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Welcome to the New OWL (Powered by Sakai)

Find your courses here: HTTPS://OWL.UWO.CA

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About In Touch

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Editor: Merran Neville

The purpose of In Touch is to inform our users about activities and events of Information Technology Services.

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We welcome your comments, suggestions, and articles.

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Web: http://www.uwo.ca/its/

Notices/Information

• Scheduled System Maintenance takes place during Sundays, 3am - 12noon; Thursdays, 12am - 7am
• ITS Services Document available at: http://www.uwo.ca/its/services.pdf

Need help, have a question?

• Call ITS Customer Support Centre:
  519 - 661-3800 ext. 83800
• ASK ITS: http://askits.uwo.ca/
• Email using the web form:
  http://www.uwo.ca/its/helpdesk/question.html

Instructional Support Team News

ITS Instructional Support Team <its-owl@uwo.ca>

New OWL (powered by Sakai)

Training in the new OWL has been running since early February and will continue into the fall. Information about training, including dates/times, and how to register, making plans to build your course or project site in the new OWL, and documentation is available at:

http://webct.uwo.ca/owlflightplan/getting started.html

ITRC student consultants and members of the Instructional Support team have been assisting instructors to migrate content and set up their courses in the new OWL ready for September. Migration usually involves moving the content from the file manager in WebCT to the Resources tool in the new OWL. Quizzes are moved using Respondus, http://www.uwo.ca/its/sitelicense/respondus/.

Many instructors are finding that this is a good time to do some spring cleaning and are building their courses from scratch in the new OWL.

More information about the new OWL and the progress of the OWL Flight Plan can be found at http://webct.uwo.ca/owlflightplan/. Please return regularly to this site to check the latest news.

The ITRC is the place to phone or visit if you need help getting your course(s) ready for the fall. Please visit us in the Support Services Building, room 4320 or phone 519 661-2111 ext. 85513. Contact information and hours are provided at: http://itrc.uwo.ca/contact.html
Dave Loveless Staff Award

Merran Neville <mneville@uwo.ca>

Ihsan Rehman, who is a member of the ITS Applications Development team, is the 2012 recipient for the Dave Loveless Staff Award. The following was said about Ihsan in his nomination: “Ihsan is one of our quiet people whose good work isn’t always acknowledged with bright lights and banners. For the last few years, Ihsan has continued to evolve our RAMP registry to meet the institution’s changing needs. RAMP has grown into a critical application. Ihsan has demonstrated that we have left this important work in very capable hands.”

Congratulations, Ihsan!


ITS Staff Retirement - Andy Skelton

Merran Neville <mneville@uwo.ca>

Long time ITS staff member, Andy Skelton, retired in June 2012. Andy was a member of the Onsite team and provided support to many units on campus. Most recently his support has been for the Faculty of Law and Huron University College.

A retirement party was held for Andy at the Grad Club on Friday, June 15 and Andy was joined by his family and colleagues, including many members of the units he supported. His knowledge and support over many years has been greatly appreciated by all those who have worked with him.

Congratulations, Andy on your many years of service to ITS and Western. We wish you the very best in your retirement.

(See pages 10-12 for more photos.)
I have supreme confidence when I say more valid than others. For example, Western here: we post the ones people report to us at seen the generic phishing attempts, and other action. Most email users have credentials, open an attachment, or some entice a victim to give up information, product of the 'hacker', 'cracker' culture. telecommunications systems. It is a 'illegally' manipulating analogue the action of exploring and sometimes 'phreaking' was a term used to describe those interested, the expression is a derivative of 'fishing' and 'phreaking' where about a person, they are able to construct obtaining money), but not always. For for the sake of obtaining money), but not always. For those interested, the expression is a derivative of 'fishing' and 'phreaking' where 'phreaking' was a term used to describe the action of exploring and sometimes 'illegally' manipulating analogue telecommunications systems. It is a product of the 'hacker', 'cracker' culture. 'Phishing' employs the use of bait to entice a victim to give up information, click on a link, disclose their bank credentials, open an attachment, or some other action. Most email users have seen the generic phishing attempts, and we post the ones people report to us at Western here:

Some categorical declarations are more valid than others. For example, I have supreme confidence when I say “Anyone who has received email in the last decade has received a phishing attempt”. Whereas, I have less confidence when I say “People who receive phishing attempts are apt to fall for them”, even though I know some people DO fall for them. Incidentally, I assume most reading this article know what ‘phishing’ is; though I could have used ‘SPAM’ in my example rather than ‘phishing’.

