In Touch

In this issue:

David Loveless Staff Award

Debbie Jones <debbie@uwo.ca>

Jean Savage, Reina Tebby and Debbie Jones

The 2008 winner of the **David Loveless Staff Award** is Reina Tebby. The citation for Reina's nomination includes the following comments:

Highly contagious optimistic outlook that easily spreads to her Genlab co-workers

Answers emails from students/ instructors at all hours of the day, including weekends, regarding Genlab issues. Comes in during non-work hours to deal with issues.

Deals with instructors with last minute changes to Genlab machine software and does so with a positive attitude

Congratulations Reina!

Reina maintains and supports the campus public computer labs known as the Genlabs. She is responsible for the software on the computers in the labs. See Reina's article on page 7 about the work being done in the Genlabs this summer.

This is the second year of the David Loveless Staff Award. This annual award was created to recognize the significant contributions of an ITS employee.

Scheduled System Maintenance

**Sundays
6:00am - 12:00 noon**

Need help, have a question?

- **Call the ITS Customer Support Centre
519 661-3800 ext.83800**
- **ASK ITS at http://askits.uwo.ca/**
- **Email using the Web Form at
http://www.uwo.ca/its/helpdesk/question.html**

Network Backup Service

For network backup and recovery service please contact the ITS Legato Group, e-mail: *legato@uwo.ca* For details see: *http://www.uwo.ca/its/network/ backup.html*

About *In Touch*:

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We welcome your comments, suggestions, and articles.

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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 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.

ITS OPEN HOURS

Building hours and hours of opening for the various areas of ITS are listed on the web at *http://www.uwo.ca/its/reach/ contactus.html#hours*

In Touch Mailing List

Additions, deletions, and changes to the mailing list can be made using the form on the web at *http://www.uwo.ca/its/doc/ newsletters/InTouch/ subscription.html*

ITS Services 2008-2009

http://www.uwo.ca/its/services.pdf

We're Movin', Movin', Movin' - #3

Doug Vandevrie <dougv@uwo.ca>

Editor's Note: *This is the third article in the series of articles about the ITS move, specifically the Natural Sciences Data Centre, to the new **Support Services Building (SSB)**. Areas of ITS will begin moving in July and others will follow throughout August, continuing into the fall term.*

*Details about the new **Support Services Building** are available online at **http://www.onthemove.uwo.ca/** .*

The New Data Centre

Plans are well underway to move the current Natural Sciences Data Centre facility in October 2008. Here we are, three-months and counting before the **Big Move**. The flurry of building activity continues with increased vigour as we head into the home stretch.

As we move into July, racking and cabling (copper and fibre) will be in progress within the new facility. Air conditioning units, electrical systems, UPS, fire suppression systems and monitoring systems will be started, tested, verified and re-tested in preparation for equipment moves into the building. Components, such as the network infrastructure, campus backbone connectivity, and telecommunication services, will be documented and tested. Finally, a complete commissioning process involving a myriad of testing and verification steps for all Data Centre systems will be completed.

As we move towards the end of August, ITS will enter a **Change Freeze** period within the current data centre to step back and do final planning and preparations for the October move of the Natural Sciences Data Centre to the SSB. This period of time will allow ITS to

- do a final asset inventory to ensure all assets have been accounted for in the move
- complete final plans for all move logistics and processes
- complete development of the Communication plans specific to the Data Centre move
- complete all final checks of the new facility
- continue to coordinate our final move plans with those of Physical Plant

This continues to be a busy time for all and we look forward to the final outcome of a state of the art Data Centre servicing the University Community for years to come.

New equipment racks ready to be moved into the new facility.

Looking east towards the Operations window from the west entrance to the Data Centre

Telecommunicatons Project Udate

Mona Brennan-Coles <mona@uwo.ca>

Voicemail

All Faculty and staff were moved to the new voicemail system (Cisco Unity) on the evening of May 6, 2008.

