If You Are Not on Social Media, Here’s What You’re Missing! #DoTheThing

C. Eric Freitag, MD; Michael A. Arnold, MD, PhD; Jerad M. Gardner, MD; Christina A. Arnold, MD

What’s all this buzz about social media? Why are people tweeting and ideas trending? What am I missing?

If you have these thoughts, you are not alone. In this editorial, we share our personal inroads to Twitter (Twitter Inc, San Francisco, California), explain why we believe social media has staying power and enhances pathology, and offer basic tips to get you started.

LINGO 101

Let’s start with some basic lingo. Social media (abbreviated SoMe) is a broad umbrella term that encompasses a variety of platforms that facilitate information exchange. Popular examples of social media include Facebook (Facebook Inc, Menlo Park, California), Instagram (Facebook Inc), and Twitter.

Most are familiar with Facebook; it was introduced in 2004 and allows users to share text, videos, and images. Instagram was introduced in 2010, and it allows users to post images or short videos. Twitter was introduced in 2006, and users can post images, short videos, and up to 140 characters of text.

Content on social media platforms is organized by key words or phrases, without spaces, preceded by “#”, or hashtags. Hashtags are searchable, allowing users to find related posts. Popular pathology-specific hashtags are listed in Tables 1 and 2. For example, users interested in pathology board preparation can search Twitter for #pathboards. Users interested in the United States and Canadian Academy of Pathology (USCAP) can search #InSituPathologists, #IamUSCAP, or #USCAP2016.

Twitter handles (or user names) start with “@”. Messages directed toward Christina Arnold, MD, would include her Twitter handle “@CARnold_GI”, for example. Twitter handles are also clickable, bringing the viewer to the profile page for that handle. Twitter, Facebook, and Instagram also allow private messages to be sent between users or groups of users, functioning similarly to email.

OUR PERSONAL TWITTER INROADS

For the purposes of brevity, this editorial will focus on Twitter. Despite Twitter having passed its 10th birthday, medicine in general, and pathology in particular, have been late to arrive on Twitter. This hesitation may be due to conservative leanings of medical professionals to avoid unvetted communication tools, concerns to protect patient privacy, and already overburdened physician schedules.

Among pathologists, Jerad M. Gardner, MD (@JMgardnerMD), was one of the first to recognize and advocate the power of social media. He joined Twitter in 2009 but did not use the service much for several years. After seeing the interest generated during his social media for pathologists lectures at the 2013 College of American Pathologists (CAP) annual meeting and the 2014 USCAP annual meeting, he decided to get more active on Twitter and began following and interacting with other pathologists, as well as physicians in other specialties. C. Eric Freitag, MD (@cefreitag), currently a resident, joined in 2010 to follow news, sports, and athletes. This soon expanded to include medical institutions, organizations, and physicians. Shortly after beginning his residency in 2015, he happened to come across Dr Gardner’s Twitter account, which led to the discovery of the growing pathology Twitter community, which included pathologists, fellows, and residents from around the world. Michael Arnold, MD, PhD (@MArnold_PedPath), joined in 2011 to follow news, sports, and politics, and became active in tweeting about pathology after the USCAP 2016 meeting. Dr Christina Arnold (@CARnold_GI) joined in 2014 initially to help promote a USCAP interactive microscopy course, but she quickly recognized Twitter’s importance in sharing ideas and making connections with other pathologists.

TWITTER AS A DOMINANT VOICE IN PATHOLOGY

It is not clear how many pathologists have joined Twitter, but it is clear that Twitter is energizing our field, as evidenced by log-linear growth during multiple years. Twitter activity related to the annual USCAP meeting has risen from 7 tweets containing #USCAP10 during the 2010 meeting dates, to 17 860 tweets containing #USCAP2016 or #USCAP16 during the 2016 USCAP meeting dates (Figure 1).1–8 The 2016 USCAP Twitter activity resulted in almost 27
million potential impressions (tweet views) and was a trending topic (a popular topic among all global Twitter traffic; Figure 2). To the best of our knowledge, Rasmus Kiehl, MD (@trkiehl), was the first pathologist to use a USCAP hashtag with the currently popular 4-digit year format (Figure 3).

