pathology, and how a pathologist’s role may vary in different practice settings. Part I also provided examples of how a pathologist may contribute to a patient’s medical care in the following ways: diagnosing and evaluating tissue samples; monitoring the overall quality of results reported by the laboratory; ensuring appropriate procedures for specimen management; maintaining effective internal and external communication; and providing education. Part II spotlights the diagnosis and evaluation of tissue samples, a complex and significant subject in its own right. The discussion is limited to the standard handling of routine specimens and is intended to provide an overview of some basic procedures in surgical pathology. Although the study of some tissues is now supplemented with methods such as electron microscopy, flow cytometry, and rapidly expanding techniques in molecular diagnostics, surgical pathology remains anchored in the use of light microscopy to study cell and tissue morphology.

Significance of Findings in Surgical Pathology

As described in Part I, surgical pathology is one branch of anatomic pathology, and deals with the examination of tissue and organs removed from the living body (by biopsy or surgery) to diagnose, rule out, or evaluate disease, or to provide some form of documentation. The surgical pathologist is best known to the public for determinations of benign versus malignant disease when a patient undergoes a procedure such as a breast or prostate biopsy. Distinguishing between benign and malignant disease, however, is only one part of surgical pathology practice. Vast categories of benign, premalignant, and malignant disease exist. The pathologist is trained to evaluate subtle features in each category and to provide information to help guide patient treatment.

In the category of benign disease, for example, pathologists often assess the presence, type, and severity of inflammation in biopsies such as those from the gastrointestinal, respiratory, and genitourinary tracts. Pathologic examination may also detect infection by bacteria, fungi, or parasites, or cellular changes wrought by viruses.
The presence of ulceration, scarring, necrosis, or other signs of tissue reaction can also be detected. Specific patterns of tissue reaction may provide clues to underlying disease; for example, the combination of certain types of inflammation coupled with necrosis prompts a search for possible infections such as tuberculosis or fungal disease. In some cases, documenting that a tissue sample is normal contributes to medical care, for example, as in a patient who has unexplained symptoms, and various diseases must be ruled out. Occasionally pathologists also identify unsuspected malignancy in organs or tissues removed for what was assumed to be benign disease.

The surgical pathologist also plays a significant role in the evaluation of premalignant disease. For example, certain benign disorders of the breast are associated with a significantly increased risk of future malignancy, while others are not (Figures 2 and 3). A pathologist’s evaluation can thus help identify those patients who need close clinical follow-up. Evaluation of biopsies from sites such as the bladder, colon, cervix, endometrium, bronchus, prostate, and skin can identify a spectrum of dysplastic changes that may precede malignancy. The pathologist’s assessment of the severity and extent of such changes can help the patient’s clinician determine what type of follow-up and treatment the patient needs to prevent or forestall malignancy.

Likewise, the surgical pathologist’s identification and evaluation of malignant disease plays a critical role in health care. Each organ system in the body is subject to its own characteristic types of neoplasia, some of which differ by only subtle distinctions. In making decisions about the best treatment for a particular patient, surgeons and oncologists depend on pathologists to distinguish between benign and malignant tumors, and if malignancy is present, to assess the type and extent. The pathologist is thus called upon to evaluate such features as depth of invasion of the cancer, involvement of blood vessels and lymphatic channels, metastasis to lymph nodes and other organs, and relationship of the cancer to surgical margins.

**Approach to Specimen Evaluation in Surgical Pathology: Gross and Microscopic Examination**

Pathologists evaluate tissue from all parts of the body, and virtually any type of tissue may be examined, including biopsies of brain, nerve, heart, blood vessel, and muscle. Whole organs commonly seen in a general surgical pathology laboratory include: gallbladders, ovaries, uteri, kidneys, prostates, spleens, and lymph nodes. Breast and prostate tissue are common specimens, and may be submitted to the laboratory in a variety of forms ranging from thread-like needle biopsies to the entire organ. Large routine specimens also include variably sized segments of bowel, stomach, lung, bone (eg, femoral heads from fractured hips), and portions of the lower limb removed for gangrene. Small routine specimens include biopsies from a variety of sites such as esophagus, stomach, duodenum, colon, liver, bronchus, prostate, endometrium, cervix, bladder, kidney, thyroid, and mucosa from the mouth. Skin biopsies and resections also are common and range from minute to larger segments. As described in Part I of this article, pathologic evaluation of tissue and organ specimens includes both gross (macroscopic) and micro-
scopic examination. A description of these two aspects of specimen evaluation follows. It should be noted that although the two are discussed separately, they are integrally linked, each contributing an essential part of pathologic assessment.

**Gross Examination**

Gross examination refers to evaluating the specimen with the naked eye, taking measurements—including weighing when appropriate, and noting and describing abnormalities. Most specimens, except for minute ones under about 2 mm in thickness, require dissection for adequate gross assessment and to prepare the tissue for microscopic evaluation. Most microscopic exams are performed upon a very limited portion of the total specimen; therefore, a crucial part of macroscopic evaluation is deciding which portion(s) will be submitted for histopathologic study. Clinical information such as the suspected diagnosis and reason for the biopsy or surgery are essential in guiding the pathologic evaluation, beginning with the gross exam. The dissector looks for signs of the clinically suspected disorder, as well as any other signs of disease.

In general, specimens are serially sectioned and examined for variations in texture, consistency, and color; however, relevant macroscopic findings vary widely for different types of specimens. For example, in the case of a gallbladder removed for gallstones, documentation of gallstones (number, size, and description) is generally the most germane information. In the case of a colon segment removed because of cancer, the cancer itself is obviously of the most interest, but other findings such as the presence of small polyps or ulceration unrelated to the cancer are also important. The dissector sometimes places ink at the specimen margins or other areas of interest to identify or call attention to those areas during microscopic exam. Occasionally pathologic exam may uncover a clinically unsuspected and significant lesion, such as cancer in an appendix removed for acute appendicitis.

A key point is that the dissector must identify portions of the specimen that contain all the features needed for disease diagnosis. A diagnosis based on microscopic features cannot be made if the lesion has remained in the gross specimen. Sometimes during microscopic exam, the pathologist gets clues that not all the relevant evidence of disease was sampled from the gross specimen. Such a clue may be, for example, that a macroscopically benign-appearing area of the specimen contains microscopic cancer. Gross specimens are kept available for re-examination for a period of time, usually a period of weeks to months, for just such scenarios. In general, these specimens are eventually discarded, however, and the only permanent record of the tissue removed from the patient is the tissue that was used for microscopic study.

Once representative portions of the tissue are identified for microscopic viewing, a scalpel is used to cut thin slices, or sections, from the specimen. These scalpel-cut sections are routinely no more than 2.0 x 2.5 cm (ideally less) with a thickness of 2-3 mm. Sectioning at the gross table is greatly facilitated by proper fixation, ie, conditioning with a preservative. Ideally, for the best histopathologic detail, the specimen is placed in preservative immediately upon removal from the body, although the need for certain special studies, such as microbiologic cultures, precludes immediate fixation. Preservatives (commonly formalin, a 10% buffered solution of formaldehyde) prevent autolysis, inhibit bacterial overgrowth, stabilize cellular structure, provide conditions for tissue staining (necessary for microscopic viewing), and firm the tissue to aid in sectioning. The smaller the specimen, the more easily the fixative can penetrate the tissue. For optimum preservation and sectioning, large specimens, such as bowel segments, may be opened and left in preservative overnight.

The 2-3 mm sections taken from the specimen during gross dissection are transferred to small plastic cassettes (Figure 4) that are, in turn, placed on a tissue processor. This machine automatically takes the tissue through a series of steps that dehy-

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**Figure 3.** The benign but atypical cellular proliferation (arrows) of breast tissue shown here is associated with an increased risk of future breast cancer (Hematoxylin and eosin stain, original magnification x100).

**Figure 4.** Representative tissue samples are removed from the specimen at the gross table, unless the specimen is very small, and placed in plastic cassettes for processing. Tissue processing allows the tissue to be prepared for microscopic examination.
drates it and ultimately infiltrates it with paraffin, a wax-like substance. Routinely, this process takes place overnight, although very small specimens can be prepared in a shorter time. Any short cuts or technical problems during this process can interfere with the microscopic appearance of the specimen and make interpretation by the pathologist difficult or even impossible. After the tissue has been properly infiltrated with paraffin on the tissue processor, histotechnologists embed each individual portion of tissue in paraffin blocks. They then use special knives called microtomes to cut extremely thin sections, usually 4-6 μm, of the tissue.

Histotechnologists place the microtome-cut sections on glass slides and stain them with dyes that enhance cellular detail in preparation for microscopic examination by a pathologist. The most commonly used stain for routine histopathologic examination is a combination of hematoxylin and eosin (H & E). Hematoxylin, a basic dye, imparts a blue/purple stain to acidic structures, such as nuclei. Eosin, an acidic dye, imparts a red/pink color to basic structures such as cytoplasm. H & E staining thus allows the pathologist to distinguish between different regions of cells and to assess many cellular details. Most processed tissue can be adequately evaluated with H & E alone. There are numerous other stains, however, that can aid in histopathologic evaluation, including those that highlight microorganisms or different types of tissue (Figures 5 and 6). Over the last few decades, more and more use has been made of immunohistochemistry to provide immunostains, ie, stains with antibodies to highlight very specific features of cells and tissues. Immunostains can help delineate forms of cancer that are difficult to classify with conventional stains.

**Microscopic Examination**

One of the first steps in a pathologist’s training is learning to recognize the microscopic appearance of normal tissue. The human body is comprised of numerous and extremely varied types of cells and tissues. For example, the epithelial or surface-covering cells of various locations in the body have different appearances; epithelial cells of the esophagus can be distinguished from those of the stomach, which are different from those of the small bowel. These cells, in turn, differ from those of the colon. Cells that are normal for the intestine represent an abnormality in the stomach (Figure 7); thus, the recognition of normal tissue in normal locations and the presence of subtle

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**Figure 5.** Fungal elements (arrow) can be difficult to distinguish from the background when stained with routine hematoxylin and eosin, as shown here (original magnification x400).

**Figure 6.** Special stains enhance the appearance of microorganisms for better visualization and identification. Shown here is the fungus, *Coccidioides immitis*, in the form of a spherule containing endospores (Gomori methenamine silver stain, original magnification x400).

**Figure 7.** A section of the lining of the stomach that shows areas of normal gastric epithelium (upper arrow) and areas with vacuolated cells (lower arrow). The vacuolated cells are similar to normal intestinal epithelial cells, but represent an abnormality when they occur in the stomach (Hematoxylin and eosin stain, original magnification x400).
changes in these tissues is significant.

Achieving familiarity with the microscopic appearance of highly variable normal tissue constitutes only a fraction of the skills that a pathologist must hone. Cells and tissues may undergo an infinite number of alterations, giving rise to a vast spectrum of both benign and malignant changes. Usually, the differences between the microscopic appearances of benign versus malignant cells are obvious to the trained pathologist (Table 1 and Figure 8); however, morphology does not always reflect biologic behavior, making it sometimes difficult, and occasionally impossible, to identify malignancy. For example, rare tumors of the adrenal gland are encountered that can only be deemed malignant if and when metastasis occurs. A more common reason, however, for difficulty in differentiating benign from malignant cells occurs when benign cellular alterations mimic malignancy. One of the hallmarks of malignant cells is an increase in the intensity of nuclear staining (hyperchromasia) and a disproportionate increase in the size of the nucleus in relation to the surrounding cytoplasm. The nucleus-to-cytoplasm ratio, normally from 1:4 to 1:6, may approach 1:1. When benign cells react to inflammation or other insults, however, similar changes can be seen, sometimes creating difficulty in diagnostic interpretation. Likewise, the morphologic appearance of premalignant dysplastic change may be quite similar to that of malignancy. Severe dysplasia and early cancer can be morphologically indistinguishable, causing diagnostic difficulties in areas such as the cervix.

Table 1. General histopathologic features of malignant neoplasms.\textsuperscript{5,6,7} There is considerable variation from case to case, however, and no individual rule or set of rules can invariably indicate malignancy, other than the occurrence of metastasis.

<table>
<thead>
<tr>
<th>Feature</th>
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<tbody>
<tr>
<td>Distortion or obscuring of normal tissue architecture</td>
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<tr>
<td>Crowding and disorganization of cell growth patterns</td>
</tr>
<tr>
<td>Invasion of proliferating cell population</td>
</tr>
<tr>
<td>Growth into adjacent structures/tissues</td>
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<tr>
<td>Growth into blood vessels/lymphatics</td>
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<tr>
<td>Necrosis (tissue death)</td>
</tr>
<tr>
<td>Cellular morphologic alterations</td>
</tr>
<tr>
<td>Pleomorphism (variation in size and shape)</td>
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<tr>
<td>Diminished differentiation (ie, developmental immaturity)</td>
</tr>
<tr>
<td>Nuclear atypia</td>
</tr>
<tr>
<td>Enlargement (increased ratio of nuclear to cytoplasmic size)</td>
</tr>
<tr>
<td>Pleomorphism</td>
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<tr>
<td>Irregularity of borders</td>
</tr>
<tr>
<td>Changes in internal appearance</td>
</tr>
<tr>
<td>Hyperchromasia (increase in intensity of staining)</td>
</tr>
<tr>
<td>Coarseness of chromatin</td>
</tr>
<tr>
<td>Prominence of nucleoli (organelles associated with protein synthesis)</td>
</tr>
<tr>
<td>Mitotic figure changes</td>
</tr>
<tr>
<td>Increased numbers</td>
</tr>
<tr>
<td>Aberrant appearance</td>
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**What Pathologists Look for in Different Types of Specimens**

As described in Part I of this article, the time, labor, and expertise needed for the interpretation of gross and microscopic findings depend upon a number of different factors, including the size and/or complexity of the specimen, the nature of the pathologic process, and the specific types of information that the pathologist must determine and convey. The range of requirements, demands, and strategies for pathologic examination varies widely between disparate types of specimens. The following are descriptions of the handling of a few specimens commonly encountered in a general surgical pathology laboratory.

Specimens that require minimal time for pathologic evaluation are those received in the laboratory from sterilization procedures, such as small segments of either paired Fallopian tubes or vasa deferentia. The pathologist rarely finds disease in these resected segments; the reason for evaluation is microscopic documentation that the surgeon has indeed resected the appropriate structures. Although inadvertent resection of other structures (eg, a blood vessel) during a sterilization procedure is rare, such an event could have serious consequences (eg, unwanted...
pregnancy). Both gross and microscopic evaluation of these specimens can be accomplished quickly.

Many other small specimens, such as biopsies from the GI tract, bronchi, bladder, and prostate, can also be quickly and easily handled at the gross table. Many are small enough to be submitted for microscopic exam without dissection. Some are slightly larger, such as colonic polyps that must be sectioned with a scalpel, but in general are still easily examined, measured, and described at the gross table.

Subsequent microscopic evaluation may also be accomplished quickly, or it may be more complicated than such a small specimen would suggest. One consideration in this regard is the number of microtome-cut sections prepared from the specimen. For example, histotechnologists routinely prepare several sections from a single needle biopsy of the prostate. Sections are taken from both superficial and deep levels of the paraffin block to ensure that all clinically significant tissue alterations present in the specimen are available for microscopic evaluation and diagnosis. Likewise, in any case in which the original slides reveal findings that are equivocal or difficult to interpret, the pathologist may request additional sections taken from deeper in the paraffin block. A colon biopsy, for instance, may present difficulties in differentiating benign reactive changes from malignant or dysplastic changes, especially if only scant, superficial, fragmented tissue is available for evaluation. Additional sections taken from deeper in the paraffin block may reveal unequivocal malignancy, or they may reveal the presence of inflammation or ulceration sufficient to suggest that the observed cellular alterations reflect a benign, reactive change.

Another example that may prompt a pathologist to request extra sections is the presence of patterns of inflammation that suggest the presence of infectious agents. In this case, the use of special stains may be needed to identify microorganisms, necessitating additional slide preparation, viewing, and interpretation. In any of these situations, the preparation and viewing of extra sections prolongs the time needed for pathologic evaluation, but the extra time and effort spent may result in a definitive diagnosis, ultimately facilitating patient treatment.

Large specimens from the bowel, such as segments of colon removed because of cancer, require more extensive dissection and examination at the gross table than do their smaller counterparts. The size of the tumor, its location and growth characteristics, depth of invasion into surrounding tissue, and distance from the margins of resection must be determined and recorded. In addition, the fat outside the bowel wall must be carefully inspected for lymph nodes to determine whether cancer has metastasized to them from its original site in the bowel. Additional time and effort are needed for microscopic evaluation as well to confirm or dispel gross impressions and to evaluate microscopic features of the tumor.

The nature of the disease present determines the amount of tissue that must be removed from any specimen and submitted for microscopy (unless the specimen is minute and submitted in its entirety). For example, a uterus removed because of the presence of leiomyomas requires sampling of the tumors to document the disease and also to rule out the presence of similar-appearing malignant tumors, leiomyosarcomas. If only a few small tumors are present, and if all have the characteristic gross appearance of leiomyomas, examination and sampling can be accomplished fairly quickly. The larger and more numerous the tumors, the more tissue that must be sampled and submitted for microscopy. In addition, more thorough sampling is required if gross inspection reveals signs of malignancy, such as irregular tumor borders encroaching upon surrounding tissue or the softening and sponginess of necrosis sometimes caused by neoplasms outgrowing their blood supply. Likewise, when a uterus is removed as a result of endometrial cancer, thorough gross dissection and sampling are necessary to evaluate the following features: location and extent of the cancer; how deeply the cancer has invaded the wall of the uterus; and whether cancer is present outside the uterus, either at the external surface or in other removed organs, such as ovaries and fallopian tubes. As in the case of bowel segments, fat removed at surgery also must be carefully inspected for lymph nodes in order to detect metastasis. Subsequently, as is the case with any specimen, microscopic evaluation will require sufficient time and effort to confirm or dispel gross impressions, in addition to identifying the subtype of malignancy and other histopathologic features, such as tumor invading blood vessels or lymphatic channels.

One example of a complex specimen that is labor-intensive at both the gross table and at the time of microscopic evaluation is the breast lumpectomy specimen. Even relatively small lumpectomy specimens can require substantial time and expertise. When performing a lumpectomy, the surgeon’s goal is to remove the breast cancer with a rim of noncancerous tissue surrounding it, referred to as the margins. The pathologist must evaluate a number of histopathologic features of the cancer and its growth characteristics and also determine whether the margins of the specimen are free of tumor. Assessment of the margins must take into account that the whole external surface of the specimen represents the margins, just as the peel of a grapefruit can be considered as its “margins.” However, the margins of a breast lumpectomy specimen are generally composed of soft pliable fatty tissue that does not maintain the same stiff shape of a grapefruit peel, making assessment a challenge. The pathologist must take adequate samples from the margins and examine them carefully. What constitutes adequate sampling can some-
times be problematic, but in general the margin(s) nearest the tumor is/are sampled more thoroughly and margins farther from the tumor are sampled more sparsely. During pathologic examination, it is necessary to maintain the orientation of the specimen conveyed by the surgeon to facilitate treatment. If cancer is found extending to one or more margins, the surgeon must know which margin(s) of the patient’s operative wound must be re-excised to remove all possible residual cancer.

