CAROLINA CONNECTIONS

Carolinas Chapter—American Medical Writers Association

Winter 2004

President's Message

Viruses, worms not just human parasites

BY TERRY PAUL

In early January, an on-line newspaper article on three of last year's computer viruses caught my eye. My concern was the speed at which the viruses infected a large number of computers.

On January 27, 2004, my anti-virus software alerted me that in my inbox was an attachment containing the W32.Novarg.A@mm worm. The manufacturer of my anti-virus software had provided updated virus definitions and W32.Novarg.A@mm removal instructions the previous day. I followed the removal steps as a precaution and found that my computer was clean. Because I did not open the suspicious e-mail or its attachment, the worm did not infect my computer.

I was impressed by the speed at which the manufacturer of my anti-virus software had tailored its anti-virus software to this worm. Since my first encounter with W32.Novarg.A@mm, my anti-virus software has alerted me to the presence of this worm in my inbox at least six times. The lessons to be learned from this are not to open any suspicious e-mail, or e-mail from people you don't know, to get effective anti-virus software, and back-up your files in case your files are infected. Read more about viruses and how to protect your computer in the article *Watching the worms* on page 3.

Spring conference right around the corner

Spring is already here, and the Carolina's Chapter 2004 conference is Friday, May 7 at the Friday Center in Chapel Hill. The courses to be offered included:

- English Usage and Abusage (R), taught by Edie Schwager
- Building a New Drug Application (PH), taught by Howard Smith
- Ethics of Authorship and Editorship (EW/PH), taught by Nancy Taylor and Betts Field
- Rhetorical Grammar (ADV), taught by Nancy Taylor

For more details, please visit the chapter's Web site, www.amwacarolinas.org. For directions to the Friday Center, please visit www.fridaycenter.unc.edu/fc/fcdir.htm.

In This Issue

Editor's note

By Tara Hun

January's Carolinas Chapter AMWA meeting was one of the best-attended recent chapter events. Over 25 AMWA members came out to hear panelists discuss freelance careers or to share their experiences with the group (see article below). A combination of factors probably accounted for the good turnout, including the interesting topic, the central Cary location of the meeting, free food (always a plus!), and the weather (one of the few snow or ice free days in January).

More good things are on tap for the chapter. On May 6, the evening before the May 7 conference, the chapter will host a party in RTP in lieu of a second quarter meeting. Details will follow on the AMWA list serve and the chapter Web site (www.amwacarolinas.org).

In addition, the monthly luncheons continue to be held the last Friday of the month at noon at George's Garage on Ninth Street in Durham. These luncheons are a great, informal way to netk(y)

Freelance panel discussion informative and well-attended

By Tracey Fine

On January 21, 2004, about two dozen Carolinas Chapter members filled the training room at i3 Research in Cary for the first quarterly chapter meeting of 2004. This was an evening of networking, delicious hors d'oeuvres and desserts, and an expert panel of freelancers dispensing advice on starting and managing a freelance business. The panel comprised Carolinas members Linda Puertolas of ClinDoc Associates, Chandra Louise, PhD, of PharmSupport, and Patricia (Trish) Watson of TrishCraft.

The panelists are seasoned biomedical communicators. Linda has been a medical writer for 13 years and a freelancer for 3 years. She has a bachelors degree in psychobiology and a masters degree in education. Her area of expertise is clinical submissions. Chandra has been a medical writer since 1995 and began freelancing in 2001. She and her partner, Fred Smith, MD, provide medical writing services to the pharmaceutical and biotechnology industries. Trish Watson began working in scientific publications in 1984 and has been freelancing since 1987. Trish holds a masters degree in technical communications and is certified as an Editor in the Life Sciences. She works as a writer, editor, manager, and consultant.

While all panelists have thriving freelance businesses, they took different approaches to starting them. Linda made careful, methodical plans about 6 months in advance of her business start date. Early on, she defined her business as a sole owner/operator company as opposed to a growth business; she honed her networking and marketing skills to land her first clients; investigated health insurance and other benefits; and protected her personal assets by incorporating her business.