SOCIAL MEDIA HAS STAYING POWER

Because social media allows instantaneous global interconnectivity, it is reshaping modern information exchange. Never before have people been able to instantaneously connect despite geographic, political, religious, cultural, age, professional, and socioeconomic differences. Users turn to social media for the latest information on anything. Social media provides the latest information on global and local news events, politics, sports, and celebrities. It facilitates international networking and is important for professional and personal engagement. Individual Twitter user mentions and interactions between users during the 2016 USCAP annual meeting (Figure 4) illustrate the broad interconnectivity that this platform provides. Of note, this analysis was performed by Greg Matthews (@chimoose) using data from MDigitalLife Online Health Ecosystem Database (MDigitalLife, Austin, Texas; @MDigitalLife), and was displayed using Google Fusion Tables (Google, Mountain View, California). On a more individual level, at the time of writing, Dr Gardner has more than 8000 Twitter followers originating from more than 100 countries. We used http://tweepsmap.com (Tweepsmap, Toronto, Ontario, Canada; @Tweepsmap; accessed February 15, 2017).

Table 1. Examples of Pathology Hashtags

<table>
<thead>
<tr>
<th>Category</th>
<th>Example</th>
</tr>
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<tbody>
<tr>
<td>Gross pathology</td>
<td>#Grosspath</td>
</tr>
<tr>
<td>Pathologist selfies at the USCAP annual meeting</td>
<td>#IamUSCAP</td>
</tr>
<tr>
<td>USCAP annual meeting live tweet group</td>
<td>#InSituPathologists</td>
</tr>
<tr>
<td>Laboratory medicine</td>
<td>#Labmed</td>
</tr>
<tr>
<td>Artistic or aesthetically beautiful pathology images</td>
<td>#PathArt</td>
</tr>
<tr>
<td>Pearls for pathology board exam studying</td>
<td>#PathBoards</td>
</tr>
<tr>
<td>General pathology hashtag</td>
<td>#Pathologists</td>
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<tr>
<td>General pathology hashtag</td>
<td>#Pathology</td>
</tr>
<tr>
<td>Pathology resident-specific information</td>
<td>#PathResidents</td>
</tr>
<tr>
<td>USCAP interactive microscopy course live tweets</td>
<td>#USCAPInteractive</td>
</tr>
<tr>
<td>Work and personal lives of pathologists</td>
<td>#IlookLikeAPathologist</td>
</tr>
</tbody>
</table>

Table 2. Examples of Pathology Subspecialty Hashtags

<table>
<thead>
<tr>
<th>Subspecialty</th>
<th>Example</th>
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<tbody>
<tr>
<td>Autopsy pathology</td>
<td>#Autopsy</td>
</tr>
<tr>
<td>Blood banking and transfusion medicine</td>
<td>#BloodBank</td>
</tr>
<tr>
<td>Breast pathology</td>
<td>#BreastPath</td>
</tr>
<tr>
<td>Bone and soft tissue pathology</td>
<td>#BSTpath or #BST</td>
</tr>
<tr>
<td>Cardiovascular pathology</td>
<td>#CardiacPath</td>
</tr>
<tr>
<td>Clinical pathology</td>
<td>#ClinPath</td>
</tr>
<tr>
<td>Cytopathology</td>
<td>#Cytopath</td>
</tr>
<tr>
<td>Dermatopathology</td>
<td>#Dermpath</td>
</tr>
<tr>
<td>Endocrine pathology</td>
<td>#EndoPath</td>
</tr>
<tr>
<td>Head and neck pathology</td>
<td>#ENTPath</td>
</tr>
<tr>
<td>Ophthalmic pathology</td>
<td>#EyePath</td>
</tr>
<tr>
<td>Fine-needle aspirate (FNA)</td>
<td>#FNAPath</td>
</tr>
<tr>
<td>Cytology</td>
<td>#ForensicPath</td>
</tr>
<tr>
<td>Forensic pathology and forensics</td>
<td>#ForensicPath</td>
</tr>
<tr>
<td>Gastrointestinal and liver pathology</td>
<td>#GIPath</td>
</tr>
<tr>
<td>Genitourinary pathology</td>
<td>#GUPath</td>
</tr>
<tr>
<td>Gynecologic pathology</td>
<td>#Gynopath</td>
</tr>
<tr>
<td>Hematopathology</td>
<td>#HemePath</td>
</tr>
<tr>
<td>Molecular pathology</td>
<td>#MolDx</td>
</tr>
<tr>
<td>Neuropathology</td>
<td>#NeuroPath</td>
</tr>
<tr>
<td>Oral pathology</td>
<td>#OralPath</td>
</tr>
<tr>
<td>Pathology informatics</td>
<td>#PathInformatics</td>
</tr>
<tr>
<td>Pediatric pathology</td>
<td>#PediPath</td>
</tr>
<tr>
<td>Pulmonary and pleural pathology</td>
<td>#PulmPath</td>
</tr>
<tr>
<td>Renal and medical kidney pathology</td>
<td>#RenalPath</td>
</tr>
<tr>
<td>Surgical pathology</td>
<td>#SurgPath</td>
</tr>
</tbody>
</table>