**Intraoperative Consultation**

It is sometimes necessary for a pathologist to perform microscopic examination of tissue during a surgical procedure, while the patient remains anesthetized. Reasons for such intraoperative consultation include: “1) to establish the presence and nature of a lesion; 2) to determine the adequacy of surgical margins; and 3) to establish whether the tissue obtained contains diagnosable material...or whether additional sampling is indicated.” In order to perform microscopic evaluation intraoperatively, tissues must be processed much more quickly than for routine evaluation, necessitating the use of a cryostat to freeze the tissue. Freezing hardens the tissue enough for microtome sectioning. The frozen sections thus obtained can be used for microscopic examination. Although diagnoses are often rendered from frozen sections, confirmation generally awaits evaluation by permanent sections. The morphologic detail of frozen sections is inferior to that provided by permanent sections; freezing tissue does not preserve cellular structure as well as fixation does, and the frozen tissue is more prone to artifacts and distortion.

**The Pathology Team**

From the preceding discussion, it should be clear that the surgical pathology laboratory involves the skill, effort, and training of many people. Pathologists often have assistants who help in the organization and recording of procedures related to gross examination. Some pathologists have highly trained assistants who perform gross evaluation under supervision. Histotechnologists perform the meticulous tasks of microtome sectioning and slide preparation. Medical transcriptionists type reports of the pathologic findings and diagnoses. Other clerical and technical staff also provide essential services along the entire chain of events from specimen receipt and log in to assurance of distribution of the final surgical pathology report. Significant assistance and support is also offered by fellow pathologists who consult on difficult cases.

**Conclusions**

Many steps are involved in the examination of tissues, and providing a pathologic diagnosis often appears much simpler than it actually is. Gross examination and sectioning must be thorough enough to provide the material that will

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**Glossary**

**autolysis** – breakdown of cells or tissues due to digestion by their own enzymes.

**cryostat** – a cabinet within which tissue is rapidly frozen (commonly to -20°C) to harden the tissue enough to cut thin sections (usually 4-6 μm).

**dysplastic** – describes a particular type of morphologic alteration of cells similar to malignant change, that may precede malignancy; dysplasia, unlike malignancy, may still respond to cell regulatory mechanisms and, as such, is reversible.

**frozen sections** – microtome-cut tissue sections prepared for microscopic examination by quick freezing during intraoperative consultation.

**histopathologic** – microscopic morphologic alterations of diseased or abnormal tissue.

**leiomyoma** – benign smooth muscle tumor common in the uterus.

**leiomyosarcoma** – rare malignant smooth muscle tumor.

**microtome** – an instrument with a special knife blade designed to hold and advance a tissue block in minute increments (1–10 μm) in order to cut thin sections (usually 4-6 μm) for microscopic examination.

**necrosis** – localized area of tissue death and degeneration resulting from outside injury or disease.

**neoplasia** – abnormal tissue growth; applies to both benign and malignant tumors and is used in contrast to reactive changes such as scarring.

**permanent sections** – microtome-cut tissue sections prepared for microscopic examination from tissue that has undergone fixation and embedding in paraffin.

**sections** – slices of tissue cut at the gross table with a scalpel, generally 2-3 mm in thickness, or slivers cut with a microtome, generally ranging from 4-6 μm in thickness. In common usage, both types of preparations are referred to (imprecisely) as “sections.”
yield relevant microscopic findings. Microscopic evaluation is not always straightforward; subtle findings may be difficult to observe and interpret. Looking at glass slides through a microscope can be compared to viewing a football field through a magnifying glass. The scale of microscopic findings is even more surprising when it is taken into account that even a minute specimen may yield hundreds of microscopic sections, not all of which exhibit the same histopathologic changes.

Science is the engine of surgical pathology, but interpretation is the fuel that runs it. There is a tendency for those outside the field of pathology to see diagnoses rendered by the surgical pathologist as the product of calculation or programming, an automatic response ejected from a microscope. However, pathology, like any other field of medicine, requires data collection and assimilation, discernment, judgment, and decision making. Pathology is not practiced in a vacuum. It requires the input and cooperation of clinical colleagues sharing information, such as clinical impressions and pertinent patient histories. Optimal patient care is the shared goal of the medical community, and its attainment depends on the daily contributions made by pathologists working in conjunction with clinicians and the many other members of the health care team.

Acknowledgments
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When Emily Dickinson is mentioned, the typical survivor of high school poetry classes (and perhaps most physicians and patients) will probably think immediately of “death.” Not many realize that the broadly educated, well-read Dickinson wrote many life-affirming poems that foreground (literally as well as metaphorically) medical, anatomic, and scientific concerns. Both fascinated by and fiercely protective of the human body, she emphasized the vibrant inner life of vulnerable patients—too often (in her day as well as ours) objectified as silenced, numbed specimens for surgeons to perform on and physicians to exert sterile power over. The stirring body of Dickinson’s work (the hundreds of poems and letters mailed to her intimate correspondents and the hundreds of poems unearthed in her bedroom after her death at the age of 55) are permeated with, in her succinct yet dramatic words, “the Culprit - Life!” Medical writers and editors who love poetry might be interested in the musings (not meant for a hardcore literary journal!) of one of their own regarding a poet whom most physicians and patients have heard of but may not know much about.

Abstract
This article focuses on various allusions to the world of medical science—in particular, surgery—that Emily Dickinson deftly inserted into many of her poems and into a few of her letters. Most people ascribe to her an obsession with the topic of death, but do not realize that she wrote numerous life-affirming poems that foreground (literally as well as metaphorically) medical, anatomic, and scientific concerns. Both fascinated by and fiercely protective of the human body, she emphasized the vibrant inner life of vulnerable patients—too often (in her day as well as ours) objectified as silenced, numbed specimens for surgeons to perform on and physicians to exert sterile power over (and, yes, to try to help; perhaps even to save; or to not bother attending to, if already dying or dead). Turning Michel Foucault’s “anatomo-clinical gaze” back at surgeons, she implored them to keep in mind that the skin they mark and incise, and the body parts they manipulate and excise, help sustain a living, hurting soul.

Medical writers and editors who love poetry might be interested in the musings (not meant for a hardcore literary journal!) of one of their own regarding a poet that innumerable physicians and patients have heard of but may know little about.


d of medicine,” even though he also reminds us: “Poetry moves magically away from rational thought. Modern medicine attempts to approach it. They are conflicting directions.” My primary purpose in this article is to share my appreciation of Dickinson’s range by showcasing some of her medically pertinent imagery. As an English PhD who works amid a sea of MDs, I know full well that “there is no single way to read a work of literature,” medical or poetic.

I also know that Dickinson belongs not only to ever-analyzing academicians, but also to an ever-admiring public. This admiration was dramatically in evidence at a marathon reading of every one of her nearly 2,000 poems on April 25, 2008, from 8 AM to midnight, at a local college campus in Minneapolis. As an ever-editing faculty member charged with critiquing surgeon-scientists’ manuscripts (for more than 20 years now, at 2 different research universities), I have drawn sustenance from reading, in my own

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*An earlier version of this article was presented by the author as part of a panel at the 2003 annual convention of the Conference on College Composition and Communication (a division of the National Council of Teachers of English), New York, NY; the seed for this article originally grew, in part, from a roundtable developed and led by the author at the 1999 AMWA Annual Conference, Philadelphia, PA.

Author disclosure: The author notes no commercial associations (eg, consultancies, stock ownership, equity interests, or patient licensing arrangements) that may pose a conflict of interest in relation to this article.
way and on my own time, every one of those nearly 2,000 poems.

In particular, I am inexorably drawn again and again to one of Dickinson’s poems that, in its entirety (albeit only 4 lines long), exclusively addresses surgeons. Deceptively simple, it was written around 1859 or early 1860 and numbered as Poem 156 (out of her lifetime total of 1,789 poems), per the 1998 R.W. Franklin variorum edition:

Surgeons must be very careful
When they take the knife!
Underneath their fine incisions
Stirs the Culprit - Life!

The poem is not anthologized in the extensive reference volume Familiar Medical Quotations, which does include 3 other Dickinson poems (“The Brain - is wider than the Sky -,” “The Bustle in a House/The Morning after Death,” and “Much Madness is divinest Sense -”). However, in Bartlett’s Familiar Quotations, the 4½ pages dedicated to Dickinson do include all 4 lines of “Surgeons must be very careful.” The same holds for On Doctoring (a 1995 volume of Stories, Poems, Essays” edited by Richard Reynolds, MD, and John Stone, MD), which allotts a total of 2 pages to 4 of Dickinson’s poems, including “Surgeons must be very careful.”

Both “knife,” lowercased, and “Life,” initial-capped, in Poem 156 are immediately followed by an exclamation point. The “Culprit,” also initial-capped, that “Stirs” underneath the fine incisions of all those knife-wielding—or to phrase it less bluntly—scalpel-wielding surgeons constitutes “Life!” in the inert, unconscious, but internally very much stirring form of a human patient. “Culprit” is a puzzling choice of words as a synonym for or expansion of “Life,” coming as it does from the abbreviations “cul.” for the Latin culpable (meaning guilty) and “prit” (meaning ready), from an Anglo-Norman legal phrase “marking the prosecution as ready to prove the defendant’s guilt” (as Random House Webster’s Unabridged Dictionary puts it).

So, here we have the patient, in surgical as well as legal terms, being equated with a person charged with, or guilty of, or responsible for a crime or offense or fault: a culprit, but also a victim on the receiving end of a well-meaning but bloody and risky bodily invasion by a powerful perpetrator. The defendant, unconscious, trusting, and defenseless, is being penetrated by a knife and pierced by incisions—incisions that may well be made with fine, studied, skillful precision but that will nonetheless inscribe the skin forever with not-so-fine scars.

This culprit, this defendant, this patient is, in reality, the grammatical subject of the inverted second sentence of Poem 156. Dickinson’s plea is for surgeons, no matter how “fine” their technical skills with “the knife” may be, to compassionately mark the moving vitality of the unconscious person they are working on, rather than reducing him or her to a passive object on whom to superficially or superciliously operate.

The incessant, insistent drumbeat of this poem is delivered through its descending rhythm of trochees (that is, 2 syllables: an accented syllable then an unaccented one): SURgeons MUST be VErY CAREful, and on in that same pattern, with Line 1 and Line 3 both in trochaic tetrameter (4 trochaic feet). Line 2 and Line 4, however, shift toward trochaic trimeter (3 trochaic feet), except that the final foot in each is abruptly truncated into a 1-syllable word, knife and Life, the only 2 words that rhyme in this abcb poem. Both of these mono-syllabic line-stoppers are followed, not by a second unaccented syllable, but instead by an exclamation point, which furnishes Lines 2 and 4 with dramatically different ending sounds and looks. What gets the last word of the poem, and what is hopefully the point of surgery then and now, is Life! That ultimate syllable, preceded by a show-stopping dash and followed by an emphatic exclamation point, is capped and capitalized on, and, unlike any other word in the poem, italicized.

Dickinson certainly understood the clear need for surgeons’ bold, active, invasive, transformative action, for their talent of implementing a controlled bodily disruption in order to try to heal an injured or diseased body or body part. In one of her earliest letters, in 1862, to minister and writer Thomas Wentworth Higginson, she chided him, apparently, for not criticizing some poems she had sent him incisively enough, for timidly or tactfully holding back. Intriguingly, she used a surgical analogy: “Will you tell me my fault, frankly as to yourself, for I had rather wince, than die. Men do not call the surgeon, to commend—the Bone, but to set it, Sir, and fracture within, is more critical.” She did not want the unhelpful inaction of a surgeon sitting on his or her hands and idly praising a broken bone, leaving her to “die.” She did not want the unhelpful inaction of her chosen literary expert blandly praising possibly broken poetry, as opposed to constructively setting it. She wanted the bone set so that it could heal, grow stronger; she wanted Higginson, a leading published writer of her day, to set out for her what he thought her poems required, even if doing so involved initial wrenching and lingering discomfort and thus made her “wince.” Of course, she ended her analogy in the realm not of broken bones but of the intangible mind, soul, and heart: “and fracture within, is more critical.”

In an earlier letter to Higginson that same year, Dickinson made an even more definitive comparison

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*The wide dash so familiar in earlier editions of Dickinson’s poems is reproduced herein as a generously spaced hyphen, per R. W. Franklin’s assessment of its appearance in her handwritten manuscripts: “A spaced hyphen, rather than an en or em dash, has been used as appropriate to the relative weight of her dashes in most of the poems.”
Dickinson was both fascinated by and fiercely protective of the body, in all its anatomic splendor and animated familiarity.

When a patient’s body or a poet’s body of work is invaded through exposure to the light of day, in an operating theater or in an epistolary exchange, pain is to be expected and endured, proof that someone cared enough to go beyond the surface, to dig in, to endeavor to do something constructive that would make a positive, albeit temporarily painful, difference. The key is that surgeons or critics—or editors, I would add—must be careful and respectful, for a trusting supplicant’s physical or emotional life is on the table, in their hands.

It is unlikely that Dickinson herself ever underwent surgery. She wrote Poem 156 at the start of the Civil War, a war rife with its gory litany of battlefield wounds and shattered bones that were treated by surgery, often amputation, under brutal and crude conditions. But surgery in the civilian world had also arrived, to a degree, before the war, especially on the heels of the spectacular 1846 demonstration of anesthesia in Boston. Dr Owen Wangensteen, a noted medical historian, described that historic operation at the Massachusetts General Hospital in their monumental book *The Rise of Surgery: From Empiric Craft to Scientific Discipline.* On October 16, 1846, Harvard professor and surgeon John Collins Warren removed a neck tumor from a patient named Gilbert Abbot, who was anesthetized with inhalation ether by dentist William Morton and felt no pain, only “a scratching sensation.” As the Wangensteens pointed out, “The upon recognition and acceptance of chemical and thermal antiseptics.”

That recognition and acceptance did not widely come until about the mid-1880s, by which time Dickinson was ill, supposedly with a kidney disorder broadly termed Bright’s disease in that era, most likely exacerbated by depression over the sudden deaths of her idolized 8-year-old nephew, Gib, in October 1883 and of the venerable widower who asked her to marry him, Judge Otis Lord, in March 1884. According to Alfred Habegger’s 2001 biography of Dickinson, “she was told she was suffering ‘revenge of the nerves’”; he quotes her as having once said “I do not know the Names of Sickness,” referring to her own final sickness in a letter as “Nervous prostration” before her death in May 1886 at the age of 55, after what was probably “severe primary hypertension” and a stroke.

In her more than 5 decades of life, even if Dickinson probably did not experience surgery firsthand, she did undergo “painful,” possibly cornea-puncturing “prolonged treatment” at the hands of Boston’s leading ophthalmologist, Dr Henry Willard Williams” for many months in 1864 and 1865 for a serious eye problem, perhaps “anterior uveitis.” Yet she mentions the surgical profession in several other poems beyond Poem 156 (“Surgeons must be very careful…”), though more briefly. Poem 168 (written about spring 1860) refers to “the pain / Surgeons assuage in vain.” Poem 405 (written about autumn 1862), “Although I put away his life,” contains 1 line in stanza 6 (out of 8) that explicitly mentions a surgeon, someone who has no reason to try to intervene since the patient is dead:

"Your Servant, Sir, will weary -
The Surgeon, will not come -
The World, will have it's own - to do -
The Dust, will vex your Fame -"

Poem 552, “There is a Languor of the life” (written about summer 1863, in the throes of the ghastly Civil War)
devotes 2 of its total of 4 stanzas to a surgeon, also in the context of one who is no longer needed:

The Surgeon - does not blanch - at pain -
His Habit - is severe -
But tell him that it ceased to feel -
The Creature lying there -
And he will tell you - Skill is late -
A Mightier than He -
Has ministered before Him -
There's no Vitality

Here, the last line, “There’s no Vitality,” has no punctuation marks at all, not even a dash, let alone the exclamation point that followed “Life!” in Poem 156. “There’s no Vitality” trails off into nothingness, into the blank absence of life, into a Vitality” that is no more than this.

In Poem 267 (written about late 1861, in the early days of the Civil War), Dickinson alludes to surgeons in the opening stanza, but “they” are off-stage, their dislocating and amputating actions only facetiously referred to as impossibilities, every fantasy-drenched line ending in an exclamation point:

Rearrange a “Wife’s” Affection!
When they dislocate my Brain!
Amputate my freckled Bosom!
Make me bearded like a man!

As Habegger wryly comments, “the speaker insists that her ‘Wife’s Affection’ can change only when her mind and sex are surgically tampered with.”

In addition to the above-cited poems invoking surgeons and surgery, Dickinson wrote countless others that refer to doctors or physicians; to various, precisely labeled parts of the body; to anatomic and scientific concepts; and to other medical topics like illness, eye problems, breathing, shock, depression, and insanity. To reprise the opening line of just a few of these other, medically slanted (at least obliquely) offerings:

I breathed enough to take the Trick - (308)
Before I got my eye put out (336)
The Soul has Bandaged moments - (360)
The Brain, within it’s Groove (563)

Dickinson’s last poem that, to my knowledge, features an explicitly surgical allusion is Poem 1654, written much later than the others just cited: about 1884, just 2 years before her death. Like Poem 156 a quarter-century earlier, Poem 1654 returns to the plural human beings, this time in mid-line but still capitalized. The theme is similar, that of a patient soon beyond the possible aid of any scalpel:

Still own thee - still thou art
What Surgeons call alive -
Though slipping - slipping - I perceive
To thy reportless Grave -

In Poem 267, “It was not Sickness - then -
Nor any need of Surgery -
And therefore - 'twas not Pain -

My first well Day - since many ill - (288)
The Bone that has no Marrow, (1218)

Dickinson melded art and science when she, pithily and precociously, referred to bodily life as “this brief Tragedy of Flesh” (279) and “this Compound Frame” (294). She liberally sprinkled, throughout her poetic corpus, sometimes jarring but strikingly apt medical terms, such as Artery (eg, 450, 465, 527, 1550), Retina (529), Pharmacy (887), Carbonates (1097), Embryo (1413, 1507, 1549), Hypothesis (1513), cauterize (485), and Marrowless (1218), to cite just a few. An amateur botanist, Dickinson proclaimed as a teenager in a letter to a friend, “I am now studying Silliman’s Chemistry and Cutter’s Physiology, in both of which I am much interested.”

She harbored pragmatic respect for the efficacy of science, as demonstrated by Poem 202:

“Faith” is a fine invention
When Gentlemen can see -
But Microscopes are prudent
In an Emergency.

This poem was echoed by a statement she wrote in a letter (around 1861, to her adored “Master,” whose identity is still in doubt) about Doubting Thomas, the disciple who had to see and feel bodily evidence of Christ’s wounds before believing: as she drolly phrased it, “Thomas’ faith in Anatomy, was stronger than his faith in faith.”

However, Dickinson also expressed disdain for science’s obsession with sterile nomenclature; she sympathetically pitted the so-called “foolish” who call flowers “flowers” against the alleged “Savans” who “Classify” them (179). Such superficial wisdom is anthropomorphized as “very mean” and as an outright “monster” in another poem (117) that harrumphs:

“Arcturus” is his other name.
I’d rather call him “Star.”
It’s very mean of Science
To go and interfere!
… I pull a flower from the woods - 
A monster with a glass
Computes the stamens in a breath - 
And has her in a “class”!