Chandra and Fred represent the other end of the start-up spectrum. Their initial plans were less defined, but the results have been just as successful. Due to market demands, PharmSupport has evolved from primarily providing medical writing training services and some medical writing to primarily providing medical writing services with less emphasis on training.

All panelists agreed that managing a medical communications business is an ongoing learning process. For instance, Linda has learned the importance of everything from how to craft and negotiate a finely detailed contract to showing her appreciation for clients by sending personalized holiday greeting cards. Since establishing their freelance business, Chandra and Fred have learned that there is an unpredictable ebb and

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flow in the medical communications market and that adapting to changing market needs is essential. Trish, who moonlights as an artist, suggested that discovering natural talents and passions is the best path to creating a niche.

The benefits of freelance medical writing were carefully weighed against its inherent challenges. While freelancing allows for a flexible lifestyle, variety of work, and the satisfaction of working for one's self, panelists cautioned that it is not for everyone. To be successful, a freelancer must be able to generate ongoing business, negotiate contracts, send invoices, track accounts, pay taxes, and deliver well written documents on time—and with a smile. Adequate cash reserves are essential to weather the lean times. Finances must be carefully managed to pay taxes and provide for retirement. Before relinquishing a regular paycheck, a would-be freelancer should undertake a careful assessment of how these tasks would be accomplished.

The meeting ended with a lively Q&A session that elicited more advice from panelists as well as audience members, such as the importance of obtaining document templates, business insurance, and examples of proposals from established freelancers. Web sites were declared unessential as a marketing tool, but helpful as a "living business brochure."

For more information on freelancing, see the resources page on the Chapter Web site for *Starting a Home-based Medical Writing Business in North Carolina* and *Professional Liability Insurance for Medical Writers*. Freelance courses and discussion groups are offered at the national AMWA conference.

Writers' woes

The dangerous realities of the global network

By Terry Paul

Watching the worms

Computer malfunctions or software glitches can lead to loss of valuable time, delay in meeting timelines, and can be costly to resolve. Viruses are a common cause of computer problems .

Three widely publicized computer viruses (Blaster, Nachi, and SoBig.F) were responsible for infecting almost two million computers worldwide from August 19, 2003, to September 2, 2003. These viruses are classified as worms: a program that makes copies of itself (e.g., from one disk drive to another or by copying itself using e-mail or another transport mechanism). A worm may damage a computer and compromise its security and may arrive in the form of a joke program or software.

Meet the worms

Blaster, MSBlast or Lovsan exploited a specific vulnerability in some Windows operating systems. When the worm infected a computer, it used the Internet to find and attack other computers with the same security weakness.

Nachi or Welchia searched the Internet for computers that had the same vulnerability that Blaster exploited so that it could download a patch, which then overloaded computer networks, leading

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New technical communication certificate program at Duke University

By Jenny Walker

If you want to enhance your skills in technical communication/writing, or find a way to break into the field, Duke University may have an opportunity for you. Duke Continuing Studies has begun a new certificate program in Technical Communication and is working closely with the Society for Technical Communication in developing it.

To obtain the certificate, students must take three required classes, 32 hours of "skills" electives, and four "tools" electives (a total of 11 classes). Two of the required classes are "Technical Communication: Introduction," a practical course designed to help students determine an area of specialization, and "Technical Writing Workshop," in which students develop a piece of work suitable for a portfolio. Skills electives include topics such as Web writing, typography, and teamwork and collaboration. The tools electives encompass a wide variety of practical applications such as HTML, JavaScript, Adobe Photoshop, and Macromedia software programs. All classes are taught in the evening and on Saturdays. There are three terms per year: spring, summer, and fall.

The Technical Communication certificate program is designed to help people break into or establish a niche in a field in which, with commitment and energy, it is possible to make a very good living.