Abbreviation: USCAP, United States and Canadian Academy of Pathology.

Footnotes:
- Data derived from http://www.symplur.com/healthcare-hashtags/ontology/pathology/ (Symplur LLC).

Figure 1. Twitter activity at the United States and Canadian Academy of Pathology annual meetings shows logarithmic growth.1–4

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Social media’s rich resources of people and cases support the 2016 USCAP annual meeting generated almost 27 million interactions (Figure 5). For analysis of @JMGardnerMD’s Twitter follower growth and global interconnectivity (Figure 5).

HERE’S WHAT YOU ARE MISSING!

So, what do these numbers mean for you? A lot! Below are the reasons why we believe social media has staying power, how social media is influencing pathology, and what you gain by joining the conversation.

- The 2016 USCAP annual meeting generated almost 27 million potential interactions via Twitter. Can you imagine a more robust audience with which to share your ideas and cases and promote your research, textbooks, courses, and consult services? Social media is a powerful tool for connecting pathologists around the world!

- Social media activity can directly influence the impact of your research. Journals with Twitter profiles have been found to have cited articles with 93% specificity and 75% sensitivity. Eysenbach found highly tweeted papers were 11 times more likely to be highly cited than less-tweeted papers, and top-tweeted articles can predict top-cited articles with 93% specificity and 75% sensitivity. Journals with Twitter profiles have been found to have higher impact factor, higher number of citations, and higher H-index.

- Social media can be a powerful tool for aggregating cases and it has been used to identify collaborators from around the world for publications, lectures, and textbooks. We have personally accumulated rare cases for USCAP presentations and papers based on social media contacts (projects ongoing). Without social media, prospective collection of these rare cases would likely have taken a number of additional years.

- Example 1: A colleague needed a clinical photo of hidradenoma papilliferum for an upcoming book chapter. Because the colleague does not use social media, Dr Gardner posted a request on the Dermatopathology Facebook group. Within less than an hour, a colleague from Ecuador, Juan Carlos Garcés, MD, had sent a high-quality clinical photo of hidradenoma papilliferum. He received credit in the figure legend for the image, and the book author obtained the needed photo within hours.

- Example 2: Keisuke Goto, MD, a pathologist in Japan, shared microscopic images of a very classic case of sparganosis on the Dermatopathology Facebook group. Dr Gardner sent Dr Goto a message requesting that they collaborate to write the case up as a cover quizlet case report for the Journal of Cutaneous Pathology. Gina Johnson, MD, a pathology resident from Emory University (Atlanta, Georgia), had been looking for a case report to work on and agreed to be first author. Because of social media, pathologists from Japan, Little Rock, and Atlanta came together and drafted a manuscript. The case report was accepted for publication on the cover of the Journal of Cutaneous Pathology (actually, through a glitch in the publication process, it was accidentally published on the cover twice!). Incidentally, Dr Johnson is currently Dr Gardner’s dermatopathology fellow.