So, too, with medical science, 
which sometimes concentrates 
on surface tests rather than on 
the human forces themselves, as 
Dickinson scoffs in Poem 605: 
I am alive - I guess - ... 
And if I hold a Glass 
Across my mouth - it blurs it - 
Physician’s - proof of Breath -

Often in Dickinson’s poems, the medical scientists, the doctors or physicians, like some of the surgeons already discussed, appear only as they are leaving, powerless, after the patient is beyond reach, as in “There’s been a Death, in the Opposite House, / ... The Doctor - drives away - ... ” (547). In other cases, they are not summoned at all, dispatched by Dickinson as too frequently weak or moot in the invasive reality of earthly suffering, as in “A Clock stopped - / Not the Mantel’s - / ... It will not stir for Doctor’s - / This Pendulum of snow - ... ” (259). Religion and medicine are explicitly united in Poem 1260, but in the form of a skeptical question that kicks off the 2-stanza Q&A:

Is Heaven a Physician?
They say that He can heal - 
But Medicine Posthumous -
Is unavailable -

Dickinson’s most upfront, overt references to scarring per se are in an emotional, not surgical, context, as in “Each Scar I’ll keep for Him” (920), “The healed Heart shows [it’s] shallow scar” (1466), “The Wound that was not Wound nor Scar - ” (1505), and “Heavenly Hurt, it gives us - / Can find no scar,” (320). Rather graphically, in the context of military conquest, she does refer to “Bullets” and “the Royal Scar,” ordering “Angels! Mark ‘promoted’ / On this soldier’s brow!” (136). Throughout her corpus, she makes numerous other allusions to life’s emotional, theological, and battlefield wounds, violently inflicted by arrows, guns, darts, swords, drills, cannons, blades, spears, staples, and other weapons.

The earthbound, yet spirit-housing, body that surgeons actually invade with the knife—hopefully, very carefully, and in time to do any good—was problematic for the sensitive, passionately private Dickinson, at least according to some evidence. In the chapter “The Word Made Flesh” in The Seductions of Emily Dickinson, Robert McClure Smith stresses that

…the representation of the “body” is of crucial importance in her poetic strategies. Of course, that “body” is not the literal one she took such care to conceal from the prying eyes of strangers: the body whose illness the family doctor was supposed to diagnose from a glimpse of its passage by an open door; ... We are concerned instead with the body Dickinson preferably inscribed as language—... with the poet who genuinely believed that “a Book is only the Heart’s Portrait—every Page a Pulse” (L[etter] 794).

... Admittedly, the young Dickinson disapproved the body by emphasizing her personal distaste of it: “I do not care for the body, I love the timid soul, the blushingshrinking soul...” (L[etter] 39); ... and by noting its unimportance relative to the soul: “Glad to know you were better—better physically, but who cares for a body whose tenant is ill at ease? Give me the aching body, and the spirit glad and serene, for if the gem shines on, forget the mouldering casket!” (L[etter] 54).13

John Evangelist Walsh, in This Brief Tragedy: Unraveling the Tod-Dickinson Affair, vividly paints the (medically, almost comic) scene, mentioned in the quotation above, of the poet’s refusal to allow her understandably exasperated physician close enough to her body to do his job, at least on several occasions in the spring of 1886 when she was near death:

To the puzzlement of both her family and her physician, she airily refused further medical attention, going so far as to decline even the meager comfort of her doctor’s presence. On his last few calls to the Dickinson house, the nonplussed physician was directed to a seat in the main parlor facing the doorway. From that vantage point he was expected to conduct his examination as the sick woman, gliding along the hallway outside, came momentarily into view. ‘She would walk by the open door of a room in which I was seated,’ Dr O. F. Bigelow recalled.

‘Now what besides mumps could be diagnosed that way?’14

Clearly, the sometimes prickly, often playful, usually poignant Dickinson intensely focused—in her poems as well as in her life—on the soul and self and spirit, on the “gem” that is the body’s “tenant,” above and beyond the mere fleshly trappings that are always already mired in space and time. In her illness- and death-scarred life, bodies were frequently imprisoned either in a sickbed (her own or that of loved ones whom she watched over and cared for) or in a coffin. Yet she treasured those dear various bodies of her beloved family members and friends who one by one, sometimes in waves, moved away or ailed or died.

In conclusion, as shown by her surgically and medically oriented allusions, Dickinson was both fascinated by and fiercely protective of the body, in all its anatomic splendor and animated familiarity. She depicted the bodies of very-much-alive patients as laid out in a vulnerable way to the all-too-human intervention of knife-taking surgeons in particular, and medicine-giving physicians in general. Ultimately, she bequeathed to all of us the stirring body of her work: the hundreds of poems and letters mailed to her intimate correspondents and the hundreds of poems unearthed in
her bedroom, after her death, by her astonished sister. The methodical production of her homemade fascicles might even be seen as a “very careful” operation: she meticulously folded sheets of stationery (à la layers of skin? surgical drapes?), then made holes (lanced? punch-biopsied?) through them, then tied them (ligated? sutured?) with string (catgut? polypropylene?). In any case, “underneath [her] fine incisions”—the lively words she handwrote in the nineteenth century that have thankfully survived into the twenty-first and beyond—still “stirs the Culprit - Life!"

References
3. Franklin RW. The Poems of Emily Dickinson, Variorum Edition. Cambridge, MA, and London, England: The Belknap Press of Harvard University Press; 1998. [Throughout this article, Dickinson’s poems are referred to by the numbering system used by Franklin; the estimated time of authorship of each poem is also per his rendering.]
“I am interested in the future,” said 20th century inventor and scientist Charles Kettering, “for that is where I expect to spend the rest of my life.”

This quotation speaks directly to members of AMWA as we continue on the journey of our profession in the 21st century. Planning is now complete for AMWA’s 69th Annual Conference, which will be held October 22-24, in Dallas, TX. While playing off this location’s Western history, the selected theme of “Blazing the Trail” more importantly reflects this annual opportunity of professional communicators in medical and health care fields to assess, contemplate, and establish both direction and velocity for our own future.

AMWA has a rich legacy of leadership in educating medical communicators. At each year’s annual conference, the emphasis is traditionally on high-quality workshops and open sessions, supplemented by breakfast roundtables, poster presentations, and a multitude of networking opportunities. Check the Web site at www.amwa.org for up-to-date conference information, and keep an eye on your e-mail for registration reminders.

The complete registration brochure will be posted on AMWA’s Web site in the first week of July, and registration will open on July 20. Please note that hotel reservations will also open on July 20. Stay tuned to our Web site for updated information.

We hope to see you in Dallas. We’re going to have a wonderful time! It’s big, bold, and budget-friendly! Read on for conference highlights.

—Douglas Haneline, PhD
2009 Annual Conference Administrator
Workshops

The core of AMWA’s 2009 Dallas conference is education, offering members learning opportunities at every level and relevant to every environment in medical communications. This year’s conference features nearly 90 workshops, including core, science, and advanced credit workshops and noncredit workshops. New core certificate workshops include “Basics of Health Care Compliance,” “Sentence Diagramming,” and “Writing Clinical CTD Summaries for INDs and Marketing Applications.” Multiple sessions of some of AMWA’s most popular core certificate workshops have been scheduled, and one new noncredit workshop, “Using Classical Rhetorical Principles to Enhance Medical Writing,” has been added. The roster of AMWA’s science workshops continues to grow, with the following workshops offered in the certificate program for the first time for credit: “Introduction to the Musculoskeletal System,” “Introduction to Cancer Biology,” “Sex and Beyond: A Multimedia Presentation on Human Fertilization and Early Development,” “Chemical Equilibria in Physiology,” and “Diseases of the Nervous System.” The following science workshops are being introduced this year for the first time as noncredit: “Principles of Epidemiologic Research: Beyond the Basics,” “Introduction to Cancer Pharmacology,” “Introduction to the Endocrine System,” “Basics of Virology,” and “The Four Primary Classes of Biological Macromolecules.”

Open Sessions

Open sessions provide conference attendees with valuable information and insights on a variety of timely issues of interest and are included in the cost of conference registration. The following open sessions are planned for this year’s conference.

- The Basics of PubMed and Medline Plus
- Copyright Do’s and Don’ts
- Developing More Effective Verbal Presentation Skills
- The Ethics of Clinical Trials
- First Person Singular: Creative Nonfiction as an Outlet for Medical Writers
- Getting Down to Business: Non-writing Issues for Freelances
- Getting Your Manuscript Published
- Globalization of Medical Writing
- Grammar Tips for Writing and Teaching in a Second Language
- High Performance Freelancing
- How to Mentor a Medical Writer
- How to Respond to Reviewers’ Comments
- How to Use Repetition Effectively in Technical Documents
- Justifying Our Profession: How to Do Research on Medical Writing and Get It Published
- The Least You Need to Know to Publish a Book
- Navigating Today’s CME Landscape
- No Medical Degree, No Problem!
- Succeeding as a Medical Writer Without a Science Background
- Online Surveys: Opportunities and Logistics
- Osteoporosis Update: Pathology, Diagnosis, Prevention, and Treatment
- Palliative Care: Collaborative Communication at the Edge of Life
- Preventing Illness and Injury: What’s New?
- Professional Certification for Medical Communicators: Credentialing Models to Related Professions
- Project Expectations and Assumptions: Put Them in Writing!
- Pros and Cons of Direct-to-Consumer Advertising
- Protecting Your Investments (or How Not to Lose Money When Everyone Else Is)
- Publications Guidelines: GPP2, CONSORT, and You
- PubMed Searching—Optimizing Search Strategy With Medical Subject Headings
- Risk Management in the Pharmaceutical World
- Scope of Medical Communication
- Success Stories in Health Literacy
- Targeting Your Journal Article: Beyond the Impact Factor
- Teaching International Authors: Some Trail-Blazing Initiatives
- Tracking Health Policy Reform
- Using EndNote in Microsoft Word
- Using LinkedIn to Advance Your Career and Promote Your Business
- Web 2.0: Retooling How Freelances Market Their Services
- When Bad Things Happen at Good Places—PR Disasters and How to Respond
- Writing Quality Documents for Regulatory Submission

Breakfast Roundtables

Breakfast roundtables offer a great opportunity to discuss a topic related to medical communication informally over that first cup of coffee, tea, or juice, and breakfast. This year’s offerings, a total of 77, include both perennial favorites and timely additions that will be led by, well, perennial favorites and timely additions!

Poster Session

Fifteen posters were accepted for presentation during this year’s poster session. The posters highlight original research as well as how-to ideas. A committee of AMWA members reviewed abstract submissions for overall relevance, practicality, originality, organization, and other factors. The posters will be displayed in the hospitality area throughout the conference, and authors will be on hand to talk to you about their topics on Friday morning. Get a preview of the posters by reviewing the abstracts in the next issue of AMWA Journal.
Featured Speakers

Three dynamic leaders in the health care field will speak at this year’s conference. Annette Flanagin, RN, MA (left), Managing Deputy Editor of JAMA, is the McGovern Award recipient, and David Dary (center), Emeritus Professor and Director of the Gaylord College of Mass Communication and Journalism at the University of Oklahoma, is the Alvarez Award recipient. As in years past, these speakers will address attendees at special luncheons on the Thursday and Friday of the conference. Conference attendees will again have a choice of purchasing a ticket for the luncheon or attending only the speaker portion of the event. Budget-friendly free admission to auditorium-style seating will be available for those who wish to listen to the award speakers. There will be separate admission times (noted in the conference brochure) for the luncheon and the auditorium seating. (Food will not be allowed in the auditorium.) The 2009 Keynote Address will feature an exciting international speaker: Karen Woolley, PhD (right), Founder and CEO of Proscribe Medical Communications. Dr Woolley will talk about steps members of the contemporary medical writer community need to take so that we move into a new era as respected professionals.

Creative Readings

Daily we scramble frantically to meet deadlines—“Write it right, right away.” But some of us plucky lucky few escape to our secret gardens of creative delight. AMWA invites you poets, playwrights, novelists, short story writers, humorists, and essayists to read aloud your creation. Snuggle into a caring, contented evening—with a party of peers without peer, and without peer review. Or come on by just to kick back, listen, and enjoy. (An appreciative audience is the best fertilizer.) Look for the announcement and call for participants in August.

Chapter Greet & Go

Thursday, 6:30–7:45 PM

Make plans to meet members of your chapter at this year’s Greet and Go. Why not plan to mingle with your chapter colleagues over dinner at one of the many great restaurants within walking distance of the conference hotel? Talk to your chapter members in advance of the conference in order to make dinner plans early—restaurant reservations are sure to fill up quickly! The conference program has been modified to allow more time for dinner with your colleagues and still enable you to attend your favorite Coffee and Dessert Klatch. Take advantage of this opportunity to socialize with your chapter. Or combine your plans with another chapter for enhanced networking. The time is yours—make the most of it!

Tours

AMWA is in the process of lining up several exciting and unique tours for AMWA attendees to enjoy in the great city of Dallas! Keep an eye out for more detailed information coming to AMWA’s Web site and issues of the AMWA Update soon.

Hotel Reservations

Getting Your Employer to Say Yes to the AMWA Annual Conference

By Deana G. Betterton-Lewis, MS\textsuperscript{a}, and Jennifer T. Bridgers, MS\textsuperscript{b}

\textsuperscript{a}Senior Medical Writer and \textsuperscript{b}Medical Writer Specialist, PPD, Inc., Morrisville, NC

This article is primarily for medical communicators working in academia or for pharmaceutical companies, institutions, or clinical research organizations. If you want to attend the 2009 AMWA Annual Conference and have your employer pay for your registration fees and travel expenses, then you probably need to obtain your manager’s approval before you can register for the conference. Based on our experience in negotiating approval for attending past AMWA conferences, we provide here some tips on approaching your manager in a way that is likely to lead to approval and allow you the benefit of participating in this year’s conference in Dallas.

Emphasize Cost Effectiveness

First of all, acknowledge that you recognize the company has been affected by the economy. Then clarify that you understand the company and its employees are looking for ways to get the most for their money. In your request for attending the conference, point out the following.

- The conference is a small investment that will enable you to increase your value to the company through improved work performance, exposure to new techniques and processes, and awareness of new regulatory standards and developments.
- Workshops and sessions attended at the conference increase the knowledge and skill of employees, thereby potentially reducing expenses related to reviews, editing, and formatting, as well as understanding regulatory guidance. List several workshops and open sessions that you would like to attend and that will provide the greatest benefit to you and the company. In addition, tell your manager how the knowledge that you gain from the workshops and open sessions will enable you to handle a specific project with a direct, positive impact on the bottom line. From the conference brochure, select an open session, workshop, or roundtable that relates directly to one of your current or upcoming projects; pointing out specific benefits on your work will help your manager to more clearly see the direct benefit of your attending the annual conference.
- The annual conference is the best opportunity for taking several of the many available specialized workshops. This can be important to complete your AMWA core, science fundamentals, or advanced certificate, which is well-recognized within the medical writing community. It is also more cost-effective to take 3 workshops at the annual conference rather than making multiple trips to attend chapter conferences in other cities.

The value of the conference goes beyond the workshops. Make sure to note that the conference offers many open sessions, networking opportunities, and vendor demonstrations as well as workshops. Also, you can enhance the cost-effectiveness of the conference by offering to share what you learn from a workshop or open session with your coworkers by giving a presentation at a department meeting or sharing informally over a brown bag lunch.

Compromise

With the economy in its current state and many companies cutting jobs, asking employees to take salary reductions, or implementing hiring freezes, you might want to consider what you can contribute toward your attendance at the AMWA annual conference.

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Additional Points about the Value of the AMWA Conference

By Art Gertel

Vice President, Strategic Regulatory Consulting, Medical Writing & QA, Beardsworth Consulting Group, Inc., Flemington, NJ

When you talk to your manager with your request to attend the AMWA annual conference, ask him or her to consider the value of these other benefits of attending the annual conference.

- The conference provides an excellent forum for comparing and contrasting processes and standards. You can increase your knowledge of industry best practices through interaction with colleagues.
- The conference is a rare opportunity to learn from colleagues and workshop leaders about feedback from regulatory authorities and publishers with respect to standards and requirements that often go unstated/published.
- If any representatives of a regulatory or funding authority (such as the US Food and Drug Administration or the National Institutes of Health) will be present, make sure to note this. The presence of such representatives confers credibility and the opportunity for you to get information “straight from the horse’s mouth.”
- If you have neophyte medical writers in your group, the conference offers a good opportunity for them to get grounded in the basics.
AMWA ANNUAL CONFERENCE OFFERS VALUE AT ALL CAREER STAGES

By Arlene and Emily Kaufman

Arlene: Since making the pharmaceutical industry the focus of my second career, almost 15 years ago, my experiences have been quite diverse. I have landed happily in the scientific and medical communications arena. Working with teams inclusive of medical writers to develop and execute publication plans, I have now set my sights on becoming an adept and credentialed medical writer. My research led me to AMWA. As I am well down my career path, my goal is to complement my work experience with the proper formal training and education to afford me standing as a medical writer.

With that in mind, I joined AMWA and registered for the annual conference, knowing I could avail myself of workshops and open sessions and network with those already entrenched in medical writing careers.

Emily: I’ve always considered myself a writer. Since graduating college 2 years ago, though, I’ve been employed where writing is an important but peripheral part of my job in sales/marketing. Looking to the future, I realized that I want to get out of my cubicle and enter a field where I can take on multiple projects at once. Although my studies and job history are not in the medical area, I’ve always been interested in health. AMWA seemed like a solid place to start building the foundation for a future career.

WORKSHOPS
Arlene: In my current position, I have no formal medical writing duties; however, in reviewing abstracts, posters, and manuscripts for presentations and publication, I thought that skills in the area of statistics and pharmacokinetics would serve me best in the short term and lay a great foundation for the future. I was not disappointed. Although much of the material in the workshops was familiar to me because of my educational background in the sciences (or because of my current position), the workshops did enhance my knowledge and provided resources to refer to and to build upon. I wish there had been more time in the workshops, but the 3 hours were packed with information and worthwhile.

Emily: As these were the primary reason for my trip to Louisville, I took the maximum amount of workshops allowed. Since I thought I chose diverse topics, I was surprised to encounter many of the same faces at all 3 workshops. How could so many people, from so many backgrounds, all have the same questions? Spending time with a semi-constant group made me realize that the field is a fluid one; there are many areas to specialize in, but AMWA members are always looking to expand their skill set.

OPEN SESSIONS
Arlene: The open sessions, by design, were more free-flowing. They were true to their titles and descriptions and I picked up useful bits of information in those I attended.

Emily: Unfamiliar with the intricacies of the medical writing community, I visited sessions that I hoped would help me answer 2 questions: what can I do now, and how can I do more in the future? Happily, I was able to take away something from each session I visited, but the panel discussions were an especially helpful reminder that each AMWA member builds a different career path, with a different definition of success.

NETWORKING
Arlene: I did not avail myself fully of the formal networking opportunities for 3 reasons: it was my first AMWA experience and I was more focused on maximizing the time spent on workshops, etc; as this was an out-of-pocket expense, I had to consider the cost and cut where I could. I also had a selfish desire to spend quality time with my daughter. In spite of this, I did find that there were opportunities to interact informally and people were generally easy to talk to and willing to share their stories. I even met former colleagues and benefited from hearing their perspectives as well.