Phishing is a type of attack (on information systems), where the system being attacked is the ‘human’, on the assumption that the human is the weakest part of the system, unpatched, and therefore vulnerable. Basically, it is an attempt to acquire information, passwords, usernames, etc. Frequently it is an attempt to acquire information on a person’s identity (for the sake of obtaining money), but not always. For those interested, the expression is a derivative of ‘fishing’ and ‘phreaking’ where ‘phreaking’ was a term used to describe the action of exploring and sometimes ‘illegally’ manipulating analogue telecommunications systems. It is a product of the ‘hacker’, ‘cracker’ culture.

‘Phishing’ employs the use of bait to entice a victim to give up information, click on a link, disclose their bank credentials, open an attachment, or some other action. Most email users have seen the generic phishing attempts, and we post the ones people report to us at Western here:

Security Team News
Jeffrey Gardiner <gardiner@uwo.ca>

http://www.uwo.ca/its/accounting/official-email/phishing/

However, there are many variants. The generic phishing attempts work by sending out spam-like messages that appear to come from your bank, financial institution, Western, Microsoft or some other entity you might do business with. If you have ever seen a message appearing to come from the First Bank of Yellowknife, and thought “Hey, I don’t have an account with the First Bank of Yellowknife”, you will have seen one of these. They tend to target many others in the hopes that some percentage of recipients respond. If they send out the phishing attempt to one million people and one tenth of one percent of the recipients reply that’s 1000 people. If some portion of that group is then compromised as a result, it’s not hard to see why people do this.

On the other hand, when the attacker is able to gather specific information about a person, they are able to construct a more cunning phishing attempt. This is like using bait known fish are partial to, or like targeting a fish with a spear. This is called ‘sphere fishing’. For example, if an attacker is able to discover Alice commonly emails Bob, an attacker might surf Alice’s Facebook page, Bob’s Facebook page, and carefully construct an email appearing to come from Bob appealing to Alice’s interests to try to trick her. Fewer of these types of attempts go out, but they have a much higher success rate. This is one of the reasons you may see lots of emails appearing to come from our Help Desk asking you for your login credentials. Rest assured, our Help Desk will never ask you for your login credentials by way of email. Even at the Help Desk, they do this only when the problem cannot be solved otherwise. Who tend to be the recipients of ‘spear phishing’ attacks? Generally, managers, business leaders, victims whose exploitation would provide great benefit.

Another attack method occurs when an attacker is able to procure a copy of a legitimate email that has been delivered. An identical, or nearly identical email is sent with a substituted attachment (often containing a virus), or an illegitimate link is substituted for a legitimate one. The attachment, or link is substituted with a malicious version and the message spoofed to appear sent from the original sender. This method is often used to do more than gain information or exploit money, but used by more skilled attackers to gain standing access to resources they otherwise would not have access to. This method was used to exploit NORTEL for a decade. Former officers of the company recently acknowledged that foreign nationals had direct access to extremely sensitive intellectual property held by NORTEL ultimately contributing to the lack of commercial competitiveness of the company.

More disturbing has been the emergence of phone phishing where email is not used at all. This HAS happened at Western (recently)! Basically, the outcome is the same as ‘spear phishing’. Often the attacker will have some personal details of the victim, they will use over the phone to leverage trust, but not always. The results are the same. Identity theft and access to sensitive, often lucrative, intellectual capital are reasons we’ve seen it at Western.