- Example 3: César A. Alvarenga, MD, PhD, a pathologist from Brazil, shared photomicrographs of a very rare case of granular cell angiosarcoma on the Bone and Soft Tissue Pathology Facebook group. He and Dr. Gardner decided to collaborate and publish it as a case report in the literature. Daniel Skipper, DO, a pathology resident from the Medical University of South Carolina (Charleston), had recently inquired about working on a case report or project with Dr Gardner. Dr Gardner invited him to write up this case and submit it as an abstract for the 2016 American Society of Dermatopathology meeting. The abstract was accepted for a “Duel in Dermatopathology” oral presentation to be presented by Dr Skipper, and the manuscript is currently in preparation. Of note, at the time the abstract was accepted, Drs Alvarenga, Gardner, and Skipper had never met each other “in real life” and had only interacted via social media. Social media is a powerful tool for connecting pathologists around the world!

- By following Twitter conversations, you can gauge common diagnostic issues that can spark the next research project or help develop your next presentation.

- Commentary and research on social media itself offers opportunities for academic activities. Recent pathology-related examples include journal publications on Periscope (Twitter Inc) as an emerging teaching tool, the professional advantages of Twitter, and navigating social media.

- Social media activity can directly influence the impact of publications. Eysenbach found highly tweeted papers were 11 times more likely to be highly cited than less-tweeted papers, and top-tweeted articles can predict top-cited articles with 93% specificity and 75% sensitivity. Journals with Twitter profiles have been found to have higher impact factor, higher number of citations, and higher H-index.
higher impact factors than those without, with the number of Twitter followers having a positive association with the journal’s impact factor. Other sources have also suggested that tweeting about one’s publications can be a useful way to increase their reach and awareness, although it may not always correlate with increased numbers of traditional citations in the literature. Simion I. Chiosea, MD (@chioseasi), recently tweeted an animated graph demonstrating a correlation between tweets about his paper and the number of views and downloads of that paper from the journal Web site.

Although traditional measures of impact in the medical publication industry include number of citations and impact factor of the journal in which the paper is published, the true impact may extend beyond these metrics and may be more difficult to precisely measure. Twitter and Facebook both provide analytic data that may be useful when tweeting or posting about publications in the literature. These include the ability to see the number of views a given tweet or post has received, as well as the number of times other users have followed a link from a tweet or post (such as a link to the publication on PubMed, for example). Tweets and Facebook posts about new publications may be viewed 5,000 to 10,000 times, often within only a week of posting. Twitter and Facebook allow authors to share and “advertise” their traditional peer-reviewed publications in an efficient, wide-reaching, and robust manner.

- Social media offers prized leadership opportunities. Traditional leadership positions are usually reserved for senior pathologists and can take decades, or even an entire career to reach. Social media, on the other hand, is an emerging tool dominated by the rising tide of the next generation of pathology leaders. Through Dr Gardner’s pioneering efforts to promote social media as a useful tool in pathology, he has been selected to serve as chair of social media subcommittees for the American Society of Dermatopathology and the USCAP. He was also appointed as a deputy editor-in-chief of the *Archives of Pathology & Laboratory Medicine* largely on the basis of his social media skills.

- In selecting committee and editorial board members, Dr Gardner largely looks to Twitter and Facebook to identify pathologists with skills and experience in using social media and also to vet the ability of these colleagues to interact on social media in a professional and useful manner. Many of the members of these committees are residents and fellows, because these junior pathologists have embraced social media use much more quickly as a group than have the more senior generation of pathologists (exceptions exist, of course).

After Dr Gardner was appointed as deputy editor-in-chief of the *Archives of Pathology & Laboratory Medicine*...
in April 2016, one of his first acts in that role was to establish a Twitter account and public Facebook page for the Archives (@ArchivesPath; https://www.facebook.com/ArchivesPath/), as well as to form both a social media section of the Archives editorial board (Figure 6) and a larger social media team pulling members from other areas of the editorial board as well.