Emily: Although I did not participate in the formal networking events, it was impossible to go a full day without talking to many fellow AMWA members. At each session, I found people who were friendly, interested, and interesting.

LOOKING AHEAD
Arlene: I am hoping to participate in as many relevant workshops as are feasible given geographic, economic, and time constraints. All in all, I am so thrilled to have found AMWA. The fact that my daughter and I, coming from different stages in our careers as well as different educational and employment backgrounds, can both benefit from belonging to an organization that offers us career development opportunities speaks volumes of AMWA’s value.

Emily: I left the conference feeling ready to act. It’s admittedly a challenge to propel myself forward into a new career while still meeting the demands of my current job. However, I know that the resources I picked up in Louisville will be useful to me going forward, and I am eager to take more workshops and continue to build my knowledge base. Attending a chapter meeting a few weeks after the conference served to inspire me further and introduced me to some fantastic people.
By Faith Reidenbach, ELS
Caley-Reidenbach Consulting, LLP, Corvallis, OR

❖ The PubMed Advanced Search feature is out of beta, and the PubMed user interface (www.pubmed.gov) will be changing in 2 ways in the near future. First, the “Single Citation Matcher” will disappear from the blue bar at the left of the screen. Advanced Search allows searches by author, journal, and publication date. Select “Click here!” if you also want to search on the title or the volume, issue, or page number. Second, the tabs on the user interface (Limits, History, Preview/Index, and Details) will also disappear because these features are now on the Advanced Search page.

❖ Twitter has gone mainstream for medical journalists. Pia Christensen, managing editor of online services for the Association of Health Care Journalists, is urging members to experiment with this microblogging tool in order to get news and press releases, follow expert commentary, and connect with sources and readers. An increasing number of physicians and medical organizations (even the Cochrane Collaboration) are on Twitter, so it’s only a matter of time before most medical writers will want to try it, especially those who have books and services to promote. The rationale for journalists to join Twitter and a step-by-step tutorial for getting started are at http://tinyurl.com/5w9m63. (See page 78 for an article about the value of Twitter for medical communicators.)

❖ The library without walls—European Journal of Physical and Rehabilitation Medicine, of all places, has published an article listing medical encyclopedias, dictionaries, atlases, and images that are free on the Web. The article will be of most use to newer medical writers and editors (it’s not specific to physical medicine), but veterans might find a treasure or two worth bookmarking. Free online at http://tinyurl.com/67uqbd.

❖ New guidelines for preparing journal articles include the STREGA statement about reporting genetic association studies, guidelines for submitting manuscripts to American Psychology Association journals, guidelines for reporting medical dispatch in emergency medicine studies, and guidelines for reporting evaluation studies in health informatics. See http://tinyurl.com/bbkgec.

❖ “A checklist for authors using medical writers: a practical tool to discourage ghostwriting” appears in the February issue of PLoS Medicine (free online at http://tinyurl.com/afonhr). Developed by Karen Woolley, AMWA president Cindy Hamilton, and other leading medical writers, the short questionnaire “prompts authors to acknowledge professional medical writers and their funding source; to confirm that the authors controlled the main points, outcomes, and data reported in the manuscript; and to verify that medical writers could provide evidence that guidelines on ethical writing practices were followed.” The checklist is also well-suited to helping medical writers counsel clients about ethical practices and ensure they will receive proper acknowledgment.

Woolley et al sent their editorial to PLoS Medicine as an independent submission, but the journal editors commissioned 2 other statements on ghostwriting and published the 3 viewpoints as a “debate.” Jerome Kassirer, a former editor of The New England Journal of Medicine, notes that some kinds of “ghost involvement” are ambiguous. “Is it acceptable to hire a science writer to interview a physician and write a paper on that subject, which the physician then calls his or her own?” he wonders. “How much help with writing is okay?” Peter Gotzsche, director of the Nordic Cochrane Center, addresses “ghost authorship,” which he defines as making a substantial contribution to a manuscript without receiving authorship credit or acknowledgment. He has a firm opinion: journal editors should insist that medical writers get credit as authors. “As it is not possible to write a paper without judgment and interpretation of data. . . . writers fulfill the authorship criteria.” Gotzsche adds that journal editors should not accept “meaningless” acknowledgments such as “We thank XX (without specifying for what)” or “XX provided editorial assistance.”

In an accompanying article (free online at http://tinyurl.com/coend6), the editors of PLoS Medicine include combatting ghostwriting in their list of “five ways in which authors and [journal] editors can mitigate the effects of biased agendas on the published scientific record.” They imply that they agree with Gotzsche: they say ghostwriting occurs “when individuals who have made a substantial contribution to the research project, or to writing of the article, are not named as authors.”

Items in Briefly Noted appear earlier on AMWA’s Editing-Writing, Freelance, and Pharma listserves. To subscribe to one or more of these listserves, go to www.amwa.org and click on Members Only>Networking>Listserves.
A – This question was addressed by participants in the AMWA Florida Chapter Conference short session on freelancing in February 2009, and the answer was unanimous: take the new project and work nights and weekends to fulfill all obligations. It is very important to determine if the new client is someone you want to add to your client list. If it is, then let the client know that you are currently working on a project and will work simultaneously on both the current one and the new one. Or, alternatively, advise the client that you will finish the current project within a few days and will begin the new project immediately after. Determine also if the deadline the client is proposing for the new project is doable or if it can be extended. Evaluate if the budget proposed is acceptable and in line with your normal fees. Remember, adding a new client to your client list is always an exciting event. And the pain and suffering of working a few nights or weekends will soon be a distant memory!

—Elizabeth L. Smith

Q – What should I do when I am in the middle of 1 or more projects and a new client approaches me about a project?

A – Don’t turn down the work unless you cannot possibly meet the new client’s deadline. Work extra hours to handle the new job. Or hire a subcontractor to help you get both jobs done. Otherwise, explain that you’re busy with another deadline and let the new client know when you’ll be available. It is better to turn down the work than to do a poor job or miss a deadline! The client will understand that you’re busy and might call you later when you’re available, but if you take a job and do it poorly or miss the deadline, the client will not want to use you again.

—Cathryn Evans

A – This is a problem you always want to have—being booked, with more work on the way! However, it must be handled carefully. My approach is, first, to never jeopardize the work I have in-house, and second, to never assume getting a call for new work when I’m already busy is a problem.

I start by marketing myself to the potential new client. I tell him or her that I already have a few projects in the works and that I would love to take this project on but would never jeopardize the quality or timing of the work I’m already doing—something the new client can count on when he or she is my client, too.

Then I ask what the project is and when it’s due. For all I know, this new client could be firing a warning shot, and the project is weeks away from getting started. Also, if I had a hundred dollars for every time a project that was supposed to start right away was delayed, I’d be rolling in extra dough. So I don’t usually believe what people tell me about timing anyway.

After discussing the reality of the new assignment, I can usually find a way to move it into my schedule. If I can’t, and the new client really wants me to work on the project, often he or she will find a way to adjust expectations to make it work. Also, because I have a team of writers who work with me, I have the added flexibility of bringing in one of the writers on my team to take on the assignment if I can’t handle it because of timing or expertise.

If there’s no way to come together on the project, I apologize and ask whether I can direct the client to other possible sources, such as the AMWA Freelance Directory. If I can’t be the solution, I want to at least be a part of it, and that will encourage the client to consider me again the next time.

—Brian Bass

A – No freelance likes to pass up work, but it’s never a good idea to take on more than you can comfortably handle, especially when you’re dealing with a new client. Your reputation as a freelance medical writer or editor depends entirely on the quality of your work, and it’s difficult to maintain that quality if you are constantly overbooked. Admitting that you are booked actually reflects positively on your ability. I always thank the new client for his or her interest in my services, explain that, although I would like to have an opportunity to work for him or her, my schedule is full at the moment. I ask about the scope of the project and the deadline. If the client indicates that the deadline is flexible, then I say when I would be available to begin work on the project. If the deadline is not flexible, then I explain that I don’t accept work unless I feel confident I can meet the deadline, and that, due to my current workload, I don’t feel comfortable about accepting the work at this time. I also offer to recommend another writer or editor who might meet their needs, and express my hope that they will keep me in mind for future work. I’ve found that
potential clients appreciate this honesty and my willingness to help them out by recommending another writer or editor to them—and they often do call again. There is one caveat to keep in mind: Don’t recommend someone unless you know the quality of his or her work, because that also reflects on you.

—Donna Miceli

A — The first thing you should do is make sure that you really are “booked.” On my Excel spreadsheet, I list all my projects as line items with when they are due, the fee, and any other important information. Right beneath that I have my calendar, which is really a series of 7 blocks for each day of the week, times 13 weeks for each quarter (with a separate sheet for each quarter). I block out my calendar in half-day increments for most projects. This enables me to have several big projects going at once, and to be able to confidently determine, just by looking at the blocks, whether or not I am really booked. I used to just answer the question based on the level of panic I was feeling on any given day—not very effective.

If you want to account for projects that fall through and become delayed, it’s a good idea to overbook a little. If I had to estimate, I would say that at least half of my projects do not follow the timeframe initially stated, and about 5% to 15% get cancelled, so, clearcut scheduling can be a challenge but you can get a general sense of things.

If I have determined that I really can’t fit in a project within a given timeframe, then I will usually either recommend a trusted writer colleague or offer to put something out on the HittList (www.hittmedicalwriting.com/thehit-tlist.html)—sorry for the shameless promotion here, but it’s a free service and I believe, one of the easiest ways to help your client find a writer. If I am very eager to do a particular project, I also ask the client if there is any wiggle room in the deadline. Perhaps I can’t deliver the project in 2 weeks, but can the deadline be extended a week or two? Sometimes it can. What I don’t do is subcontract projects out. Most clients do not seem to care for the idea.

The take-home message is try not to turn down a project without at least offering a solution for the client. When I am “rejecting” the new project, I am also very nice about it. I say something like “thanks so much for asking, I’d love to do it but…” Then I say, “please keep me in mind for future projects…” so the client knows I do want to work with him or her (unless of course, I don’t want to, in which case I just say I am booked…for a very, very long time).

—Emma Hitt

A — I never like to say no to a project with a new client, assuming 2 important things: 1) that the project is interesting to me, and 2) that I really want to work with this client. Usually, both conditions must be met! (Condition 1 might be optional if I believe there might be future interesting projects with this client for which I would like to be considered if I do a good job on this first one.) So, assuming I do want this new business, there could be several ways to handle having an existing project and taking on the new one, too.

Juggle!
Consider what you can do on the new project while finishing up the existing one. You can say to the new client something like this:

I am very interested in establishing a working relationship with you. I am currently in the beginning of/in the midst of/in the process of completing a previously scheduled project. It will probably take a week or so to complete contractual paperwork with your company. So, if your project is beginning in a week to 10 days’ time, I will be able to start doing (this level) of work on your project until [this date], at which time I predict I can devote more time to your project.

Use subcontractors!
It may be possible (especially if your current project has been ongoing for awhile) for you to pass off some of the work on your current project to a subcontractor so that you can devote more time to the new client. This scenario is feasible only if your current client is comfortable with your using subcontractors (some forbid it) and if you have good, reliable subcontractors with availability. It is always best to have some sort of managerial role in such a situation, so you have to be willing to devote some time to overseeing the work of the subcontractor (in addition to your new and current workload).

Use your network!
If you have a trusted colleague who is willing and able to take on this new client’s project and can do a good job delivered in the client’s timeframe, tell the client that you are unfortunately not available now but would like to recommend another qualified writer who could do the job. Remember, the performance of the people you recommend is a reflection on you. And also remember that a good turn (on behalf of your colleague) will reward itself someday (what goes around, comes around!).

Important!
It is most important to be honest—both with your client and with yourself. If you really can’t swing the project, politely decline with regrets and suggest a future date when you expect to be available. All clients appreciate honesty, and you can avoid burnout by not overcommitting yourself.

—Sherri Bowen
Professional Development

Voices of Experience

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

➲ Interviewee: Elizabeth Yepez
US Managing Editor, Pharmaceutical Science and Toxicology Journals, Informa Healthcare

How did you find out about medical writing and editing as a career?
I didn't find out about medical writing as a career until I got my first job, an assistant editor position at a medical journal. Part of my job involved logging in details about manuscript submissions to the journal, such as the name of the sponsoring company, the medical communication group, the academic institution, etc. The longer I did this, the more I realized the breadth of the industry. The titles and functions of the people with whom I interacted were endless. I came to realize medical publishing wasn't just a publishing niche, but a field in its own right, and one that opened up to me once I stumbled into it.

What is your education and work background?
I graduated with a degree in English and journalism, so my background mainly falls on the “publishing” side of “medical publishing.” Before starting as an assistant editor, I had worked as a copyeditor at Running Press, a well-known book publishing company, and later for several college and alumni publications. I had also done document editing at a publishing service vendor, where several of our clients were such book publishers as Oxford, McMillan, and Elsevier.

AMWA: How did you job search for your first position?
In December 2006, living in the New York area, I did what every English major-graduate did: I applied to any and every entry-level, Manhattan-based publishing job I could find. I spent hours online, on Bookjobs.com, on Mediabistro.com, and marking up my hard copy of the Writer’s Market. What came back was frequently disappointing (offers included), but I kept at it. I knew where my skill set lay, and I convinced myself that once I found that first job, my qualifications would carry me from there.

Job hunting took about a month. I was set to graduate early, in January, so I sent out resumes feverishly through finals and the holidays. One day, a friend called me about a listing in her local paper for an assistant editor. I applied immediately online. A week later, I was called back, and drove 200 miles—after my last class—for the interview. I started the next month.

What surprised you most when you first started working?
I was surprised by how much business I saw happening on a personal level. My first boss, the publisher of a general medicine journal, showed me how much networking matters when considering sales and new business, and the importance of client relationships. His demonstrating how much weight professional contacts carry—and also the quantifiable results of these relationships—was an important lesson to me.

How did you come into your current role as managing editor at Informa Healthcare?
I had met the publisher of Informa pharmaceutical science, then a newly created portfolio, at the International Society for Medical Publication Professionals (ISMPP), earlier that year. We had worked together in the past, indirectly, and he was working on organizing 41 titles carved out of the company’s larger clinical medicine division. In July of that year, he called me and recommended I apply for the managing editor position.

What is a typical work day like for you?
Six months after accepting the job of managing editor, I spend the mornings going through my e-mails and communicating with my team, all based in the U.K. I subscribe to Knowledgespeak.com and Scrip, 2 newsletters reporting news in the technical publishing and pharmaceutical industries, respectively. The afternoon is given to working on any number of ongoing projects, depending on which journal (of several I oversee) I’m focusing on at the moment. For example, last week I updated editorial boards and the aims and scopes of several of my titles. Often, this entails a sizable chunk of the afternoon on the phone with editors.
What strategies do you find helpful for working with an international team?
The most obvious strategy is making sure I am as available as possible, despite the time difference. While it is ideal that I am in the same time zone as the editors-in-chief of my journals, I do have to make an intentional effort to maximize the time I am available to my colleagues in London. I usually get into the office around 8 in the morning, so I still have half the work day to communicate in real time with the production editors, marketers, and department assistants with whom I work.

What is involved in managing a portfolio of journals?
Basically, I am the gatekeeper between the scientific knowledge and clout the editors and their boards bring to the journal, and the practical, day-to-day needs that need to be met in order for the journal to run on time. I am one-part publication manager in that I keep the journal editors on deadline and one-part strategic planner in that I keep them moving, together, according to the big picture view of the company and the industry. To offer a specific example, recently, this has meant looking critically at citation patterns across the titles I manage and communicating to the editors which articles (and the corresponding subject areas) are being most-often used in later research. The editors and I then can use this knowledge to drive the editorial focus of the journal, whether in the form of call for papers, content-specific marketing campaigns, or refocused aims and scope for the journals.

Do you have any advice you’d like to share on navigating in medical publishing right now or in navigating a large international corporation?
Keep a big-picture perspective in your head, always. It’s not unique to medical publishing, or even publishing in general, to say that the industry has been hit hard by the economic downturn. On a career level, know where you’re going and how you can build accredited or professional proof that you have (or are building) the skill sets needed to move in that direction. For example, if you notice you’re not using your writing skills so much as you are managerial ones, either supplement your portfolio on the side with freelance editorial work, or build your managerial credentials by taking a class. In order to be marketable, you’ll always have to add proof upon proof of the skills you’re developing. On a job-specific level, don’t be afraid to ask for more responsibility, with or without a title change, or to suggest cost-saving initiatives where appropriate.

Any final advice?
Always send out thank-you and follow-up e-mail notes. It sounds small, but you’d be surprised by the professional connections they can forge.

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Credentialing Examinations: BELS and CMPP

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

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<td>9:00 AM–12:00 PM</td>
<td>Abbott Laboratories, Abbott Park, IL (AMWA Greater Chicago Area Chapter conference, July 31, 2009)</td>
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<td>Thursday, September 17, 2009</td>
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→ Register by: July 11, 2009

**Certified Medical Publication Professional (CMPP) credential** (offered through the International Society for Medical Publication Professionals [ISMPP]). Qualified candidates can take the 3-hour exam during the month of September 2009 at an approved CASTLE Worldwide testing center location throughout the United States and Europe. (Locations are listed at www.castleworldwide.com/mainsite/ibtsites.) For more information, visit www.ismpp.org.
Medical Communicators: Did You Tweet Today?

By Cyndy Kryder, MS, CCC-Sp
The Accidental Medical Writer, Phoenixville, PA

Popular trends online in 2009 are social networking and anything else related to Web 2.0, a label used to describe advanced Internet technologies such as blogging, really simple syndication (RSS) feeds, and member communities that users join to connect with other people who may have similar interests. In fact, according to a report from Nielsen Online, social networking and blogging have become more popular than sending e-mail messages.1 More than two-thirds (67%) of the global online community now goes online to visit social networks and blogs.

At this moment, Twitter (www.twitter.com) is the social networking darling, with hundreds of people joining daily. Recent data show that in one month, the number of Twitter users grew by 33%.2 If you have heard of Twitter but discarded it as irrelevant to medical communicators, think again.

As a microblogging platform, Twitter’s free service enables users to send out short snippets of no more than 140 characters. These updates, called Tweets, go to Twitter users who choose to follow you (known as your followers) and also appear in the Twitter timeline. Twitter began as a vehicle through which friends, family, and coworkers could communicate and stay connected by exchanging quick, frequent answers to one simple question: What are you doing? Twitter has evolved as Twitter users learned that every Tweet counts (and nobody wants to hear about what you’re eating for lunch). Today, you will find more valuable content and less useless information about what someone is doing at one particular moment in time.

As a medical communicator, what can you get out of Twitter?

• Traffic: Use your Tweets to drive prospective clients to your Web site, where they can read your bio and see samples of your work. You do have a Web site, don’t you? (Tip: You can use your public LinkedIn profile page as your Web site and direct followers there.)

• Connections: Use Twitter as a tool to connect with others in your industry or related industries while increasing awareness of your personal brand. You never know who might be reading your Tweets. As with other social networking sites for professionals like LinkedIn or Biznik, social networking contacts often lead to other connections that can generate new freelance clients or employment opportunities.