While it is necessary to complete an application and pay a fee to obtain the certificate, you do not have to be enrolled in the certificate program to take the classes. Classes are offered on a first-come, first-served basis. Any classes taken prior to applying for the certificate will count towards that certificate later. For more information or to register, call 919-684-6259. You may also register online at www.learnmore.duke.edu.

http://www.learnmore.duke.edu

Paper—The 3-D 'screen'

By Patricia Watson

Have you ever done a project completely electronically, with very few paper notes except maybe copies of new items to insert? I'm in the middle of my second one now, and I've been pondering an unmistakable sensation of slogging through mud.

After all, I was working with the latest versions of software I'd worked with for years, have a fast laptop with a 17-inch high-resolution monitor, and a team made up of highly experienced people. And it wasn't the copious changes enacted during the several team meetings—these were generous but fairly typical given the circumstances. And it wasn't my eyes—I had them checked, no changes there. Was it fatigue, from hanging my arms over the keyboard in a semi-rigid posture for hours on end, slowing me down? Didn't seem to be, I've plenty left for jogging afterward . . .

> "what was missing wasn't all that old pen and paper, quill and parchment, stone-ax technology from the cave days"

And then, one day, while moving between my two computers, laptop on one desk and desktop on the other, I suddenly realized what it was—there was a fundamental element missing in this modern, all-techno process. And it wasn't the pen and paper that was missing, at least not in the usual sense. It certainly wasn't the writer's cramped right hand with the dent in the middle finger from the pen. No, what was missing wasn't all that old pen and paper, quill and parchment, stone-ax technology from the cave days that we rejoiced at the prospect of losing when we invented the printing press and then realized with the advent of the computer and then the personal computer. . . no, none of these things are we sad to see go . . .. But there's one thing, one item

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that I suddenly realized we'd lost in that transition from the limited space on the page to the limitless inner space of the Internet. Ironically this is the very limitation that we'd thought we'd transcended when we moved with the computer's processing speed and storage capacity, and the Net as a font of information. We've lost 3-dimensionality.

I don't meant the 3-D of computer-aided design and computer-aided machining or the zoom effects we see in computer games and experience in virtual reality, not the fabulous liquidity of computer graphics in movies. No, what we'd lost, or at least what I felt I had lost, was more simple than that. I had lost the simple "page," flat but still 3-D in the same way an electron has mass—barely there but key in its existence and function and powerful when gathered in large numbers. Let me give you some examples.

Paper meeting	Electronic meeting
Picture many people sitting around a large table, each with stacks of paper in front of them, copies of information to peruse, evaluate, emend, verify, and confirm: it's already written. Each stack is piled slightly differently, and many different colors of flags (sticky notes) poke out in all directions, some neatly stair-stepped in coordinating colors and others like an explosion of confetti. Colored pens scatter across the table. (At least) One person also has a computer (1980s and beyond). Everyone turns each page in turn and discusses the relevant issues. Conversation is spirited and many notes are made. In the end there's one stack of papers, with all the flags in key places and key colors, top for part, chapter, and section (or notes) in it's own color, right side with 3 colors for 3 authors who need to answer queries, left side for verification issues . . . or whatever the system may (evolve to) be. Turn the page . . .	Picture many people sitting around a large table (or a distributed simulcast via computers). Some have stacks of paper, some have computers, some have both. On a screen is the page that's already written and being discussed, it's projected large enough to read well from everywhere in the room. A computer is loaded with all the files to be perused, evaluated, emended, verified, and confirmed, again, it's already written. Everyone sees each page in turn and discusses the relevant issues. Some look on their paper copies, some on their computer, some on the screen. Conversation is spirited and many notes are made in many different colors, highlights, and drawing tools that flash across the screen like fireworks. In the end there's one set of files, with all the notes in key places and key colors for the different authors, the different organizational levels, and the remaining issues . . . in whatever the system may (evolve to) be. Turn the page . . .

It's not really apparent, right at first, what the difference is. And once you see it, you wouldn't think it's all that different. At least I didn't think it would be. But then, in the middle of the project – after 3 of the 6 full-day meetings over the course of several weeks, and after most (or I hoped most) of the changes were behind me, suddenly I realized that I missed the instant access of 3-D pages. Let me give you some examples.