Remember that

- You will be able to access any messages saved on the old voicemail (Octel) system until September 30, 2008. It is possible to record any saved messages on the old voicemail system if you will need them later than September 30.
- You now require an active appointment before ITS is able to set up your voicemail. This process change aligns Telecom processes with ITS processes for granting access to a number of corporate systems and services e.g. Email, PeopleSoft, OWL and prepares for Unified Messaging.
- **Voicemail Quick Reference Brochures** are being distributed through your telephone coordinator.
- Additional documentation can be found at ***http://www.uwo.ca/its/telecom/voicemail/***

VoIP Telephony

The ITS pilot of VoIP began on Wednesday, May 21 with the Telecom team moving from the SL100 to the Cisco Call Manager. The remaining ITS staff was moved to the Call Manager by Friday, May 23.

As people move into the Support Services Building, their phone service will be moved from the SL100 to the Cisco Call Manager. Sandi Patterson of ITS has been working with the Move Captains to ensure a smooth transition.

All staff and faculty will be converted to VoIP by the end of 2011. Timing of individual moves to VoIP will depend on Emergency Response planning as well as renovations to existing buildings and occupancy of new buildings.

How can I get help from ITS?

- Webform: ***http://www.uwo.ca/its/helpdesk/question.html***
- Phone: 519 661-3800 or ext.83800
- Chat: ***http://www.uwo.ca/its/helpdesk/chat.html***

Safe Surfing Tips - a Healthy Dose of Paranoia

James McCloskey <jamesm@uwo.ca>

Ongoing developments in the world of hacking present new challenges to computer users – most notably the increasing professionalism which has developed in conjunction with increased involvement of organized crime. Where hacking was once a hobby, and later a more serious avocation, hacking has rapidly become a financially rewarding enterprise. Since governments and law enforcement authorities around the world lag behind the hackers in dealing with the challenges of prosecuting illegal activity, the unbalanced risk-reward equation means that computer users are currently exposed to an explosion of novel threats which force a change in the way information security is approached.

In the recent past, most information security professionals would have suggested that an updated (patched) computer running an up-to-date internet security suite would be well-protected against all but the most pernicious threats. The owner of such a well-maintained system could be confident that the system would be able to repel the types of attacks that might stem from "normal" online activity. At the same time, a mainstay of information security professionals' advice has been the importance of

avoiding dangerous websites – hacker sites, pornographic sites, and so forth.

The new hacking reality includes a focus on exploiting application-level vulnerabilities, where previously operating system vulnerabilities were typically targeted. This change in hackers' focus has resulted in several massive-scale website compromises in 2008, as well as the active exploitation of many more "zero day" vulnerabilities than in the past. Together these developments seriously damage the "set it, maintain it, and forget it" advice that previously protected most online users. Users thus must become more educated in order to better protect themselves

> The new hacking reality includes a focus on exploiting application-level vulnerabilities ...

against these increasingly sophisticated attacks. After all, as the saying goes, it isn't paranoia if they really are out to get you!

Protecting Yourself

Online users need to be comfortable with validating web links. In the same way that phishing attacks use faked sender email addresses to trick users into replying to the hacker's email address, links embedded in phishing emails or in compromised web pages often don't point to where they purport to point.

For example, while most users realize that a link that says "click **here**" clearly points to a web address (not "here.com" or "www.here.ca"), users

can be lulled into a sense of security by a link that says "visit ***www.somesafesite.com***". Of course, that link could point anywhere – just as the "click here" link could. If you simply hover over the link, however, the actual linked site will be displayed (typically in the bottom status bar of your browser). Make sure that the link is for a reputable site, and you'll already be surfing more safely.

However, hackers do use a couple of tricks to get past a quick look at the link, such as typosquatting and obfuscation.

- **Typosquatting** occurs when someone registers an internet domain name based on common typos of a real website name, and then tries to trick users into following the misspelled link. For example, a hacker might register ***www.uw0.com***, which might be mistaken for ***www.uwo.com*** if a user isn't careful.
- **Obfuscation** is the process of making a web link unreadable by using special control characters instead of normal text.

In either case, the advice is the same – make sure you know where a link leads, and only click on links that lead to reputable sites.