To get Twitter followers and make connections, you need to follow people. Use the “advanced search” function to find Twitter users in your area of interest, follow them, and comment on their posts using the “@replies” or “direct message” function.

• Resources: Twitter offers you a steady stream of ideas, links, resources, and tips. Follow people in your areas of interest and they will lead you to interesting resources you might not find yourself. I found the earlier link to the Nielsen Online report through a Tweet.

• Skills: The challenge of Twitter is to write a Tweet using no more than 140 characters. In the Twitter world, you need to write tight or forget it, which gives you an opportunity to hone your writing skills.

If you have heard of Twitter but discarded it as irrelevant to medical communicators, think again.

What should you Tweet about? I have found the best way to optimize Twitter is to become a filter, teaching my followers mini-lessons about medical writing and updating them on topics of interest in the field. My goal is to provide my followers with information they can use. For example, once a week I send out a Tweet defining a medical writing acronym. I also Tweet about medical writing resources and Web sites where medical writers can find
demographic data, disease-state information, and much more. Issues of interest to medical communicators, such as the proposed North American Association of Medical Education and Communications Companies (NAAMECC) draft Code of Conduct for Commercially Supported Continuing Medical Education (CME), provide additional content for my Tweets. You can follow me at http://twitter.com/cyndyandbrian.

Keep in mind that Twitter is a very "noisy" place. By that I mean the volume of Tweets is enormous. As you follow more people, the volume increases substantially. Since you can Tweet from your computer or your mobile phone, some users send dozens of Tweets each day, which only adds to the noise. I limit the number of daily Tweets I send and will quickly choose not to follow someone who, in my opinion, Tweets too much. The noise level does have an upside: you can repeat your Tweets, since your followers will probably miss some of your updates, given the number of Tweets they need to filter through.

A variety of free applications are available to increase the functionality of Twitter. With Tweetlater (www.tweetlater.com) you can set up keyword alerts to notify you when someone Tweets about a specific word or phrase, schedule Tweets to appear automatically when you cannot do it personally, and automatically follow people who follow you. Twellow (www.twellow.com) is an application that allows you to track selected people in your specific niche or business. You can even track Federal Express, UPS, and DHL shipments at http://twitter.com/TrackThis.

In March, 2009, Twitter launched 4 levels of premium services that cost between $5 and $250 per month and offer additional services, such as increased character limits (up to 500), an automatic spell-check function, and a so-called Twitter Concierge that will send out Tweets for you when you cannot. Whether users will flock to these paid services as they did to Twitter's free service, only time will tell.

Think you are too old to Twitter? Not in the least. One interesting characteristic of the social networking and blogging community is the diversity in terms of the age of its audience. During 2008, the biggest growth in visitors to "member community" Web sites around the world was seen among those in the 35- to 49-year-old age group; that represents more than 11.3 million visitors!

Creating a Twitter account is easy. Simply go to http://twitter.com, click on the “Get started—Join” button, and register using your real name. At this point, you have the opportunity to create a 15-character username that will become part of your Twitter URL. Once you complete this step, you can proceed to the account settings, where you can upload your photo, link to your personal Web site, create a short 1-line biography, and personalize other settings. Then it's time to create your first Tweet.

Garner more followers by including your Twitter username (@cyndyandbrian) or your Twitter URL (http://twitter.com/cyndyandbrian) in your e-mail signature line, on your business card, or in your LinkedIn profile. You can also add a Twitter link to your Web site or blog. When you visit my homepage, www.theaccidentalmedicalwriter.com, you will see the Twitter icon that links directly to my (and my partner's) Twitter profiles.

Twitter users are, for the most part, a helpful crew. If you encounter problems, send a Tweet with your question and ask for replies. Or send a direct message to a Twitter user who seems particularly savvy. In addition, several Twitter users, including Al Ferretti, Jim Grygar, and Skeeter Hansen, offer free electronic resources to get you started on Twitter.

References

Free narrated slide presentation: “Seven Ways To Generate Business with LinkedIn” (http://tinyurl.com/deg4m5)

Business consultant Zale Tabakman reviews the various elements of LinkedIn (profile, network, groups, e-mail, LinkedIn Answers, and searching) and explains how—and why—to create a large network and build a reputation there.
The Annual AMWA Student Research Award seeks to encourage students to conduct original research in medical communication. Any student (undergraduate or graduate) enrolled in a degree or certificate program in the liberal arts or sciences at an accredited US or Canadian college or university is eligible. Students must be sponsored by a faculty member, but need not be an AMWA member.

Categories of research include the following:

- Hypothesis testing
- Surveys
- Evaluations of methodologies
- Assessments of tools, software programs, practices, or procedures
- Assessments of the literature

To apply, students must submit a report of 5,000 words or less in a standardized format. Applications will be judged by a 3-person panel chaired by an AMWA member appointed by the AMWA Administrator of Awards. Judging criteria will include the novelty of the hypothesis, clarity (of the research question and the presentation overall), logic of the approach, completeness of methodologic approaches, and applicability of findings to the profession.

The award will carry an honorarium of $500, plus $1,500 to cover travel to the annual conference and a 1-year student membership to AMWA. The winner(s) of the award will present his or her research at the annual conference during an open session devoted to brief oral presentations of research findings, as a poster, and as an article in the AMWA Journal.

The AMWA Award for Best Published Research seeks to promote the publication, in peer-reviewed journals indexed in PubMed, of original empirical research by AMWA members. Topics include, but are not limited to, qualitative exploratory research to identify the value added by medical writers and editors, evaluation of metrics for assessing that value, and development of metrics to document value added to specific projects.

Manuscripts must have been published in a peer-reviewed journal indexed in PubMed. The article must be in English or must have an accurate translation available in English. At least 1 author must currently be an AMWA member and must have been a member the year the article was published.

The award will carry an honorarium of $2,000, and travel reimbursement of up to $1,000 for 1 AMWA-affiliated author to attend the annual conference. An AMWA-affiliated author will present the research findings at the annual conference.

Applications will be judged by a 3-person panel chaired by an AMWA member appointed by the AMWA Administrator of Awards. The inaugural award will be given at the 2010 Annual Conference. The award will be given only if meritorious research is identified.

Calls for applications will be issued in the near future. Look for details on the AMWA Web site (www.amwa.org) and in the Journal.

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Add to Your Experience and Your Portfolio

Make the most out of the 2009 AMWA Annual Conference by covering a session or speaker for the AMWA Journal. The experience will not only give you a published piece to add to your portfolio but will also help bring the conference to hundreds of AMWA members who are unable to attend. If it will be your first conference, write about the experience to help promote the value of the conference to others who have not yet attended.

If you are interested in either opportunity, send an e-mail to the AMWA Journal editor at amwajournal@edit@hotmail.com.
On a cold February day, nearly 200 people who work in and around the pharmaceutical industry gathered in New York City to learn how economic and political change will affect their work in 2009.

A panel of representatives from each branch of the US Food and Drug Administration (FDA) made clear that transparency and strict adherence to the package insert in all promotional activities are key to avoiding FDA-issued letters. A point of concern is nontraditional Internet-based marketing tactics, which are increasing. The panel emphasized that, although we may be used to treating Facebook, YouTube, and other Internet sites casually, when it comes to promotion, the same rules apply for the Internet as for print or other media.

Comparison of products continues to be another area of concern. Discussion of a study that directly compares the safety and efficacy of 2 products is allowed. The problem relates to comparing 2 separate studies to draw conclusions about a product. Because the patient populations, dosing, and other parameters may vary, there are few situations where this type of comparison is allowable.

Overall in 2009, a high level of change can be expected at the FDA due to the new Health and Human Services secretary, Kathleen Sebelius. Additionally, a new FDA commissioner, Margaret Hamburg, is on board.

The greatest degree of change is occurring in the field of continuing medical education (CME), and pertinent topics were discussed by several speakers, including Walter Wolynek of Confluent Healthcare Solutions; Destry Sulkes, Board Director Alliance for CME; Brad Bednarz of Visible Communications; Allan Coukell of The Prescription Project; and John Oroho of Porzio, Bronberg and Newman.

One law enacted in 2008 that affects CME is the Massachusetts “Act to Promote Cost Containment, Transparency and Efficiency in the Delivery of Quality Health Care.” This law funds an evidence-based prescriber education program developed by the state in collaboration with the University of Massachusetts Medical School. Evidence-based programs require research studies to identify gaps in provider knowledge, lack of knowledge, or inaccurate understandings that need to be addressed. The law severely restricts or prohibits industry from offering cost reimbursement, meals, activities and travel that have in the past been associated with CME programs. It is expected that an additional 25 and 40 states will propose new laws affecting pharmaceutical companies over the next year. The increase in proposed new laws is due to the support that recently approved laws have been given in court. These proposed and newly approved state laws cover all aspects of interactions between pharmaceutical companies, health care providers, and patients, including gifts, consulting, speaking engagements, sales representative interactions, advertising, and data mining of health care provider information.

The ACCME has new guidelines, which went into full effect in January 2009, that redefine what type of organization can be an accredited CME provider. The new definition excludes any company that markets products or services used by patients (with certain exceptions for health care providers). The current guidance also stipulates that there should be separation between promotional and CME in terms of development and content. Companies that sell products/services to patients cannot have any input into the content or faculty of CME programs.

Separation of promotional and CME interests is now not only an issue with ACCME that could lead to loss of accreditation or disallowing CME credits but is also increasingly becoming an issue of legal regulation. Given the current mood against interference from commercial interests, this separation rule can be interpreted as a ban on companies or even individuals from working on both types of programs. At the least, the barriers are so high that they make working on both types of projects unpalatable for some.

These strict guidelines are changing the way pharmaceutical companies and CME providers view CME. Pfizer announced recently that it will no longer support any CME programs. At the DIA meeting, a pharmaceutical employee questioned why his company should support CME, given the new restrictive guidelines. On the other hand, academic CME providers are questioning why they do accept support from pharmaceutical companies. Stanford School of Medicine has banned any direct commercial support of the school’s CME.
The overwhelming sentiment at the conference was that commercial support of CME, currently at 50%, would drop drastically in the near term. Support for CME will come from nonprofit groups, academic organizations, and, possibly, from fees paid by physicians. In other words, physician/health care provider continuing education (CE) will operate on a model similar to CE for other professions such as law or teaching, where learners pay their own way. Continuing medical education is not business as usual; it is in the middle of a paradigm shift. Many CME companies are exiting the field. One silver lining for writers is that, at present, the CME executives I consulted foresee no change in their need for freelance medical writers. However, writers may have fewer companies to work with and the impact of the changes on fees is unknown.

While the mood at the DIA conference was somber in the face of overwhelming change, attendees appeared engaged and ready and willing to adapt to the new environment. Change maybe frightening at first, but every change is also an open door to a new future.
### AUGUST

**American Chemical Society**
234th National Meeting and Exposition
August 16-20, 2009
Boston, MA
Phone: (800) 227-5558 (US only) (202) 872-4600 (outside the US); Fax: (202) 776-8258
E-mail: natlmtgs@acs.org
Web site: www.acs.org

### SEPTEMBER

**Sixth International Congress on Peer Review and Biomedical Publication**
September 10-12, 2009
Vancouver, BC, Canada
Phone: (312) 464-5108
E-mail: jama-peer@jama-archives.org
Web site: www.jama-peer.org

**Regulatory Affairs Professionals Society**
Annual Conference & Exhibition
September 13-16, 2009
Philadelphia, PA
Phone: (301) 770-2920; Fax: (301) 770-2924
E-mail: raps@raps.org
Web site: www.raps.org

**European Association of Science Editors**
Tenth General Assembly and Conference
“Integrity in Science Communication”
September 16-19, 2009
Pisa, Italy
Web site: www.ease.org.uk

**American Association of Dental Editors**
Annual Conference
September 30-October 1, 2009
Honolulu, Hawaii
Phone: (414) 272-2759; Fax: (414) 272-2754
E-mail: aade@dentaleditors.org
Web site: www.dentaleditors.org

### OCTOBER

**Association for Women in Communications**
October 15-17, 2009
Seattle, WA
Web site: www.womcom.org

**Plain Language Association International**
“Raising the Standard!”
October 15-17, 2009
Sydney, Australia
Web site: www.plainlanguagenetwork.org

**National Association of Science Writers Workshops/Council for the Advancement of Science Writing New Horizons in Science Conference**
October 16-20, 2009
Austin, TX
Phone: (304) 754-5077
E-mail: diane@nasw.org (Diane McGurgan)
Web site: www.casw.org

**American College of Clinical Pharmacy**
Annual Meeting
October 18-21, 2009
Anaheim, CA
Phone: (816) 531-2177; Fax: (816) 531-4990
E-mail: accp@accp.com
Web site: www.accp.com

### NOVEMBER

**Association for Business Communication**
Annual Meeting
November 4-7, 2009
Portsmouth, VA
Phone: (936) 468-6280; Fax: (936) 468-6281
E-mail: abcjohnson@sfasu.edu (Dr Betty S. Johnson)
Web site: www.businesscommunication.org

**Public Relations Society of America**
International Conference
November 7-10, 2009
San Diego, CA
Phone: (212) 995-2230; Fax: (212) -995-0757
Web site: www.prsa.org

**American Public Health Association**
Annual Conference
November 7-11, 2009
Philadelphia, PA
Web site: www.apha.org/meetings

**European Medical Writers Association**
November 12-14, 2009
Frankfurt, Germany
E-mail: info@emwa.org
Web site: www.emwa.org

### COMING IN 2010

**American Academy for the Advancement of Science**
February 18-22, 2010
San Diego, CA
Phone: (202) 326-6400
E-mail: aaasmeeting@aaas.org
Web site: www.aaas.org

**American Society for Indexing**
Annual Conference
May 12-15, 2010
Minneapolis, MN
Phone: (303) 463-2887; Fax: (303) 422-8894
E-mail: info@asindexing.org
Web site: www.asindexing.org

**Society for Technical Communication**
56th Annual Conference
May 2-5, 2010
Dallas, TX
Phone: (703) 522-4114
E-mail: stc@stc.org
Web site: www.stc.org

**Council of Science Editors**
Annual Meeting
May 14-18, 2010
Atlanta, GA
Phone: (703) 437-4377; Fax: (703) 435-4390
E-mail: cse@councilscienceeditors.org
Web site: www.councilscienceeditors.org
In the English language, we have several different kinds of words that end with the letter “s.” There are proper names: Jones or Barnes or Wells. There are simple possessives that do not need an apostrophe: its or his or hers. There are simple possessives that require an apostrophe: the boy’s bicycle or the crowd’s cheers or the sofa’s arms. There are plural possessives that require the letter “s” before the apostrophe: girls’ styles or automobiles’ insignias or lions’ strength.

A tangential problem in English is the collective noun and the pronoun that refers to it (consideration of the letter “s” aside for the moment). “The family is present” or “The family are present”? Since this does not impinge on the present topic, we will save that for another day.

Of course, the simplest of all is the letter “s” added to make a word plural: combs or toes or numbers. That brings us to this column’s topic. Have you ever looked at a plural word and realized that there is no singular form for it? Here are a few of those nonexistent singulars:

**Pant**

When was the last time you heard someone refer to his pant? No, we say, “I put on my pants.” And to prove it’s a plural, we say, “My pants were tight.” Not was. An obscure meaning is available for the word pant [as a noun] but rarely is used in our language.

Interestingly, the synonym for pants—trousers—has the same attribute. We do not say “I put on my trousers, one pant at a time” (although that may be technically correct). Similarly, the correct form is trousers are, not trousers is. So here we have 2 plural words for which, all things being equal, there is no singular form.

**Chop**

“The dog licked his chops.” Actually this is correct, because the Anglo-Saxon word chops means mouth or jaws. Thus, the animal or human being who licks his lips after eating or in anticipation of good food is said to be licking his chops.

Although chop as a noun has a few, little-used meanings in English (excluding such items as lamb chops), none of them are related to this context of the word. Therefore, there is no singular for this, such as licking his chop.

**Jink**

Even though there is an official definition of jink as a quick turn, it is almost never used. In current English, the word remains in our vocabulary purely as the plural high jinks. (There are no low jinks.) It means a rambunctious carry-on or prank and it is always plural. We say, “There were a lot of high jinks at the party” not “There was a lot of high jinks at the party.”

It is perfectly clear that there is no singular for high jinks.

**Hackle**

Hackles is a proper English word but is overwhelmingly used only in a biology or an anatomy context. It refers to the feather on the neck of a rooster or peacock, and the singular form is never found in conjunction with its upset, so its common use is understandable. However, in general English usage, no hackle ever appears. It is always in the plural form of raising my hackles. Here is another plural without a singular.

**Crap**

This is immediately recognized as a vulgar slang word. In the apparently plural form, craps is the popular dice game. One does not say, “He was shooting crap” but “He was shooting craps.” Regardless of how you think the dice game got its name, it is an “s” without a singular. However, in this case, the word does take a singular verb: “Craps is a dice game.”

**Duke**

Boxers are said to put up their dukes, never their duke. Thought to be named after a Duke of York, the word refers to both fists and therefore is never just duke, even though Duke has an unrelated meaning. Sometimes duke is used as a verb (and related to this meaning) but duke is not used for a single fist. Once again, here is another “s” word without a singular form.

Think of some other nonexistent singulars: jeebie (jeebie jeebies), Egg Benedict (never used in the singular), horse feather (horse feathers).

The question is “Why?” I think this is one of the foibles (but an interesting one) of the confusing English grammar, and sometimes it is the difference between British English grammar and American English grammar. No wonder speakers of foreign languages have so much trouble learning ours.

Anyway, thank for reading this far.
Institutional affiliations are given for information and convenience only. The views expressed, being solely those of the correspondents, do not represent those of any institution named or of the American Medical Writers Association. All queries, unless otherwise specified, were received and replied to by e-mail.

DEAR READERS: This is my response resulting from comments in the AMWA editing-writing listserve on the use or nonuse of a zero (0) preceding a decimal point in probability (P) values. Those cogent, well-considered comments represented at least two schools of thought on the subject. Many of them favored omission of the zero. I can publish only questions that were addressed to me personally.

DEAR EDIE: So much hard work, talent, and expertise go into keeping the *AMA Manual of Style* contemporary and sensible. Why do so many professional writers stubbornly resist the style guidelines? It’s hard enough to keep the non-writers (who have an excuse) consistent and up to date.

I’d like to add two advantages of omitting the leading “0” from probability values:

1. It distinguishes the *P* value in *already busy* parenthetical text citing data.
2. The *extra* zeros take up *more* space, which can be precious when one tries to fit wide tables onto a page.

Some writers believe that the leading 0 is used to show the reader that another digit was not inadvertently lost, but that does not make sense. How do you know that a digit preceding the zero is not missing? Do we really need a leading zero at all? Folks seem to be under the impression that the zero makes the decimal more visible, but how would that work? Is the decimal so hard to see? Anyone who says yes should show us the data!

SUSANNE RICHARDSON
Wilmington, Mass.

DEAR SUSANNE: The inclusion or omission of a number (for example, zero) preceding the decimal point is an important issue in statistics.