So what can we do to recognize phishing, whatever sort? Cyber-Security awareness starts with the following:

• if it sounds too good to be true, it is
• if it does not appear or sound to be authentic, it probably isn’t
• does the content of the message appear in search engine results?
  • if you hover your mouse over the link, does your browser or security software silently scream at you (does the link match the appearance of the link)?
  • seeing silly typos, formatting, or grammatical errors a professional would not make

(continued on page 5)
The Open Experience: Clipboard Managers

Paul Lukasewych <plukasew@uwo.ca>

Years ago, I was working on a helpdesk for an Internet service provider, answering the continuous stream of support email that comes in. I would often find myself needing to repeat some troubleshooting advice I had given a few emails ago, but because I had copied something else to my clipboard in the meantime, I had to go back and find that old response again. At first, I just shrugged this annoyance off as a limitation of the copy-paste system, but then something changed.

One day I decided it was time to reformat my Windows workstation, but instead of reinstalling Windows, I took the opportunity to try out GNU/Linux with the KDE desktop environment. As I started to explore KDE, I noticed that KDE had (and still has) a neat little tool called Klipper, which actually kept a history of all the items you copied. With a click or two I could restore previous contents of the clipboard, even if I had copied many other things since. This type of tool is known as a clipboard manager, and was such a revelation that I decided to stick with Linux as my operating system.

While my email productivity improved, eventually I was forced to go back to Windows for various other reasons. Being a programmer, I wrote my own rudimentary version of Klipper, but it didn’t integrate well with Windows and I eventually stopped using it. Having recently returned to Linux and KDE however, I can say that I’m quite pleased to be able to use Klipper again.

Fortunately, the idea seems to have caught on, and these days there are many more options than there were back when I had to write my own tool. Below are a few open source options for various platforms. Give one a shot, and I’ll bet you won’t want to go back to a standard clipboard.

Open Source Options for various platforms

- **Wlipper (Windows)** - [http://sourceforge.net/projects/wlipper/](http://sourceforge.net/projects/wlipper/)
- **Keepboard (Cross-platform)** - [http://sourceforge.net/projects/keepboard/](http://sourceforge.net/projects/keepboard/)
- **Flycut (Mac)** - [https://github.com/TermiT/Flycut/downloads/](https://github.com/TermiT/Flycut/downloads/)
- **Klipper (KDE)** - [http://userbase.kde.org/Klipper/](http://userbase.kde.org/Klipper/)
- **Glipper (GNOME/Unity)** - [https://launchpad.net/glipper/](https://launchpad.net/glipper/)

(Security Team News - continued from page 4)

- if the message asks you to send your information to them, rather than the other way around
- if you don’t have an account with the company supposedly sending the email
- our Help Desk will never ask you for your credentials via phone or email
- email phishing claiming to be From: or about Western can be forwarded to [phishing@uwo.ca](mailto:phishing@uwo.ca) so we educate others and prevent attacks from being successful.

Any questions about this topic can be directed to Jeffrey Gardiner, gardiner@uwo.ca. If you believe you’ve been phished, contact the ITS Help Desk at 519-661-3800, ext.83800 or email helpdesk@uwo.ca.
VOICE

Choose the “right” voice plan
- Carriers offer a variety of flat rate voice plans. For many users, the basic plan offers more than enough minutes. Additional minutes cost more than the included minutes. You can change your voice plan as your usage changes.

Review your bill monthly and adjust your voice plans as necessary
- If your usage changes, change your voice plan if the usage change will happen the next month and the change in minutes used is large enough to impact the total charge. E.g. your monthly plan includes 250 minutes for $20, the next plan includes 450 minutes for $32 and additional minutes cost $0.10 on both plans. If you are using more than 250 minutes but less than 370 minutes, choose the 250 minute plan. If you are using more than 370 minutes, then choose the 450 minute plan.

Consider pooling voice minutes with other users on the same account
- If you and others on the same cellular account usually use most or all of the included minutes or some use very few minutes while others use more than the included minutes, pooling could reduce overage charges. E.g. 10 lines on the same account each have 250 minutes for a total of 2500 minutes. There would be no additional charges as long as the total voice usage doesn’t exceed 2500 minutes.