Imagine you are in front of a large table. You have before you, side-by-side, a 17-inch-tall stack of pages and a computer with a 17-inch screen and infinite (for this thought-experiment) computer memory and speed, which is already running. How quickly can you tell me (1) how many permissions are outstanding, (2) which author has resolved his author queries, and (3) about how long we should estimate for the changes to be made to the computer file? (I'm comparing paper to computer screen here, not laser printers to hot lead type!)

I sit down at the computer (or hunch over), place my hands over the keypad and mouse, open up the file, and either view a file where I'd already catalogued these answers beforehand, or open a file and tabulate these items within each computer file, searching or sorting by the various coding elements. I figure with a good system this might take 3 to 4 minutes. (!) Not bad. Until I glance at the 17-inch manuscript beside it and get the same information (not quantified but definitely qualified) in about 10 seconds. Ok, let's say 30 seconds. Why? For no other reason than that by one glance, I can see all that information by color and position,

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without paging through anything to access the information. You can do one 8 x 11 page sideways. Or you can do 2 pages 6 inches x 9 inches at 50%, or 4 pages 4 inches x 3 inches at 25% . . .

Here's another example. Imagine six files containing basically the same information, each designed for a different audience. Over the course of several meetings their content was rearranged, with pages swapped out and swapped around and in some cases duplicated among some of the files. You want to know: (1) how many times page X appears in the 6 files; (2) what pages that are in file 4 and not in file 6; and (3) whether there are 2 different versions of the same page in any of the files. And you also know *before the first meeting* that you'll want to know this information later in the process. So in both cases this information is duly noted with colors and such. Now picture the computer and a stack of papers, say only 3 inches thick this time. . .

I have that little dent in the middle finger of my right hand to remind me how wonderful computers are to people who communicate.

The only difference between this scenario and the last one is that, with a thinner stack of papers, it's a really good idea to stagger (stair-step) the flags so you can see them all at a glance. Again, would be a glance at the paper versus hunching over the computer, opening the file . . .

Don't get me wrong, I'm not a Luddite who eschews technology. I remember how wonderful it was the first time I simply changed a file on a computer screen rather than retype an entire essay. And I'll never forget the thrill when I saw, for the first time, 36 automatically paginated 2-column pages, complete with mathematics and copious headings, neatly arranged across a 24-inch monitor. Wow, I thought, this was really the 80s! But I'll have to admit I think fondly of the 30-inch x 30-inch desktop of my antique, ink-stained secretary desk.

So just to be sure, I wrote this essay on paper, all 8 scribbled pages of its first draft, and I have that little dent in the middle finger of my right hand to remind me how wonderful computers are to people who communicate. I'll admit I enjoyed the kinetic experience of moving not just my fingers but my hand across the page and my back and shoulders along with it. I'd forgotten how much fun it is to let a dash sprint across a page or to be expressive with the loops in the ys and bs. And I'm so out of practice that 8 pages gave me writer's cramp.

No, there's no way I'd ever give up the computer – it represents to us not just a desktop that could use a little elbow room, but also a file cabinet that doesn't crowd an office, and now thanks to the Net a huge library you don't have to slog through the snow to get to and an amazing DVD and music collection -- a depth of information barely fathomable to us today that would be unthinkably accessible to the townsfolk marveling over the printing press in the days of yore.

All I'm saying, in my observations of the value of 3-D visual coding in document production/ collaborative authoring, is that it's worth noting, in our celebration of the wonders that technology can do for us – the speed, the efficiency, and the space savings – that we should keep in mind the human element, which not only works in living color but also has depth and dimension as well, and try to be mindful of our interfaces for not just software and hardware but brainware and boneware as well.

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them to crash.

SoBig.F was a mass e-mail worm that hijacked a computer user's e-mail address and sent messages to everyone in the address book.