This is an excerpt from the *AMA Manual of Style* (styled by me for brevity as *AMAMS*) on page 889. The entire section titled “P value” (pp. 888-889) should be read for an expanded discussion:

*JAMA* and the *Archives* journals do not use a zero to the left of the decimal point, since statistically it is not possible to prove or disprove the null hypothesis completely *when only a sample of the population is tested* [italics mine] (*P* cannot equal 0 or 1, except by rounding). If *P* < .00001, *P* should be expressed as *P* < .001 as discussed. If *P* > .999, *P* should be expressed as *P* > .99.

It should be noted especially that the *P* for probability value is always capitalized and italicized. That’s one good, unambiguous standard to follow. Lowercase “*p*” and other ad hoc variations are not. The fact that *AMAMS* uses thin spaces between the “more than” or “less than” symbol and the decimal, strengthens its argument for omission of the zero. No danger of a stray digit finding its way into those thin spaces.

The *AMA Manual of Style* is the result of distilled knowledge by experts who are admittedly writing specifically for the *AMA journals*. That’s why it differs in myriad respects from other style manuals. It exists mainly to set standards for its journals, and only tacitly suggests by example that standardization is desirable and practical in medical writing.

Most medical writers and editors use the cafeteria style of choice when it comes to the gold standard, *AMAMS*. I have written that “I don’t believe in slavish adherence to anything, much less style manuals.” However, I have always admired its monumental scholarliness, and agree with its style when I think it’s correct and appropriate. Consistency (but not the foolish kind) is all-important in any one piece of work. The medical journal’s editors may change your wording anyway. As always, good judgment is the key.

As an irrelevant postscript, let me mention that The *Chicago Manual of Style*, although the best resource for academia, should not be consulted for information relating to medicine, since it has very little, if any, of that and doesn’t purport to have it.
DEAR EDIE: This issue of noun and adjective is one of my favorite things in medical terminology, and I’ve been using it since I started teaching in the early 90s. I must have gotten it from your red book. “Mucus” is a noun, “mucous” an adjective. The suffix “-ous” is a ubiquitous one that means “pertaining to.” And such a suffix makes the term an adjective. “Mucous,” being an adjective, modifies nouns, as in “the mucous membranes were moist.”

Do, Edie, explain this in a column!

SUSAN DOOLEY
Sorrento, Fla.

DEAR SUSAN: Done! My “red book,” Medical English Usage and Abusage (MEUA), includes sections on “mucus” and “mucous.” It also discusses “phosphorus” and “phosphorous.” Both of these mistaken adjectives for nouns, or vice versa, are extremely common errors in medical writing and, particularly, in medical journalism. The suffix “-ous” means “full of, having the quality of, possessing.”

I wish I had a dollar (inflation, you know) for every such error I’ve seen in my work as a medical editor. In my fictitious list of the 10 most frequently misspelled words in medical writing, those two would undoubtedly be included. Number 1 would be “pruritus,” which, despite the “-itis” sound, is correctly spelled with the ending “-itus.” Number 2 would be “ophthalmology.”

Mucus contains sloughed-off cells, leukocytes, and inorganic salts. Mucous membranes are thin sheets of tissue that line and protect the digestive tube, the genitourinary tract, the respiratory passages, and innumerable other anatomic parts [MEUA, pp. 95-96].

Phosphorus is an element of the nitrogen family and is a noun. The word phosphorous is an adjective and means phosphorescent, sometimes used to describe waves at night [St. Elmo’s fire]. Phosphorous is also used to describe a compound in which phosphorus has a valence lower than in phosphoric compounds. When it stands alone, and in lists of blood chemistry values, it should always be phosphorus, not phosphorous [MEUA, p. 123].

Thanks for the chance to take an interesting peek into the important difference between nouns and adjectives in medical writing and editing.

DEAR MARY JEAN: One famous reverse dictionary is Bernstein’s Reverse Dictionary, which was written, naturally, by Theodore M. Bernstein, the “Supreme Court” of American editors. He was the style arbiter and maven of The New York Times, and the writer of its Winners and Sinners newsletter.

Let’s say you need a word that means a “drug that is incapable of doing harm or good.” You look under “drug,” and voilà! You find an adjective describing it: “adiaphorous,” which means neutral, that is, anything (not just drugs) that is “neither right or beneficial nor wrong or harmful” (Webster’s Third). Another word under “drug” is more common. It means a drug that “overcomes effects of sedatives”: “analectic.”

A reverse dictionary is not a thesaurus, although some definitions are synonyms. It aims to stimulate your mind and give you a range of ideas about words to use. You might want to know how to describe a “question-and-answer method of instruction.” It’s the Socratic method. Is there another word for “jargon”? “Argot” (pronounced are-go). “Jargon or vocabulary of a profession or class: “lingo.”

Need a magic word? “Abracadabra.” I would have added “Open, Sesame.”


I often turn to Ted’s book and all his others just for fun.

DEAR EDIE: What is a reverse dictionary? Thanks.

MARY JEAN PRAMIK
San Francisco, Calif.

DEAR MARY JEAN: I’m sending this question to you before I call in Jack Bauer to disperse the opposing mobs here [in the editing-writing listserv]. What is the AMA Manual of Style preference for “online” versus “on-line”? I’m guessing that “online” is preferred, based on the fact that it (but not “on-line”) is in the index of the tenth edition of the AMAMS, and more loosely on the fact that it generally leans to minimalism. But I looked up prefix, hyphen, etc., and couldn’t find a reassuring confirmation.

MICHAEL STILLMAN, Ph.D
Framingham, Mass.
DEAR MICHAEL: As you found out, the index of the AMA Manual of Style (10th ed., 2007) contains several entries on “online,” from “online books, references,” to “online Mendelian Inheritance in Animals (OMIA)” and “online newspapers, reference citation format” (p. 998). This last item may be of current and considerable interest and value to medical writers and editors.

This opens up the fascinating story about the evolution of word forms, compound words, that is, from two words (high way) to a hyphenated word (high-way) to a solid word (highway). At one time the contiguity of two vowels in a word raised an alarm to use either a dieresis (umlaut in German) or a hyphen (co-operation, cöoperation). It’s now, blessedly, cooperation and reelect (not re-elect). 

Ripples. It should be remembered that “non” as a prefix rarely takes a hyphen, except when it precedes a capitalized element such as non-American. For a mind-boggling, intellectual exercise, you might take a look at Webster's Third, which has 5 pages of such words, or its sister, Merriam-Webster’s Collegiate Dictionary, which has 3 such pages. Who knew?

I am frequently confronted, in journalism especially, with single words that should be two, or vice versa: “The budget director was really onto [on to] something.” Correct: “He jumped onto the steel girder carefully.” Or this classic: “He turned himself into police.” Of course, this presupposes a good ear for meaning and usage.

You should use the style of the AMAMS in this respect without hesitation, and no one can quarrel with you. Incidentally, I am ecstatic that AMAMS agrees with me in capitalizing “Web” when it refers to the World Wide Web, an entity. Also because it refers to citations “on the Web” and separates “Web” from “site.”

You’ll see the incorrect “website” and “on the web” a dozen times today. That brings up my notorious L.C.’s (lost causes). Don’t get me started on that one!

DEAR READERS: My slogan, LOOK IT UP!, has come back to haunt me. In a lapsus scribendi in my previous column (Vol. 24, No. 1, 2009), I wrote that Yogi Berra’s first name was “Clayton.” Where that came from I have no idea. His birth name still is Lawrence Peter Berra. I also discovered that he had earned 10 World Series rings. You didn’t know that? Another favorite slogan is NOBODY’S PERFECT. That gives me a modicum of solace.

Edie Schwager, a freelance writer, medical editor, and workshop teacher, lives in Philadelphia. She is the author of Medical English Usage and Abuse and of Better Vocabulary in 30 Minutes a Day. She welcomes queries and comments, preferably by e-mail, and in publishable form.

Edie responds within a day or so if your query is sent directly to her (not to the editing-writing listserve).

To avoid back-and-forth, time-consuming messages, please include permission to publish along with the questions or comments. For verification, correspondents must provide all addresses, especially the city and state, of the correspondent or the affiliate.

Edie’s e-mail address, not surprisingly, is dearedie@verizon.net.
The World in Six Songs: How the Musical Brain Created Human Nature
Daniel J. Levitin

In The World in Six Songs, author Daniel J. Levitin (music producer turned neuroscientist) argues that music has played a pivotal role in shaping human society and classifies music’s influence on human nature into different types of songs: songs of friendship, joy, comfort, religion, knowledge, and love.

The World in Six Songs begins with an introductory paragraph that summarizes the author’s 6-song “soundtrack of civilization” concept. In this chapter, Levitin defines “song” and lays the foundation for arguments that are made in subsequent chapters. The arguments presented in this book are, in essence, an extension of those made in the author’s New York Times bestseller, This Is Your Brain on Music, in which Levitin examined the intimate relationship between the human brain and music.

In The World in Six Songs, a chapter is devoted to each type of song. Levitin explains how each type of song has propelled human evolution (according to Darwinian theories). To support his arguments, which are difficult to verify without turning back time, Levitin draws on personal experiences, conversations with musician and scientist friends (Sting, Joni Mitchell, and Oliver Sacks among others), and popular culture.

Indeed, music is everywhere. Parents croon babies to sleep, lovers serenade each other, and surgeons listen to Bach’s musical manipulations as they operate.

This book is written with the lay person in mind rather than experts in neuroscience or sociology. As Levitin steers the reader along on a musical journey (that on occasion loops on itself), one learns of human survival through excursions into anthropology, biology, genetics, and endocrinology. In Levitin’s Six-Song World, music goes beyond being a mere form of entertainment or expression. It occupies a higher place. Music is the guiding force for human destiny.

Levitin’s literary talents are at the forefront in his personal narratives. Descriptions of his grandmother learning to play the keyboard with marked keys and Levitin’s almost out-of-the-body experience when he is in John Lennon’s and Yoko Ono’s hotel room remained with me long after I completed reading the book.

Engaging for the most part, this book presents a new twist in the story of human evolution. A good read for those interested in music beyond its value as entertainment.

—Marissa Doshi

Marissa is a graduate student in the Master’s in Science and Technology Journalism at Texas A&M University.

Study Design and Statistical Analysis: A Practical Guide for Clinicians
Mitchell H Katz

As a developing medical writer, I spent considerable time learning what I wanted to know about biostatistics—without drowning in what I didn’t want to know. Years later, as one who now teaches how to interpret and report statistics, I know my frustration is shared by more than a few students and health-care professionals. The sad truth is that most people are leery of studying statistics, and those who teach the topic are not always skilled in doing so, especially to those who do not aspire to be statisticians. Thus, it was a pleasure to read Mitchell Katz’s Study Design and Statistical Analysis: A Practical Guide for Clinicians. The author has a keen sense of audience, which by itself is an endorsement of the book. In addition, he presents an excellent overview of a difficult topic, by organizing the material in a familiar way and by explaining the concepts in familiar terms. As a result, I recommend this book highly to those looking for an introduction to clinical research and statistical analysis.

The author is well qualified to write this book. He is a Clinical Professor of Medicine, Epidemiology, and Biostatistics at the University of California, San Francisco, and the Director of the San Francisco Department of Public Health, as well as an attending physician at San Francisco General Hospital. He is clearly knowledgeable about the...
topic from personal experience and obviously comfortable with writing about it.

Although the book's subtitle indicates that the target audience is clinicians, this book should be valuable for anyone who wants an introduction to clinical research. In particular, the book will be appreciated by university students and professionals in the fields of health and clinical medicine, especially those who need to understand the medical literature or who are considering careers in some aspect of clinical research.

The book is primarily an overview of research, but it might also be used as a guide to planning research. Although the author does not explicitly recommend that new investigators consult with a statistician before beginning their research (an almost universal recommendation among seasoned researchers), I believe he did not intend this book to be their only guide to research. In fact, the book should help new investigators ask the right questions of statisticians and help them put the statistician's responses into perspective. Also, despite being relatively short (180 pages), the book will serve as a reference for some time to come; the underlying principles of clinical research and statistical analysis are not likely to change markedly in the next several years.

The book's 12 chapters are organized chronologically, around the steps in planning, conducting, interpreting, and publishing clinical research. Most of the chapters are 13 or 14 pages long, though the chapters on research designs (Chapter 2) and bivariate analysis (Chapter 5) are understandably longer, at 30 and 54 pages, respectively. The longer chapters do not detract from the flow of the book, however, despite addressing broader topics.

The Introduction (Chapter 1) establishes the value of statistics, with both the standard coin-toss examples and examples from clinical medicine. In fact, the clinical examples throughout the book are well-chosen and keep the discussion focused on practical applications.

Chapter 2, on choosing a research question and a study design, does a nice job of explaining the characteristics of a good research question and the need to address the question with an appropriate research design. The major observational and experimental designs are nicely described and are discussed in the context of the need to control for error, confounding, and bias—concepts nicely summarized in this chapter.

Often unaddressed in introductory books on statistics is the art and science of data management. Chapter 3 offers sound advice on this important aspect of research and reflects the author's hands-on expertise in conducting research.

Chapters 4, 5, and 6 contain most of the information on statistical analyses. With the intimidating titles of "Univariate Statistics," "Bivariate Statistics," and "Multivariable Statistics," these chapters are organized in the conventional way—that is, from the perspective of the field of statistics, rather than from that of an audience unfamiliar with the field. My only criticism of the book is this conventional approach, which is nearly universal in the field. One could argue that readers need to see the terminology and concepts of the field if they are to learn them, but my experience is that too much too soon is the major problem in teaching statistics. Headings such as "How do I test an association between a dichotomous variable with an interval variable?" will empty a lecture hall in record time. That said, readers who push through their fear will find these chapters readily understandable, and, I think, will be able to appreciate the underlying elegance of statistics.

These chapters, then, describe how to summarize data sets (a topic called descriptive statistics, Chapter 4); how to test for associations and differences between 2 variables (Chapter 5), and how to predict the value of a response variable from the values of 2 or more explanatory variables (multiple linear, multiple logistic, and Cox proportional hazards regression analyses, Chapter 6). Through simple, worked examples, readers are taken through the calculation of chi-square analyses, risk and odds ratios, hypothesis testing (p values), analysis of variance (ANOVA), correlation, simple linear regression analysis, and time-to-event analysis (survival analysis).

Many published studies did not have samples large enough to rule out clinically important differences, even if such differences were to be found in the data. Thus, the fact that sample-size calculations are described in their own chapter (Chapter 7) appropriately emphasizes this important, if neglected, aspect of study design. Chapter 8 describes the logic behind diagnostic test characteristics and prognostic studies, such as sensitivity, predictive values, likelihood ratios, receiver operating characteristics curves, and Bayes's theorem. By nature, these concepts are difficult to understand in the short-term. Any difficulty encountered by readers should be attributed to the concepts, not to the text, which, as in the rest of the book, provides clear explanations and illustrative examples.

Chapters 9 and 10 cover other topics of interest, such as the notion of causality, differences between clinical and statistical significance, differences between absolute and relative risk, and how to use statistical software programs.

Publication is the final stage of research, and an appealing part of the book is Chapter 11, which describes how to write and publish a scientific article. The important points are addressed, including issues of authorship, journal selection, rejection, and even dealing with the media.

The book closes with a list of the steps to follow in planning and conducting clinical research. The index is adequate.

In summary, this book does what the author intended it to do, and does so with great skill and grace. It is reasonably priced and will be a valued reference for some time to come. What's not to like?

—Thomas A. Lang, MA

Tom Lang is the Principal, Tom Lang Communications and Training, Davis, CA; adjunct professor of biomedical writing, University of the Sciences in Philadelphia; and adjunct instructor, Biomedical Writing and Editing Program, University of Chicago.
Although the AMWA Web site is still a work in progress, great strides have been made since Ronnie Streff worked with the Web and Internet Technology (WIT) Committee to redesign the site a couple of years ago, and it is rapidly becoming the preeminent source of information for medical writers, editors, and educators. If you haven’t visited the Web site recently or have never taken the time to explore all the offerings, you really should. I think you’ll be amazed at how many resources are just a click away.

Start by going to www.AMWA.org and signing in with your last name and member number. Choose “Links/Resources” from the menu on the left hand side and click on “Links.” This will take you to a page where you’ll find more than 80 direct links, listed under the following headings: Allied Associations, Publication and Ethical Guidelines and Statements, General Resources, Government Links, Internet Information, and Medical Communication Resources. Obviously, I don’t have the space here to go into detail on all of these links, but I will highlight some that might be of particular interest to you.

**Publication and Ethical Guidelines and Statements**
Under this heading, you will find links to the AMWA Code of Ethics and the AMWA Position Statement on the Contribution of Medical Writers to Scientific Publications. If you haven’t already done so, it is important that you read both of these documents and incorporate their principles into everything you do as a medical communicator. Included in the link to the AMWA Position Statement are links to a fact sheet on the contributions of medical writers to scientific publications, a template for a “Letter to the Editor” that can be used to write to the editor of a journal that doesn’t acknowledge the contributions of medical communicators, the story behind the AMWA position statement, an article on how to work ethically with medical writers, and a poster presentation on how to acknowledge a medical writer.

**General Resources**
You’ll find links to a variety of reference materials under this heading. In addition to linking to the Yale Medical Library, Healthweb, Bartleby.com, Galaxy, and Editorium, you can link to the *Guide to Grammar and Writing*, *Plain English Handbook*, *YourDictionary.com*, and the newly added OneLook Dictionary. Also under General Resources, you can find a link to information on insurance resources for freelance writers and editors.

I’ve barely scratched the surface of the resources available on the AMWA Web site. Now I hope you’ll do some exploring on your own. I plan to highlight other features of the Web site in future Web Watch columns.

**Medical Communication Resources**
Under this heading, you will find a whole host of valuable links, including Medscape, The Merck Manuals, Instructions to Authors in the Health Sciences, Stedman’s Online Medical Dictionary, and many more. One of the newest additions to this area is a list of links to information on copyright law. For those members who are just starting their careers as medical writers, there is a link to a “Toolkit for New Medical Writers,” developed by AMWA’s Delaware Valley Chapter. The toolkit offers information on the characteristics of successful medical writers, opportunities in medical writing, and information on how to get started.

**Need Another Reason to Know You’re in the Right Profession?**
Read “Demand for Medical Writing Continues to Rise” in the December 2008 issue of *The CenterWatch Monthly*. A special reprint of the article is available on the home page of the AMWA Web site.
This article provides an overview of 2 free online survey sites with different features. AMWA members might use these sites to poll chapter members, set up meetings, solicit feedback on a presentation, and/or set group goals and identify priorities.

**SurveyMonkey**

Survey Monkey (www.surveymonkey.com) has been an online survey provider since 1999, and it is one of the most popular sites for user-created surveys. Two versions of SurveyMonkey are available—a free version and a “professional” one, which costs $19.95/month. Professional subscriptions can be month-to-month or yearly. Paid subscriptions include unlimited numbers of survey pages and questions. The free version of the site allows 100 responses per survey, a month-to-month subscription includes 1,000 survey responses per month, and there is no limit on the numbers of survey responses for annual subscribers. Setting up surveys is straightforward, and the site has easy-to-follow video tutorials, plus a responsive help team to assist users via e-mail. There are many different survey question types to choose from when building a survey, including multiple choice (allowing for 1 response or many responses), a matrix of choices (allowing for 1 answer per row or many answers per row), rating scales, single or multiple textboxes, comment/essay boxes for longer written answers, and pre-formatted demographic information collection. Surveys are limited to 10 questions for users of the free version. The survey font and background colors, type size, and styles can be modified in any way that you choose. Logos can be uploaded for inclusion in surveys, but this feature is only available to paid subscribers. There are over 50 survey templates that subscribers can choose from, if you don’t have the time or inclination to design your own survey style. There are no advertisements in SurveyMonkey surveys, and surveys can be created in any language. To reduce survey answer “ordering bias,” users can choose to have survey question choices randomized.