Helping your browser to protect you

The good news is that security-minded users have more and more help available from their browsers. By selecting the appropriate browser and configuring it properly, many online risks can be avoided.

eduroam Wireless Network

Judy Steward <judy@uwo.ca>

Western has recently joined the eduroam Wireless Network to assist our faculty, staff and students who occasionally travel to other educational institutions across Canada or around the world.

What is eduroam?

The eduroam wireless network is a collaborative network that provides faculty, staff and students with roaming wireless access at eduroam partner institutions. Users authenticate using the same credentials as they would at their home institution, eliminating the need for obtaining a guest account when visiting at another university.

The eduroam concept began in Europe and soon spread to Australia and parts of Asia. Canada eduroam operates under the auspices of the Canadian University Council of CIO's – Conseil des dirigeants principaux de l'information des universites canadiennes (CUCCIO-CDPIUC).

BCNET was the first organization in Canada to create eduroam links for wireless authentication between higher education institutions and currently maintains Canada eduroam's radius servers on behalf of CUCCIO-CDPIUC. Canada now has 8 universities using the technology and more are scheduled to join later this year.

What do you need to use eduroam?

Anyone with a Western computer account can use eduroam. You simply need a wireless device (laptop, pda, etc.) that supports the common wireless protocols (802.11b/g) and supports 802.1x security technology. If your device currently functions on Western's secure wireless network (uwosecure), it should function on the eduroam wireless network (eduroam) with minimal setup.

For more information on the eduroam wireless network, please see the new Western eduroam site at http://eduroam.uwo.ca/.

There are many browsers available for various operating systems, but the most common are Internet Explorer, Firefox, Safari, and Opera. Getting into a detailed description of the security settings is impossible in this article, but the most important setting is to restrict the automatic execution of code. By disabling ActiveX and JavaScript execution, except where explicitly allowed, a user will be protected against many more online attacks. Your browser (or your anti-malware software) may also include some form of anti-phishing filter, which will alert you if you click on a link to a known phishing site. Take advantage of these security settings, and take the time to learn how they can be configured to better protect your online experience.

For more in-depth information, visit the ***http://security.uwo.ca*** or ***http://wellness.uwo.ca*** sites. As always, if you have an information security issue, concern, question, or comment, or if you want more information on the topics discussed in this article, please do not hesitate to contact me. And keep computing safely!

James McCloskey <jamesm@uwo.ca>

New Look in Genlabs

Reina Tebby <rdtebby@uwo.ca>

This summer the Genlabs team is replacing all the computers in the Genlabs. The new machines are running Windows XP, so their operation will still be familiar to students. The new flat panel monitors take up a lot less room than the old CRT ones, so there is more space on the desks for books, and more room to walk behind working students, without brushing the monitors. As well, these machines run much quieter than the old ones.

We are pleased with the new set-ups, and we hope you are too. Have a look!

Genlab - HSB 16

Instructional Support Team News

Merran Neville <mneville@uwo.ca>

WebCT OWL News

Fall-Winter 2008-2009 undergraduate courses are now available in OWL. When you login to OWL at ***http://owl.uwo.ca/***, you will see your 2008-2009 courses already in your **Course List**. If you do not see the course or courses listed that you expect to be teaching, please contact your department administrator to ensure that you are listed as the instructor and your appointment has been approved. The department administrator can enter instructors through the **Student Center** at ***http://student.uwo.ca/***. Updates from PeopleSoft to OWL occur four times per day Monday through Friday. (Instructor information can be checked in the timetable at ***https://studentservices.uwo.ca/secure/Timetables/mastertt/ttindex.cfm***)

You can copy previous content to the new course area. Improvements to OWL allow instructors to copy their own content from term to term. The document "Getting Started with WebCT OWL" found on the OWL homepage under **Instructor Resources** in the lefthand column covers the steps. Once you are in a course, the **Manage Course > Date Rollover** tool makes updating dates from an earlier offering of the course a breeze.