DATA

Choose the “right” data plan
- Carriers offer a variety of flat rate data plans. Carriers often have separate data plans for BlackBerry users. Some plans include tethering (i.e. using your device as a hotspot); others do not. Determine what costs, if any, you will incur if you tether. Additional data usage is usually very expensive.

Review your bill monthly and adjust your voice plans as necessary
- If your usage changes, change your data plan if the usage change will happen the next month and the change in megabytes or gigabytes (GB) used is large enough to impact the total charge.

Consider pooling data usage with other users on the same account
- If you and others on the same cellular account usually use most or all of the included MB or GB or some use very few minutes while others use more than the included MB or GB, pooling could reduce overage charges.

Roaming (i.e. using data outside Canada)
- Turn off “data roaming” and cellular data when you leave Canada. This prevents background data usage. You can turn these back on when/if you need to use cellular data.
- If you travel infrequently and/or won’t be using your device for much data, consider a roaming package. Even with a roaming package, data roaming is expensive.
- If you travel frequently and/or use your phone a lot, buy a local SIM card. This requires an unlocked cellular phone. You can purchase an unlocked device or arrange with your carrier to unlock your phone.
- Track your usage either using applications native to your device or through apps that are available through the stores associated with your device.

TEXT

Determine how many text messages are included in your voice plan
- Most voice plans include some text messaging and may include unlimited text messaging. Check with your carrier to see how many text messages are included and the cost for additional text messages. If necessary, add the appropriate text messaging plan to your line. Remember that international text messages are not included.

Roaming (i.e. using your phone outside Canada)
- If you have added a Voice roaming package, it will usually include a limited number of international text messages.

Get the Most Cellular Service for the Least Amount of Money
Mona Brennan-Coles <mona@uwo.ca>
A recurring challenge for anatomy and medical instructors is to provide their students with an interactive or “hands on” education. Some resources, such as ultrasounds and cadavers, are scarce, either because they are expensive or simply inaccessible to students. Instructors are often forced to fall back on textbooks and other static resources which, despite containing all the necessary information, do a poor job of engaging students. Fortunately, technologies exist which can help bridge that gap. By providing dynamic resources such as interactive software modules, instructors can engage their students with meaningful, relevant material that is both inexpensive and flexible.

Over the past several years, the ITRC has worked closely with the Department of Anatomy and Cell Biology on a number of these software projects. Of those, the Digital Atlas of Nerve Blocks was one of the most ambitious. The main purpose of this project was to fill a void in anesthesiologist training. Students need to know the anatomy of a region in order to interpret the ultrasound. Technology allows a pair of images (surfaces/dissection/cross section/ultrasound/ultrasound nerve block video) to enhance this learning.

Developing the Digital Atlas was a multiyear project that involved two ITRC student consultants, Hadrian Mertins-Kirkwood and Amin El-Naggar, as well as two graduate anatomy students, Kathleen Milne and Ryan Rawski. Amin developed the application framework and Hadrian added content provided by Kathleen and Ryan. The end result was a Flash-based application that illustrates the human body’s various “nerve blocks” by comparing images and video using interactive labels. It will be used by anesthesiology students to supplement their in-class learning with visual examples.

### Using the Digital Atlas

When a student first opens the application, they are provided with a list of nerve blocks to choose from. Each block is associated with a particular part of the body (e.g. the “Axillary block” is the armpit). When they click on a block, students enter a module that contains a variety of relevant images, text, and video. They can navigate through this module using a dynamic menu that slides in and out of the right side of the window.

Importantly, all of the images are displayed in pairs. A surface image of the forearm, for example, is juxtaposed with a dissection image of the same area (see Fig. 1). Moreover, anatomical structures (muscles, nerves, bones etc.) are highlighted with interactive labels. Each of these labels can be activated and deactivated by clicking on either the label itself or on the corresponding title in the left-hand menu. The labels allow students to compare images of similar structures that may appear at first to be very different (e.g. ultrasound vs. cross-sectional images (see Fig. 2)).

Overall, the Digital Atlas gives students who are traditionally limited to static textbooks a new and engaging way to learn about the body. It also provides instructors with more flexibility than traditional visual resources.