Once you’ve put together your survey, you will want to invite participants and track responses. SurveyMonkey has many collection options and tools. A link to your survey can be pasted into an e-mail note and/or posted on a Web site, and you can require users to enter a password to access the survey. Users can build e-mail lists in SurveyMonkey, track respondents, and send reminders to those who haven’t completed the survey. Survey creators can create cutoff dates and can configure surveys to allow multiple responses from the same computer (useful in a work environment with shared computers). SurveyMonkey has many tools for
analyzing the results of your survey. During the survey data collection process, the survey creator can view the responses at any time. Individual survey responses can be viewed, as can comments entered into text boxes. The paid version of SurveyMonkey has tools to download survey results to a spreadsheet, and also to save results as a PDF file. In summary, SurveyMonkey is a very powerful online survey creation site with many well-designed features. Many users will find the free, basic version sufficient for their needs, but for complex, large, or repeated surveys, a month-to-month or annual subscription could be considered.

Doodle

Doodle (http://doodle.com/main.html) is a bare-bones online survey site. It is a free service that is primarily used to schedule events, but it also has other applications. There are some situations where setting up a SurveyMonkey survey would be overkill and more time than it’s worth. For example, if you’ve ever tried to schedule a meeting with colleagues, and cringed at the resulting flurry of e-mail replies, you might try Doodle in the future to set up meetings with greater ease (and a less clogged e-mail inbox). Doodle registration is optional, and users do not need to provide an e-mail address, although registration is encouraged.

Setting up a poll is very straightforward. To poll respondents about preferred event dates, poll creators click on the “Schedule Event” button on the Doodle home page. You are then taken through a series of screens where you enter information about your event, such as the event title, description, and your name. A calendar tool allows for simple selection of possible event dates. Event times can be added to the list of possible event dates. Click on the “Finish” button once you are happy with your survey. If you provided an e-mail address while setting up your survey, you will receive 2 e-mail messages. One e-mail note contains a link that you forward to those whom you want to poll, and this link is used by respondents to access the poll. The other link is for the survey creator, and it is to be used for editing, exporting, and/or deleting the poll. If you do not provide an e-mail address, these 2 links will appear on a Web page. It is important to save the survey links, because Doodle will not resend them.

Setting up a poll asking users to vote for their favorite options is also straightforward. The first step is to select the “Make choice” button on the Doodle home page. Next, you will be prompted to enter a survey title, your name, and an optional survey description. Lastly, you will enter the various choices that survey respondents will vote on; ie, various flavors of ice cream for the chapter ice cream social. Click on the “Finish” button once you have completed assembling your survey. As described earlier, you will receive 2 survey links, one to forward to your intended respondents to be used to access the survey, and the other for the survey administrator.

Unlike SurveyMonkey, Doodle does not offer the options to adjust fonts or colors in the surveys, and some Google advertisements will appear in surveys. Doodle is currently available in over 25 languages. For survey assembly on the go, Doodle can be accessed on a mobile phone via m.doodle.com. Doodle modules have also been written for Facebook, iGoogle, and Microsoft Outlook—links are available on the Doodle home page. If you become a frequent Doodle user, you may consider signing up for a free MyDoodle account, which helps you manage all your polls from 1 location. Although Doodle is much more utilitarian than SurveyMonkey, it might be suitable for your survey needs if they are simple and straightforward.

Joanne McAndrews led the breakfast roundtable “Top 10 Free Web Sites for Medical Writers” at AMWA’s annual conferences in 2007 and 2008 and will offer it again at the 2009 conference in Dallas.
This President’s Report was prepared with enthusiasm generated by the spring meeting of the AMWA Board of Directors (BOD). Approximately 40 people attended, including chapter delegates and 15 members of the Executive Committee (EC). In addition, Executive Director Donna Munari, Education Manager Dane Russo, and Communications and Technology Specialist Ronnie Streff represented AMWA headquarters. The complete list of EC and staff members is available on the AMWA Web site (www.amwa.org).

The spring meeting allows BOD members to formulate AMWA policies and programs in accordance with objectives specified in the organization’s constitution, such as promoting standards of excellence in medical communication. The 2009 spring meeting was noteworthy for lively discussions among the attendees and practical recommendations. The minutes will be available in the Members Only area of the Web site after approval at the next BOD meeting in October. Meanwhile, this report provides a brief overview.

Much of the discussion at the meeting focused on the budget, annual conference, and new initiatives. The BOD members considered these topics within the context of the current economy and the implications for AMWA and its members.

One of the most important motions was to approve the annual budget. Treasurer Judi Pepin presented the budget and explained that the fiscal year begins on July 1 to front-load the year with revenue from the annual conference, AMWA’s largest source of revenue. This strategy gives AMWA the opportunity to tighten its belt if conference revenue is less than budgeted, as had occurred after September 11, 2001. AMWA follows predefined financial management guidelines to ensure sound financial health. These guidelines, along with a report on the 2007-2008 budget begins on page 96 of this issue.

Annual Conference Coordinator Douglas Haneline updated the BOD on his work with AMWA staff and volunteers to plan a conference that AMWA members can afford to attend and can’t afford to miss. Volunteer committee members have organized open sessions, breakfast roundtables, a poster session, and coffee and dessert klatches to meet the high expectations of AMWA members. Workshop Coordinator Susan Aiello and Dane Russo are collaborating to repeat popular workshops that can be applied toward the core and advanced certificates and to add more workshops that can be applied to the science fundamentals certificate. Be sure to review the article beginning on page 68 to learn more about the conference and details on registration. Administrator of Education Lawrence Liberti described potential methods to better meet the educational needs of members and their employers by, for example, expanding the certificate program. All AMWA proposals require considerable research and vetting by different stakeholders, and proposals for new educational programs are scheduled for presentation to the BOD in 2010.

The Endowment Fund has grown to more than $100,000, thanks to donations from generous AMWA members and chapters. Interest earnings from the Fund were recently used to finance an index of Dear Edie topics (available in the Members Only area of the Web site). Administrator of Special Projects Lili Velez asked chapter delegates to identify a new initiative for the upcoming year. The initiative must be consistent with AMWA’s mission statement and should benefit as many AMWA members as possible. The proposed initiative will be presented at the fall BOD meeting and must be approved by a two-thirds majority vote.

An exciting new initiative that was approved was the establishment of 2 research awards. I encourage you to learn more about these opportunities by reviewing the brief article on page 80.

President-elect Tom Gegeny presented the proposed slate of officers for 2009–2010. The BOD unanimously approved the slate, and brief introductions to the candidates begin on the next page.

BOD members enjoyed a reception at AMWA’s new headquarters and met the entire staff of 9 full-time employees, including the new Marketing Manager, Duane Brewster. Please join me in thanking staff and BOD members for their hard work and dedication to AMWA. If you are interested in volunteering to help with any of the initiatives mentioned in this report or in serving in other ways, please complete and submit the Willingness-to-Serve form in the Members Only area of the AMWA Web site.
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 meeting the criteria for the 3 elective offices: president-elect, secretary, and treasurer. Members of the 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 president-elect automatically assumes the office of president at the annual business meeting held during the annual conference of the following year. The 2009-2010 AMWA president is Thomas Gegeny, MS, ELS. A member since 1998, Gegeny has served AMWA in many capacities on the national and chapter levels. Before becoming president-elect in 2008, he served 2 terms as AMWA secretary. He has also served as the Web and Internet technology (WIT) administrator (2005-2006), annual conference administrator (2005), administrator of publications (2002-2003), and administrator of membership (2001-2002). He is currently a member of the task force on partnering with academic institutions and has served on the education committee (2003-2004) and the WIT committee (2004-2005 and 2006-2007), serving as chair of the latter committee in 2003-2004. Gegeny has also been extensively involved in the annual conference as a workshop leader, open session speaker, coffee and dessert klatch leader, and roundtable leader; he was a breakfast roundtable coordinator in 2001 and again in 2004. He was awarded an AMWA Fellowship in 2004.

A member of the New England Chapter, Gegeny is a medical writer at Envision Scientific Solutions in Southport, CT. He was previously Executive Director and Senior Editor at The Center for AIDS Information & Advocacy in Houston, TX. He holds a master’s degree in biomedical sciences from The University of Texas Houston Health Science Center. He earned BELS certification in 1999. When living in Texas, Gegeny was active in the Southwest Chapter, including serving as its Webmaster, program chair, president-elect, and president.

The following candidates were approved by the Board of Directors at its spring 2009 meeting:

**President-elect:** The president-elect (1) must be a fellow of AMWA, (2) must have held at least 2 different positions on the Executive Committee (EC) in the past, (3) must have served on the EC for a minimum of 2 full years, and (4) must be a current member of the EC when his or her name is being considered by the Nominating Committee.

Melanie Fridl Ross, MSJ, ELS, a member since 1996, is currently serving on the EC as public relations administrator. She also is a member of the Task Force on Partnering with Academic Institutions and of the Constitution & Bylaws Committee, and chairs AMWA’s History Task Force. She was awarded a Fellowship in 2008. She has been a member of the EC since 2003, serving as the 2007-2008 and 2006-2007 publications administrator, 2006 annual conference administrator (66th Annual Conference in Albuquerque), 2004-2005 chapters/membership administrator, and 2003-2004 chapters administrator. She was a member of the 2006-2007 Science Curriculum Task Force and served as the 2004-2005 chapter newsletter award chair and as a member of the 2005-2006 chapter newsletter award committee. She has been a breakfast roundtable leader at each annual conference since 2004 and was the open session coordinator in 2003; an open session speaker in 2007; and a workshop leader in 2004, 2007, and 2008. She was president of the Florida Chapter from 2002-2003. She earned certification through the Board of Editors in the Life Sciences in 2000.

Ross is interim director and senior medical writer/editor at University of Florida (UF) Health Science News & Communications in Gainesville, FL. She also produces the award-winning radio program “Health in a Heartbeat,” which airs on public radio affiliates in 18 states and in Washington, D.C., and she is on the adjunct faculty at UF’s College of Journalism and Communications, where she teaches news reporting. For a number of years, she held a dual appointment in UF’s Division of Cardiovascular Medicine as an author’s editor. She holds a master’s in journalism with concentrations in newspaper administration and legal reporting from Northwestern University, and was a Washington correspondent covering health for Northwestern’s Medill News Service. She is a former reporter for The Tampa Tribune.
Secretary: The secretary must have served in at least 2 different positions on the EC within the 5 years immediately preceding his or her consideration by the Nominating Committee and must be a fellow of AMWA.

Mary G. Royer, MS, ELS, a member since 1987, is currently serving on the EC as secretary and has also served as the WIT administrator (2006-2008) and publications administrator (2003-2004). Royer is currently a member of the task force on partnering with academic institutions and has also been a member of many committees, including the long-range planning committee (4 terms), publications committee (6 terms), publishing committee, nominating committee, fellowship committee, elections task force, Swanberg committee (2 terms, one as chair), and the WIT committee. She was also a member of the task force that developed AMWA’s position statement on the contributions of medical writers to scientific publications. She has participated in annual conferences as a workshop leader (2004-2007) and a roundtable leader. She is currently the short sessions coordinator for the 2009 conference and has been a roundtable coordinator, freelance section chair, and special interest session coordinator. She has also been a Journal peer reviewer since 2003. At the chapter level, she served as the 1990-1992 Delaware Valley Chapter secretary. She was awarded the President’s Award in 2000 and Fellowship in 2001.

Royer is a freelance medical writer in Ithaca, NY. Before starting her business, Royer held positions at Sterling Drug, the New York State College of Veterinary Medicine, and Norwich Eaton Pharmaceuticals. A graduate of Tufts University, she also holds a master’s degree in technical communication from Rensselaer Polytechnic Institute. She received BELS certification in 1992.

Treasurer: The treasurer must have served at least 1 full year on the Budget and Finance (B&F) Committee within the 5 years immediately preceding his or her consideration by the Nominating Committee.

Judi M. Pepin, PhD, has been a member since 1997 and is currently serving a second term as AMWA’s treasurer. She served on the 2006-2007 EC as development administrator, held 3 terms as a member of the B&F committee (2003 to 2007), and was a member of the WIT committee (2005-2006). Pepin also served 6 years as treasurer for the Ohio Valley Chapter (2000-2006) and was the Ohio Valley Chapter delegate for 3 years (2003-2006).

Pepin is currently a medical writer at Procter & Gamble Pharmaceuticals in Mason, OH, where she has been employed since 1990. She holds a doctorate and a master’s degree in pharmacology and toxicology from the University of Connecticut School of Pharmacy, Storrs, CT, and a bachelor of arts degree in biochemistry from Smith College in Northampton, MA. She completed her postdoctoral training in the department of vascular cell biology and atherosclerosis at Cleveland Clinic.

Procedure for Additional Nominations
According to AMWA’s Bylaws (Article III.2b), 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 (at the annual conference in Dallas, TX, October 23, 2009). Any individuals so nominated must meet the criteria outlined in the Bylaws (Article III.1.a through 1.d) for their names to be placed on the ballot. Such a nomination must state clearly the qualifications of the candidate, must be signed by 50 members in good standing as of the date of 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.

References

→ Questions about the structure and governing bodies of AMWA? Review 2 articles previously published in the AMWA Journal.1,2
→ Questions about how the AMWA election works? Visit www.amwa.org and review new Election Process FAQs posted in the members only section.
The American Medical Writers Association (AMWA) was in a strong financial position at the end of the fiscal year that ended on June 30, 2008. At that time, income exceeded expenses by $109,783. This excess is attributable to the well-attended 2007 Annual Conference in Atlanta and growth in membership.

How Should This Report Be Interpreted?
This financial report provides a snapshot of the financial status of a dynamic organization. AMWA's fiscal year begins on July 1, so that income from the annual conference, which accounts for about one-third of AMWA's total income, is realized in the first half of the fiscal year. Because many sources of income have associated expenses, differences between income and expenses (eg, excess of income over expenses) should be considered as well as variances from the budget and changes from the previous year. When differences between income and expenses are compared with differences from the previous fiscal year, the change is reported as net gain over (or loss from) the previous fiscal year.

What Are AMWA's Sources of Income?
AMWA’s main sources of income are membership dues and the annual conference; these accounted for 77% of the income for fiscal year 2007–2008 (Figure 1). Membership grew and, after subtracting related expenses, AMWA realized a net gain of $26,927 over last year. In addition, the annual conference provided a net gain of $260,411. Education had a net gain of $9,475 over that of last year, primarily due to revenue from the third distance-learning module (on sentence structure) and enrollment in the science fundamentals certificate program.

What Are AMWA's Expenses?
Staff salaries and associated expenses such as payroll taxes and benefits accounted for a lower proportion of expenses (33%, Figure 2) than in fiscal year 2006–2007 (36%), and decreased $5,224 from last year. Furthermore, these expenses did not exceed the budgeted amount. AMWA had a staff of 8 full-time employees, including an Executive Director, during the last fiscal year. Two staff members work exclusively on educational programs. Other staff members support membership services, maintain the Web site, maintain the Freelance Directory and Jobs Online listings, market AMWA's products and services, coordinate meetings, implement AMWA's awards programs, and perform bookkeeping.

Annual conference expenses were the second-highest expense category (21%). The largest expense was meal functions, which are heavily subsidized by AMWA. Other conference expenses were for (in descending order) printing and design, workshops, nonworkshop audiovisual support, bank charges for credit card use, and exhibits.

Other expenses (20%) were for (in descending order) insurance for staff and officers, unrealized loss on investments, Board of Directors (BOD) and Executive Committee (EC) activities, Web site/Internet technology, and education. EC/BOD expenses comprised travel and hotel rooms for a spring and summer meeting, plus meals or other food/beverages for the 3 BOD meetings held in the spring, at the end of the annual conference, and at the beginning of the subsequent annual conference. Also included in this subcategory were travel-related expenses for the EC to attend the previous meetings plus 2 additional meetings, one in January and one in July. The highest single Web site/Internet technology expense was Harrison's Online/McGraw-Hill. Education expenses were mainly for on-site workshops and the distance-learning modules.

Administration expenses (14%) increased only $2,979 from last year. Rent was the largest subcategory, but this expense was within the budgeted amount. Other administration expenses, each exceeding $10,000, were for depreciation, computer services and supplies, bank charges for credit card use, accounting, and audit. The remaining expenses were for membership (7%) and publications (6%).

What Lies Ahead in the Current Fiscal Year?
AMWA Executive Director Donna Munari, then-President Sue Hudson, then-President-elect Cindy Hamilton, and Treasurer Judith M. Pepin prepared the 2008–2009 AMWA budget in January 2008. Based on experience available at that time, we budgeted $1,663,756 in income (Figure 3) and $1,639,465 in expenses (Figure 4), for a projected excess of $24,291. The 2008-2009 budget included less expense for meal functions at the 2008 Annual Conference; an increase in revenue from registrations, membership, and workshops at the 2008 Annual Conference; and maintenance of 9 full-time staff members, including a new marketing manager and the Executive Director.

Although it is too early to predict the outcome for the 2008–2009 fiscal year, the largest categories of income received since the budget was prepared indicate that the current fiscal year is likely to be slightly better than budgeted but not as good as the 2007–2008 fiscal year. Registrations for the 2008 Annual Conference in Louisville
Figure 1. Sources of AMWA’s income during fiscal year 2007–2008 (July 2007–June 2008). The amounts are from the final financial report for June 2008.

*Other = investment income (6%), Jobs Online (4%); Freelance Directory (2%); publications (<1%); awards (<1%); special projects (<1%); label sales (<1%); member contributions (<1%); Web site/Internet technology (<1%); realized gain on investment (<1%).

Figure 2. AMWA’s expenses during fiscal year 2007–2008 (July 2007–June 2008). The amounts are from the final financial report for June 2008. The percentages total more than 100 because of rounding.

*Other = insurance (5%); unrealized loss on investment (4%); Executive Committee/Board of Directors (4%); Web site/Internet technology (2%); education (2%); miscellaneous (1%); special projects (1%); unrelated business income tax (<1%); awards (<1%).

Figure 3. Anticipated sources of AMWA’s income during fiscal year 2008–2009 (July 2008–June 2009). The amounts are from the budget approved by AMWA’s Board of Directors on April 4, 2008.

*Other = Jobs Online ads (5%); Freelance Directory (2%); special projects (1.5%); interest (1%); awards (<1%); publications (<1%); label sales (<1%); member contributions (<1%); Web site/Internet technology (<1%).

Figure 4. AMWA’s anticipated expenses during fiscal year 2008–2009 (July 2008–June 2009). The amounts are from the budget approved by AMWA’s Board of Directors on April 4, 2008.