*Maren Y. Fuller, MD (@marenwhymd), currently still a pathology fellow in training, has quickly risen to be a widely recognized pathologist on social media, largely because of her extensive activity on Twitter as well as with Periscope. Because of her stellar work on Twitter, Dr. Fuller was invited to be a social media section editor. In just a few short months, she was further promoted to the position of associate editor of social media for the Archives (October 2016); she is the only pathology trainee to serve as an associate editor in the 90-year history of the journal and may very well be the first to do so in the entire history of formal pathology publishing (P. T. Cagle, MD, written communication, October 2016). Of note, Dr. Fuller recently secured a fellowship in pediatric pathology after responding to a posting on social media.28*

*Because social media is in its earliest stage of development, the potential for leadership opportunities will only continue to grow, providing important academic currency for career advancement and cultivating a national and international presence. Seeing how rapidly the social media landscape is changing and how quickly new names can rise to positions of worldwide recognition via social media, we feel it is very likely that the future leaders of pathology will largely arise from the pool of pathologists who most actively use social media. New pathologists in training may get exposure once or possibly several times per year to senior famous pathologists who do not use social media; these trainees get daily exposure to the core group of

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The influence of social media is increasingly recognized by academic institutions. Social media activities have become integrated into fellowship evaluations, and some institutions, like the Mayo Clinic (Rochester, Minnesota), have also incorporated such activities in the metrics for academic promotion.30 These actions acknowledge the time investment of the users, recognize its benefit to the institution, and result in tangible achievements that can be used for career advancement.

- Even if the promotion and tenure process at one's institution does not yet recognize the impact and relevance of social media, academic pathologists can still leverage their social media influence to create quantifiable metrics that can be submitted as supplemental information along with the more traditional promotion and tenure packet. Dr Gardner was recently approved for promotion from assistant professor to associate professor. His packet included traditional data about clinical service, education, leadership, letters of recommendation from senior leaders at other institutions, and peer-reviewed publications. Many of the publications, organizational leadership positions, and educational activities were related to or directly derived from his social media use. Moreover, in addition to these traditional metrics of academic success and impact, Dr Gardner included feedback directly from his social media followers. To do this, he created a short survey via SurveyMonkey (San Mateo, California) and distributed it to his followers on Facebook, Twitter, and Instagram. The survey asked his followers to rate his teaching and leadership skills based purely on his social media activities and asked if his posts positively influenced other doctors to provide better care for their own real-life patients. He also invited his followers to state which country they were from and to leave brief free-text feedback regarding the value of his social media posts and tweets. Within 4.5 days of first posting it on social media, 1100 of his followers from more than 80 different countries had taken the survey, and 1000 of these had left free-text feedback comments, most of which were very positive (full survey and results can be found here: https://www.surveymonkey.com/results/SM-VRPSJKLML/; accessed February 15, 2017). Metrics from this survey were included in his promotion and tenure packet, as were nearly 20 pages of selected positive feedback from his followers who took the survey. Many of these comments spoke to leadership, teaching, patient care, and national and international reputation; all prized traits that promotion and tenure committees expect from academic physicians. The benefits are not only for pathologists: David R. Stukus, MD (@AllergyKidsDoc), an associate professor of pediatrics at Nationwide Children’s Hospital/The Ohio State University (Columbus), wrote a blog post for KevinMD.com discussing how he used Twitter to get promoted in his academic career.31

- Twitter-based journal clubs allow pathologists to stay current while vigorously discussing the latest publications with peers from across the world. Online journal clubs, such as @Path_JC and @NephJC, conduct live, virtual journal clubs. The first @Path_JC live Twitter event occurred on Tuesday July 26, 2016. The group discussion of a recent publication by Heeren et al32 on the prognostic effect of programmed death ligand-1 (PD-L1) in squamous cell carcinoma and adenocarcinoma of the cervix generated 836 tweets that were potentially viewed more than 1.5 million times within 2 days.33,34 The most recent November #pathjc on Choi and Appelman’s exposure of serrated lesions35 garnered 2.5 million potential impressions from 147 users.