January worms

In mid-January, a worm virus named **Bagle-A** was reported to be spreading rapidly across Australian e-mail networks. The worm is sent via e-mail as a message that contains few lines of text suggesting that the e-mail may be from a system administrator. It also includes an executable attachment. When the attachment is activated by the recipient, the worm installs a program on the computer that allows the worm to be e-mailed to other users in the system's local address book. The worm also attempts to install a backdoor or Trojan on infected computers, listening for activity on port 6777 (see "Firewall" for definition of a port).

Installing anti-virus software helps to thwart most viruses; however, the success of these software programs depends on how quickly the manufacturer can respond to the out-break of the virus and deliver the anti-virus patch to their subscribers.

In late-January, another worm virus was identified. **W32.Novarg.A@mm** is a mass-mailing worm that arrives as an attachment with the file extension .bat, .cmd, .exe, .pif, .scr, or .zip. When a computer is infected, the worm sets up a backdoor into the system by opening TCP ports 3127 through 3198, which can potentially allow an attacker to connect to the computer and use it as a proxy to gain access to its network resources. In addition, the backdoor can download and execute arbitrary files.

Viruses can cause major damage to computers leading to loss of data or expensive repairs. Currently, there is no means to completely protect your computer from viruses; however, there are several ways minimize the chances of future attacks from the viruses described above and other types of viruses.

Anti-virus software

Installing anti-virus software helps to thwart most viruses; however, some viruses probably can evade the anti-virus software. It will likely be a race against time for the manufacturer to develop effective anti-virus software before the virus can cause widespread damage. It is a good idea to regularly download new virus definitions from the anti-virus software manufacturer. Anti-virus software that can be automatically updated via the Web is preferred.

Choose well-established anti-virus software, e.g., NortonAntiVirus (Symantec), McAfee VirusScan (Network Associates). Good anti-virus software can be configured to scan incoming and outgoing e-mails, downloaded files, and any floppy disks or CDs that are inserted into a computer.

Firewalls

If you have a high-speed Internet connection that is always on, your computer may be probed by a hacker. The hacker could extract enough personal information to impersonate you or steal important financial data. Furthermore, hackers could use your computer to launch attacks to cripple major Web sites, financial

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institutions, and other businesses. One strategy to minimize exposure of your computer to an intruder is to install a firewall. A firewall is software that monitors all incoming and outgoing network traffic and allows only the connections that are known and trusted. A firewall also makes your computer less visible on the Internet and helps ensure that any hacker who does find your computer won't be able to access its programs and files.

There are three ways to install a firewall on your computer:

- If your operating system is Windows XP, activate its built-in firewall via the Control Panel Network.
- Purchase a separate firewall software; an application that runs in the background to monitor your computer at all times, e.g., ZoneAlarm Pro (Zone Labs), Norton Personal Firewall (Symantec).
- Interpose a hardware firewall between your computer and the Internet. These devices contain firewall software that operates in a similar way a basic software product does.

Good firewall software should protect against incoming threats, i.e., they should put the computer in "stealth mode" making it virtually undetectable and closing the software gateways technically known as "ports." A port is a specific connection point through which applications on your computer connect to the Internet. A hacker needs only one open port through which to mount an attack. Firewall software should also provide outgoing protection. If you use instant messaging and other types of on-line file sharing, the firewall should be able to effectively filter these applications. This is important because instant messaging applications and other types of file sharing programs can be used to infect your computer with a Trojan Horse (malicious code often hidden in e-mail attachments that, once activated, can be used by hackers to steal or destroy programs, files, and personal information), which performs outgoing communications.

Minimizing threats to your computer

Other ways to reduce your vulnerability to viruses and hackers.

- Regularly update your operating system, Web browser, and other key software, using the manufacturer's update features or Web downloads.
- Download critical software security updates from Microsoft's Web site.
- Don't open e-mail attachments from strangers. Even if an e-mail is from someone you know, check with them first before opening it.
- To thwart password-cracking software, use passwords that are at least eight characters long and include at least one number.
- Delete suspicious and junk e-mail from your inbox. Virus creators and spammers attempt to trick you into opening e-mails and attachments by making it appear as if they were sent by someone you know.
- Back up your data daily.