### How the Digital Atlas Works

The application can be embedded in a webpage, can run on its own, or can even be integrated directly into OWL. The Digital Atlas is Flash-based and draws on a series of XML documents for its content. Although the application is self-contained, adding new content is simply a matter of updating/adding the appropriate XML documents with new blocks, labels, and links to images/video.

So far, graduate students and professors in the Department of Anatomy have provided all of the original text, images, and videos showing how different parts of the body respond to anesthesia. These materials were labeled and edited by the ITRC before adding them to the application. In the future, however, instructors will be able to add new content themselves. The application framework may even be used by instructors outside of anatomy and medicine to suit their unique pedagogical needs.
Figure 1

**Median Forearm**

- Biceps Brachii
- Brachialis
- Brachioradialis
- Cubital Fossa
- Dorsal Branch of Ulnar Nerve
- Elbow Crease
- Flexor Carpi Ulnaris
- Flexor Digitorum Profundus
- Flexor Digitorum Superficialis
- Flexor Pollicis Longus
- Forearm Flexors
- Medial Epicondyle
- Median Nerve
- Pronator Teres & Flexor Carpi Radialis
- Ulnar Artery
- Ulnar Nerve
- Ulnar Veins
Figure 2

**Interscalene Block**

![Ultrasound Image 2](image)

![Cross Sectional Image](image)

- Anterior Scalene
- Anterior Surface of C6 Transverse Proc
- Brachial Plexus
- C5 Anterior Tubercle
- C5 Posterior Tubercle
- C6 Ventral Ramus
- Common Carotid Artery
- Internal Jugular Vein
- Longus Colli
- Middle Scalene
- Sternocleidomastoid
- Thyroid Gland
- Trachea
Photos from Andy Skelton’s Retirement Party
ITS Information

Network Backup Service

For network backup and recovery service, please contact the ITS Legato Group:
Email: legato@uwo.ca
Web: http://www.uwo.ca/its/network/backup.html

ITS Mission

We are committed to delivering the best information technology services and solutions in support of the teaching and research missions of the University.

ITS Open Hours

Building hours and hours of opening for the various areas of ITS are listed on the web at the following location.
Web: http://www.uwo.ca/its/about-its/hours.html

ITS Vision

To be recognized as the preferred source of information technology services and solutions within the campus community and recognized as one of the leaders in the North American university community.

Commonly Used Numbers

<table>
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<th>Service</th>
<th>Phone</th>
<th>Extension</th>
<th>Email</th>
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<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
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<td>Voice &amp; Data</td>
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<td>ext. 83800</td>
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<tr>
<td>Administration Office</td>
<td>519 - 661 - 2151</td>
<td>ext. 82151</td>
<td>FAX 519 - 661-3486 ext.83486</td>
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<tr>
<td>Computer Accounts Office</td>
<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
<td><a href="mailto:accting@uwo.ca">accting@uwo.ca</a></td>
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<td>Computer &amp; Network Operators</td>
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<td>ext. 83525</td>
<td><a href="mailto:operator@uwo.ca">operator@uwo.ca</a></td>
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<tr>
<td>ITRC</td>
<td>519 - 661 - 2111</td>
<td>ext. 85513</td>
<td><a href="mailto:itrc@uwo.ca">itrc@uwo.ca</a></td>
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<tr>
<td>ITS Non-Credit Courses</td>
<td>519 - 661 - 2151</td>
<td>ext. 82151</td>
<td><a href="mailto:its-courses@uwo.ca">its-courses@uwo.ca</a></td>
<td></td>
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<tr>
<td>Dial-in Line (all modem speeds)</td>
<td>519 - 640 - 5305</td>
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<tr>
<td>E-mail Postmaster</td>
<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
<td><a href="mailto:postmaster@uwo.ca">postmaster@uwo.ca</a></td>
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Facilities

General Purpose Labs:
NSC - 110
SH - 1310
NCB - 105,
HSB - 13, 14, 16
SSC - 1000, 1012, 1032

ITS Support Centre  SSB 4100
ITS Training Lab    SSB 4230
ITRC                SSB 4320