- Invited lectures via social media services, such as Periscope and YouTube (San Bruno, California), allow experts to teach and users to enjoy world-class lectures from the comfort of their own home or office.14 These lectures can be simultaneously viewed at many sites, allowing rapid information dissemination. To the best of our knowledge, the first formal, archived, pathology-related Periscope lecture was delivered by Dr Gardner on April 5, 2016, on the subject of social media’s role in academic pathology. The Periscope broadcast of that talk was initiated by Dr Fuller.14 Since that time, at least 5 additional Periscope lectures have been delivered by experts in thoracic pathology (Sanjay Mukhopadhyay, MD, Cleveland Clinic Foundation, Cleveland, Ohio; @smrungpathguy) and liver pathology (Neil D. Theise, MD, Beth Israel Medical Center, New York, New York; @neiltheise). Periscope presentations can be recorded on platforms such as YouTube to allow the lecture to be viewed again later. Dr Mukhopadhyay’s May 10, 2016, lecture on thoracic pathology has been viewed more than 1300 times on YouTube as of October 12, 2016 (only 5 months after it was initially posted on YouTube).14,36

- This information exchange is a critical link for those in underserved areas who would otherwise not have access to the latest information from journals, conferences, courses, and textbooks. In this way, social media plays an important role in giving back through helping all pathologists stay current so that all patients around the world are provided the very best available care. International communication efforts have been aided by the proliferation of mobile phone technology and inventive strategies for adapting mobile phones for taking pictures, such as building an adapter using a phone case and a toilet paper roll or using free-hand smartphone microscopic photography techniques without any adaptor (as demonstrated in this YouTube video by Annie O. Morrison, MD: https://youtu.be/cfd9VhBIR4; accessed February 15, 2017).37–44

- In the social media follower survey conducted by Dr Gardner, several users commented in this regard35:

  "Living in Pakistan, where educational resources are scarce and the pathology books are often too costly and therefore out of reach... contributions on social media have been really helpful to me."
"I am a path resident from a very small town in India. But because of social media I don’t feel handicapped, I can learn the best things. …that was unimaginable earlier. . ."

". . .[in] developing countries. . .there is limited or no access to this kind of education except by social media. For example, there are no dermatopathologists in Afghanistan. The only access to expertise in dermpath is via social media and telemedicine."

- Social media allows you to start a social movement and generate a call to action through its global interconnectivity. One example includes #ILookLikeAPathologist, which is directed at overcoming stereotypes about pathology among the public, other doctors, and trainees. Common pathology stereotypes include the idea that all pathologists are antisocial lab technicians who only perform autopsies. No wonder many medical students dismiss pathology as a career choice! Through social media, pathologists from across the globe have posted pictures under #ILookLikeAPathologist to break down these stereotypes and show the vibrant and wonderful world of pathology. From May 1, 2016, to July 23, 2016, #ILookLikeAPathologist was tweeted by 185 Twitter accounts more than 784 times, resulting in 1,272,394 views (Figures 7 and 8).

- Social media presentations at national meetings represent a growing and ever popular new form of education. Examples include USCAP’s 2014 and 2016 “Practice Changers” presentations on social media, USCAP’s 2017 special course by Dr Gardner on social media for pathologists, the American Society of Dermatopathology 2015 Young Physician session panel, and a panel discussion of social media at the CAP 2016 Residents Forum.

- Twitter users enjoy the quick dissemination of cutting-edge information from abstracts, articles, conferences, courses, textbooks, and interesting case sites from our field, and also from our clinical counterparts.

- Twitter allows users to be in more than one place at one time. Most major meetings have multiple presentations competing for the same audiences at the same time. Twitter allows you to sit at one presentation and still glean the content of a concurrent presentation via live-tweeting (posting messages in real time during a presentation so that people not at the presentation can receive the content).

- Users have access to expansive preparatory materials for pathology board and maintenance of certification examinations (search these hashtags: #PathBoards and #KnowOrFail).

- You can experience common and sublime pathology cases from all corners of the world. Numerous high-quality gross and microscopic images are shared every day via Facebook and Twitter.

- Social media is becoming an important tool for posting staff, trainee, and faculty positions.
Figure 8. Participants in the hashtag #ILookLikeAPathologist represent a diverse array of pathologists, pathology programs, and trainees.