*Other = insurance (5%); Executive Committee/Board of Directors (3%); Web site/Internet technology (2%); special projects (2%); education (2%); research (1%); unrelated business tax (<1%); awards (<1%); Long-range Planning Committee (<1%); Strategic Implementation misc. (<1%); Freelance Directory (<1%); public relations (<1%); Jobs Online (<1%); label sales (<1%).

What About the Long Term?
As a general rule, nonprofit organizations should have operating funds of 25% to 33% of annual expenses (for AMWA, this was $394,533 to $520,784 for fiscal year 2007–2008). AMWA’s reserves are defined as its short-term investments in certificates of deposit (CDs) that mature after 1 year and long-term investments in mutual funds. As of June 30, 2008, our short-term and long-term reserves amounted to $1,041,065, which was down from $1,046,844 on June 30, 2007, but within the target range. AMWA’s long-term investments comprise a diversified portfolio (60% various stocks and 40% bonds) and are managed by Smith Barney. With the income received since the June 30 cutoff for this report (including substantial income from the 2008 Annual Conference), AMWA has purchased CDs with interest rates ranging from 4.4% to 5.15% earnings. The BOD determines how to allocate the excess of income over expenses at the end of each fiscal year. At its fall meeting, the BOD approved a motion to place one-third of the excess into long-term reserves and one-third into the Endowment Fund; according to AMWA policy, the last third automatically remains in operating funds and short-term reserves. However, given the downturn in economic trends during the first 2 quarters of the 2008–2009 fiscal year, a new motion came before the BOD at the spring meeting to recommend reallocating the one-third of the excess of revenues over expenses from exceeded expectations with approximately 937 registrants. In addition, membership-related income at the end of fiscal year 2007–2008 ($601,118) was higher than expected ($588,628 budgeted).
the end of the last fiscal year from long-term to short-term reserves (CDs). The motion passed. The Endowment Fund was designed to reinvest the interest until it reached the target of $85,000 in principal. That goal was achieved in January 2007, and AMWA began to spend the interest from the Endowment Fund on special projects consistent with its mission statement and as determined by the BOD.

AMWA has enjoyed another year of increased net assets and continued financial health. With the current economic trends and the downturn in the stock market, however, we do not expect to do as well in the 2008-2009 fiscal year and are planning and budgeting a lean year ahead.

Table 1. AMWA Balance Sheet as of June 30, 2008

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
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<tbody>
<tr>
<td>Cash and cash equivalents</td>
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<td>Short-term funds (maturity 1 to 5 yr)</td>
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<td>Accrued interest on short-term investments</td>
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<td>Long-term investments</td>
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<td>Accounts receivable</td>
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<td>Prepaid expenses and supplies inventory</td>
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<td>Fixed assets (furniture, equipment)</td>
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<td>Other assets (McGovern Fund, Endowment Fund, deposits)</td>
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<tr>
<td><strong>Total assets</strong></td>
<td><strong>$1,825,760</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and Net Assets</th>
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<tr>
<td>Accounts payable and accrued expenses</td>
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<tr>
<td>Unearned (deferred) income</td>
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<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>$413,097</strong></td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td><strong>$1,412,662</strong></td>
</tr>
<tr>
<td>Net income</td>
<td>109,783</td>
</tr>
<tr>
<td><strong>Total liabilities and net assets</strong></td>
<td><strong>$1,825,759</strong></td>
</tr>
</tbody>
</table>

Note: the total assets versus total liabilities and net asset amounts differ by $1 due to rounding.

Acknowledgments
I thank the members of the current AMWA Budget and Finance Committee—Cathy Clark, Heather Haley, Karen Klein, Jane Krauhs, Jennifer Minigh, and Barbara Snyder—for reviewing this manuscript. I also thank Cindy Hamilton and Anne Derbes for helping me by answering questions and providing valuable advice during my first year as AMWA Treasurer.

References

Two AMWA Blogs to Debut!

AMWA members can soon add 2 blogs to their list of important resources. First, the AMWA Journal Editor is establishing a blog to better engage Journal readers and offer news, links, and resources to readers in a timely manner. The Editor welcomes ideas for the Journal blog; send them to www.amwajournaleditor@hotmail.com.

Another exciting initiative is an AMWA Annual Conference blog, coordinated by Victoria White. She plans to lead a team of bloggers to bring highlights and commentary from this year’s annual conference in Dallas to attendees as well as those at home. She can be reached at victoriajwhite@gmail.com.

These blogs reflect AMWA’s commitment to use technology to provide interactive forums for members and enhance their experience with AMWA publications and services. Look for a link to the Journal blog on the AMWA Web site this summer. More information on the Annual Conference blog will be available in the September issue.

Getting Your Employer To Say Yes continued from page 71

For example:
• Offer to share a hotel room with a coworker or colleague who is also planning to attend the conference—a savings of $139 + tax per night.
• Attend only the lecture portion of the award lunches.
• Offer to pay for your own meals during the trip.
• Offer to pay for your travel expenses if your company pays for the registration fee and workshop fees.
• Focus on taking core or science workshops at $95 each rather than advanced workshops at $120 each, or attend noncredit workshops for only $55 each.
• Plan to take advantage of the great open sessions being offered this year and included in your registration fee, and limit the number of workshops to save the added cost.
• If you live within driving distance of Dallas, plan to attend the conference for only 1 day and pay a registration fee of $175 instead of $330.
On January 17, 2009, the AMWA Southwest Chapter presented the 2009 John P. McGovern Award to Lawrence K. Altman, MD, a full-time reporter for The New York Times since 1969 and author of Who Goes First? The Story of Self-Experimentation in Medicine. The award has been given annually since its establishment in 1982 by McGovern (1921-2007), a noted educator, author, and historian who was a member of the Southwest Chapter.

Dr Altman addressed nearly 60 attendees about his research on the history of self-experimentation in medicine. Self-experimentation is defined as an investigator’s deliberate experiment on himself or herself before risking other humans to the experimental factor. The definition includes the word “deliberate,” because it does not include cases of accidental exposures to diseases by treating physicians.

Dr Altman provided several examples of medical researchers whose discoveries would not have been made if they had not acted as their own experimental being. Surprisingly, some of these researchers won Nobel Prizes for their efforts.

Dr Werner Forssmann was one such researcher. One day, after inserting a cannula and catheter into his own arm, Dr Forssmann walked from his laboratory to the radiology department in the basement of the hospital in which he worked. Once there, he had to physically fight off a colleague to get the technician to take an x-ray of the catheter within his right auricle. Dr Forssmann repeated the self-experiment 5 times. In 1956, he was a co-recipient of the Nobel Prize in Physiology or Medicine for his work on cardiac catheterization.

The medical specialty of anesthesiology, Altman said, developed as a result of a long history of self-experimentation by surgeons, dentists, and general physicians. In the mid-19th century, the social use of ether, known as “ether frolics,” was popular. Some physicians noted bruises for which they had no memory after an ether frolic. These early events led to more self-experimentation and, eventually, the use of ether and other inhalants to prevent pain during surgery.

Self-experimentation has also helped drug discovery. Altman told the story of the development of disulfiram. Originally developed by Medicinalco as an anti-parasitic agent, the drug was first tested in rabbits and was not found to induce adverse effects. The company’s medical research director and a member of his research team conducted the first in-human safety study on themselves. While taking a daily dose of disulfiram, each researcher experienced nausea, flushing, and headaches after alcohol consumption. After comparing notes, the researchers made the link between alcohol consumption and disulfiram ingestion. Thus began the development of Antabuse, a drug used to help alcoholics avoid alcohol. Altman noted that such a discovery may never have been made if animals had been used as test subjects.

In centuries past, scientists with the courage for self-experimentation have made many important discoveries in medicine. However, as Altman was quick to point out, modern Institutional Review Boards (IRBs) would not likely grant approval for self-experimentation. While self-experimentation appears to be a thing of the past, Altman opined that IRBs should ask researchers requesting the use of human subjects whether they would be willing to enroll themselves in their own studies. He believes that researchers should be willing to participate first if they are going to risk the life of someone else for their research.
The Chapter Delegates Session at this year’s spring Board of Directors meeting produced a great deal of useful discussion. We talked about the updates being made to AMWA’s Manual of Procedures for Chapters, and the delegates had several suggestions for making the contents of the Manual more informative.

Lili Velez, AMWA’s Administrator of Special Projects, solicited ideas about spending the interest from AMWA’s Endowment Fund in ways that would benefit the largest number of AMWA members for the longest period of time. Suggestions included putting career-planning tools on the AMWA Web site (eg, “job help pages” describing different types of medical writing jobs and where one might look for each type of job); improving member recruitment by creating a speakers’ bureau at either the national or the chapter level; and establishing an individual or group mentoring program for new medical writers.

We also talked about how chapters can communicate electronically with their members without deluging them with e-mails. Ideas included limiting communications to once- or twice-monthly e-newsletters that contain no fewer than 2 items each; putting new information on the chapter’s Web site and merely e-mailing links to it; and using chapter blogs instead of e-mails. It was also mentioned that spybots can find e-mails with long “To:” lists and hijack them for unsolicited advertising; these spybots can be foiled by putting addresses in the “Bcc:” field or by using mail merge.

Lastly, we addressed the perennially relevant topic of recruiting new chapter officers. Delegates from the New England Chapter mentioned the importance of personal contact—calling potential officers by phone rather than sending e-mails.

The Delaware Valley Chapter delegates mentioned several practices that they have found useful for recruiting volunteers: dividing chapter tasks up into smaller units and recruiting members to perform each one (rather than asking people to take on a whole officer or chair position), having a volunteer coordinator who assigns these tasks, and having officer business cards with each officer’s name and title and the URLs of the chapter and national Web sites.

In sum, the Chapter Delegates Session produced a great many good ideas for delegates to take back to their chapters. We encourage chapter members to discuss these ideas with their delegates and chapter officers.

When planning the location of your chapter conference, find out what other events are planned in the area at the time of your conference. The site for a recent chapter conference was overrun with people in a wide array of costumes who were attending MegaCon (a large convention that caters to the anime, sci-fi, comic, and fantasy communities), as well as hordes of teenage girls participating in a regional volleyball tournament. Imagine what the lobby looked (and sounded) like! At least it was easy to pick out the medical writers!

Do you have a tip to share with fellow chapters? Send it to Chapter Corner Editor Tracey Fine at finemedpubs@earthlink.net.
Member Profile: Marianne Mallia, ELS

By Bettijane Eisenpreis

If you have attended an AMWA annual conference any time during the past 25 years, there is a good chance you have taken a workshop taught by Marianne Mallia, ELS. Or, you may remember her as AMWA’s President in 2002-2003. Perhaps you attended the 1999 Annual Conference in Philadelphia and remember her as the dynamic, omnipresent Annual Conference Administrator. And that’s just what she does in her spare time.

For over 30 years, Mallia has worked as a medical writer and editor at the prestigious Texas Heart Institute (THI) at St. Luke’s Episcopal Hospital in Houston, TX. Currently, she is Manager and Senior Medical Writer in the Section of Scientific Publications. At the Institute, she has been fortunate to work directly with the legendary Dr. Denton A. Cooley, who performed the first successful human heart transplant in the United States and the first total artificial heart implant in the world.

Mallia graduated from the University of Iowa with degrees in English and chemistry. Although she had planned to stay in science, she was hired to teach English by the Houston Independent School District, an experience she has never regretted. After a few years, she happened to learn of an opening in the research laboratory at THI. Because she missed science, she decided to apply for the job, and she got it.

“We wrote a lot of grants and contracts, and it soon became apparent that I was the best writer in the group,” she says. “I ended up doing more writing and editing than anything else; this was the catalyst for my career change.”

In 1980, she began working directly with Dr. Cooley. “I worked just with Dr. Cooley for about 6 years,” she recalls. “Then we decided that THI needed more editor-writers to help the other academic and clinician researchers. So we formed the Department of Scientific Publications. I headed that department and still do.”

Early in her career at THI, Mallia started looking for a professional association. “I assumed I wasn’t the only medical writer in the world,” she said. “I found AMWA and joined immediately.” “I was extremely lucky to find AMWA at the beginning of my career. I could understand the science. I knew grammar. But I didn’t really know anything about medical writing or editing. In the late 1970s, neither the Internet nor the AMA Manual of Style existed. AMWA gave me countless opportunities for professional growth. I got the education I needed from instructors who still help me whenever I have questions (people like Martha Tacker and Edie Schwager), a network of colleagues, and some of my very best friends.”

A teacher at heart, Mallia soon became involved in AMWA’s education program.

“I took the course Organizing the Biomedical Paper from Martha Tacker, who had just been AMWA President,” she says. “Afterward, Martha told me I had done an excellent job on my homework and in the class discussion. Not long thereafter, she called to ask if I would be willing to teach the course. I said, ‘yes,’ and I have taught at every annual conference since then.”

In 1996, Mallia was named an AMWA Fellow and, in 1998, she received the Golden Apple Award for being an “outstanding workshop leader.” Besides serving as Annual Conference Administrator and national President, she also served as Southwest Chapter President, Annual Conference Workshop Coordinator (twice), and Education Administrator (twice). She remains active by serving on task forces and committees. She also is the author of 2 chapters in AMWA’s Essays in Biomedical Communication series: “Advanced Writing” and “Organizing the Biomedical Paper.”

Mallia says her major interest has always been furthering AMWA’s education programs. “During my presidency, I proposed that we begin an endowment fund,” she says, “I thought an endowment would be a means of ensuring AMWA’s future and a vehicle for offering members even more educational activities. We also expanded the number of workshops at the annual conference, and we began work on the Professional Development Certificate.”

“Without a doubt, Marianne Mallia is THE AMWA Fashionista!” quips longtime colleague Art Gertel. “She is also a very effective administrator and superb consensus-builder. As AMWA President she was never afraid to take on the tough issues and to effectively communicate her opinion on important policy decisions. Marianne has been a particularly notable contributor to AMWA’s curriculum programs—reinforcing the foundations that set AMWA apart from other professional organizations.”

“When I first met Marianne formally, years ago, I remember thinking that she was one of those perfectly groomed cheerleader types,” says Barbara Good, PhD. “Then at an AMWA board meeting, we went out visiting antique shops during a lunch break. My whole idea of her changed; she was so much fun! Since those days I have gotten to know that she is highly intelligent, a really fine teacher, a dedicated editor, and a very brave and inventive person. She’s also an animal lover like me.”

Mallia challenges members to become involved and to take advantage of all AMWA has to offer. “I will always cherish my years of service in AMWA, and I am still honored whenever I receive a call from someone asking for my help.”
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This past week, my son’s teddy bear needed stitches. Erik, who is 4, says that Boo Bear is his “fuzzy sleeping buddy” who “protectors” him from bad guys. Boo Bear’s fur is matted, his neck is wobbly, and he has the sour smell of drool. He’s been soiled with urine and vomit and has been spun through the washing machine. Boo Bear is one of us.

Boo Bear came to us 2 years ago after my father-in-law, Paul, had surgery for colon cancer. His minister gave him a prayer bear that was later shown to Erik as a “boo-boo bear.” Erik reached for the bear and still hasn’t let go. In the meantime, his grandfather beat the cancer.

Also in the meantime, my grandfather had no such luck. Grampy developed stage IV prostate cancer that spread to his bones. In the final months, his decline was rapid, and on New Year’s Day we flew from North Carolina to Maine to see him one last time. Grampy was especially fond of Erik, who is third in a line of firstborns and the only male great-grandchild.

By the time we arrived, Grampy’s body was wasted and bent, his mouth was twisted to one side, and one of his eyeballs had bled from the inside and was unfocused. He was no longer the man who ate 2 pancake breakfasts in one sitting or always checked the oil in his grandchildren’s cars. In his prime, he had built a cottage on Coffee Pond in Casco, Maine, and kept an old diesel Peugeot running for years.

Grampy lay in a bed set up in his living room. When he croaked out his greetings, Erik tightened his grip on Boo Bear and clung to my neck. We sat near the grandfather clock that my grandmother proudly bought 30 years ago. Grammy has Alzheimer’s disease and lives in a nursing home—the same facility where she once was a nurse. This was before my grandparents’ productive and happy lives were replaced by a series of losses, mostly of function and dignity.

It was 4 o’clock. The final afternoon light begged through the windows. The clock chimed 11 times. After 5 minutes, Erik got down from my lap to play with his new Spider-Man car, and, although he stood close to the bed, my grandfather said, “Where’s Erik?” Grampy asked to be put in his wheelchair, and his bony frame was lifted out of the bed. Grampy wheeled over to the light switch and slowly, with a shaky, outstretched hand, turned on the light. After a lifetime of building and fixing, it was his last effort to make something right.

Later that night, Erik asked me if Boo Bear could make his Great Grampy feel better. I had to tell him that nothing could.

Indeed, the next morning Grampy lost most of his consciousness. Time slowed to a crawl. Mom and I prepared food for visiting family, and we took Erik outside to romp in the snow. After dinner, the morphine was started. When I said goodbye to Grampy that night, I promised that Erik would spend lots of time at Coffee Pond—and that I would remember to check the oil in my car. He squeezed my hand.

At 3 o’clock that morning, with his 4 children by his side, Grampy died. A few miles away, Erik, Boo Bear, and I were asleep on a futon in my aunt’s basement.

Six weeks had passed—and my grief had gone from numb to tender—when Erik ran into my office. I was, coincidentally, editing a book about cancer and working after dinner to finish it.

“Mommy,” Erik said. “I damaged Boo Bear. I didn’t mean to, but he ripped.” His hands were outstretched. “You have to fix him. Can you fix him? Please?”

Later that night, I found some light-brown thread, and my husband gently extracted Boo Bear from the arms of our sleeping boy. It took only 10 minutes to stitch Boo Bear’s left leg back on tight. Before Erik was born, I sewed quilts that took months to finish. But this job seemed just as big somehow.

I tied off the final knot, pulled on the repaired leg, and put the bear up to my nose. The smell of my son’s breath was so comforting I almost took his protector to bed with me.

But the bear went back to the boy, and I went to bed relieved that some things can be mended—and granted to stay with us through the night.

Jennifer King, PhD, ELS, is president of August Editorial, Inc. She can be reached at jking@augusteditorial.com.
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**Feature Articles:** Original compositions that are timely and relevant for medical writers and editors (approximately 3,000 words).

**Science Series:** Articles that provide an overview of a specific anatomical or physiologic topic or of a particular disease (approximately 3,000 words). Send manuscripts (and suggestions for content) to the Science Series Editor, Jeremy Dugosh, at jdugosh@abim.org.

**Practical Matters:** Articles that provide advice to medical writers and editors at all levels of experience and in all types of practice settings (approximately 700-1,000 words).

**Professional Development:** Information on career development issues and opportunities for professional development (educational programs, writing competitions) for medical writers and editors of all levels of experience.

**Sounding Board:** Forum for members’ opinions on topics relevant to medical writing and editing (approximately 1,000 words).

**Chapter Corner:** Forum for chapters to share experiences and expertise. Send suggestions for content to Chapter Corner Editor, Tracey Fine, MS, ELS, at finemedpubs@earthlink.net.

**Member Musings:** Forum for members to share personal essays (related to medical writing and editing) and creative work, as well as news about member achievements.

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**Media Reviews:** Send suggestions or books to the Book Reviews Editor, Evelyn Kelly, PhD, at evelykell@aol.com. Send suggestions for other media (CD-ROMs, videos, Web sites) to the Journal Editor.

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