Figure 9. Audience members at the 2016 United States and Canadian Academy of Pathology annual meeting social media “Practice Changers” session; March 2016; Seattle, Washington.
• Social media offers a rich network of connections with other pathologists, physicians, and patients. These connections can prove invaluable for personal and career advancement, education, and research.46,47

WHAT ABOUT PATIENT PRIVACY?

Undoubtedly, patient privacy is an understandable and constant concern. Our advice is to remember that social media engagement is no different than discussing challenging cases at conferences, in an elevator, in textbooks, on board examinations, and on unknown case-based Web sites. The strictest commitment to protect patient privacy remains absolutely essential, as in any other arena of our personal or professional lives. If the ethical principles of privacy are respected, we believe there is no significant privacy issue with sharing completely deidentified pathology images.40

TAKE THE TWITTER CHALLENGE!

Now is the time to translate your social media curiosity into practice.

Step 1: Join the Movement!

2. Make a short and easy-to-remember Twitter handle (or, user name). Remember Twitter allows only 140 characters per post. Your Twitter handle should be short so that it gobbles up as few characters as possible, and it should be specific so that it's easy for everyone to remember your handle. Most include some combination of their last name and/or subspecialty.
3. Insert a professional photograph. Users with a professional headshot appear more approachable and tend to gather followers more readily. If you don't have a professional photo handy, just take a selfie pic and use that instead. In any case, it is critical that you add a photo to your profile. Accounts without a profile pic look fake or unused; no one will want to follow you if you look like that.
4. Provide a short description in your profile. Most people who use Twitter as a professional resource include home institution and subspecialty to allow users a quick sense of their interests.
5. Make sure you turn the “Protect my Tweets” setting to OFF (slide the switch button to the left). If your account is “protected,” that means it is private. Thus, no one will be able to see your tweets without first following you. This will greatly diminish your interactions with others and decrease the number of potential followers. The authors feel that having tweet protection/privacy turned on defeats the purpose of Twitter for most users. Twitter is meant to be a public forum for sharing with the world.

Step 2: Experience!

The most high-yield benefits of Twitter come through regular engagement. Here’s how to get started:

1. Commit to once-daily Twitter activity for 3 weeks.
2. Follow Twitter users with similar interests. Start with the authors of this paper (Twitter handles listed on the first page)! Also, search Twitter with the hashtags of interest from Tables 1 and 2 to find other users of interest. Follow their followers and follow those who follow you, if you share similar interests.
3. Try “favoriting” and “retweeting” 3 postings per visit. Promoting others is an important aspect of supporting others in the Twitter community and becoming visible on Twitter. Make sure to “favorite” (select the heart sign) and “retweet” (select the retweet icon next to the heart icon, which shares that specified message with your followers).

Step 3: Contribute!

Try to tweet/post at least 1 message and/or image per week. Generating and posting quality content is an important aspect of experiencing Twitter, and it will quickly increase your visibility on Twitter. The most popular messages have images of some sort: pathology gross or microscopic images, high-yield PowerPoint slides from a recent presentation or meeting, pictures from a recent trip, etc. Other popular messages include pearls from tables and graphs, links to useful papers, handy tips, or meaningful quotes. If posting material generated by others, make sure to credit them by listing their name or their Twitter handle. Until you have a large following, the best way for your message to be widely disseminated is to include Twitter users with large followings and a popular hashtag (Tables 1 and 2).

#SeeYouOnTwitter

In summary, social media offers tremendous advantages for pathology. It provides academic currency for career advancement via research collaborations and leadership opportunities. It is the modern route for promoting ideas, projects, textbooks, consult services, and courses. It helps us all keep current via sharing of new papers, meeting updates, and journal clubs. It facilitates a diverse network of contacts from patients to physicians to research collaborators. It provides an opportunity to share these precious resources with our global partners to improve patient care across the planet. Paraphrasing the very wise Eric Peeler, second-year medical student at the University of Arkansas for Medical Sciences (Little Rock), just #DoTheThing.49 Join Twitter today (Figure 9).

References