Many of the manualettes written by the ITRC student consultants are availabe in both pdf format and as **videos**. They are a wealth of information for instructors and can be accessed at ***http://www.uwo.ca/its/itrc/resources/manualettes/***

ITRC News

The ITRC welcomed six new student consultants at the beginning of May. These students are Colby Gauld, Corey Meingarten, Nate Smith, Adam Tuck, Richard Vacheresse, and Paul Willson.

Sadly, at the same time we are saying goodbye to students who have graduated this Spring and are moving on to new careers and other study opportunities. Congratulations to Shannon Everett, Katherine Gaskin, Dan Nanasi, Lindsay Nemeth, Angela Vandenbogaard, and Aaron Van Domelen. We wish you all the very best in your new endeavours.

On the Move

The Instructional Support team and the ITRC are on track to move to the new Support Services Building (SSB) in mid August. The move is over the weekend of August 16 and 17 and we will unpack and set up in our new location the week of August 18. See the article **We're Movin', Movin', Movin' - #3** on page 3.

Shannon Everett & Katherine Gaskin

Angela Vandenbogaard, Dan Nanasi, Lindsay Nemeth & Aaron Van Domelen

ITRC Projects

The Instructional Technology Resource Centre (ITRC) provides instructors at Western access to multi-media technology, insight, and the expertise required to create online learning materials to successfully integrate technology into their courses.

In addition to the drop in resource centre in NSC118, ITRC student consultants are available to work directly with faculty to develop unique and innovative online learning materials. The **Anatatorium Project** has fostered a unique relationship between the ITRC and Dr. Tim Wilson and his students and colleagues. Details of this project follow below.

The Anatatorium Project

Yang Ding <yding42@uwo.ca> and Dr. Tim Wilson <tim.wilson@uwo.ca>

In June 2006, Dr. Tim Wilson submitted a project proposal to the ITRC for technical assistance to develop a new method of teaching anatomy to the undergraduate and medical students. No one could foresee that this request would eventually accrete into a wide ranging set of projects.

At that time, three ITRC student consultants were assigned to the Project - Yang Ding, Nick Greven and Angela Vandenbogaard. The achievements over the past two years of hard work by the ITRC student consultants has fostered a unique relationship with the Corps for Research of Instructional and Perceptual Technologies (CRIPT) and the Anatatorium project. Inspite of some major challenges along the way, this ITRC project has prospered and transformed into one of the largest and longest running cutting edge technology exploration collaborations between the ITRC and teaching faculties.

Initially, the project proposal envisioned a complete exploration of the **Amira** software to be utilized in the field of anatomical education. However, as students explored the software and discovered diverse and immense potential, the evolving projects have now progressed beyond the original objectives. The scope has grown from the development of new anatomical teaching tools into a more systematic approach to the utilization of 3D stereoscopic visualization of any three-dimensional data acquired via multiple modalities. These include most common hospital magnetic resonance images (MRI) and computed

> *... this ITRC project has prospered and transformed into one of the largest and longest running cutting edge technology exploration collaborations between the ITRC and teaching faculties.*

axial tomography images (CT) to rarely used laser surface scanning and even 3D fluorescence confocal microscopy. Even today, we are still exploring the great potential that exists with the powerful 3D visualization software.

Apart from all the potential exploitations, the most substantial achievements at this stage result mainly from our collaboration with Dr. Wilson and his graduate students in utilizing the 3D stereoscopic visualization for anatomy education. For the past year, in this area alone, the Anatatorium Project has paved the way for at least three clinical anatomy masters students. The ITRC has spent no less than 400+ hours to explore, train, and assist the masters students in their final thesis projects as well as ensure their successful presentations at various institutional and international conferences (including the Annual Murray Barr Lecture at the Schulich School of Medicine and Dentistry and the Federation of American Societies for Experimental Biology (FASEB) 2008 Conference in San Diego, California). (**Figure 1**. An illustration of one masters student's work).

Currently, five new clinical anatomy masters students, two doctoral students, and two medical residents are commencing projects involving three-dimensional anatomy and using the software that the ITRC helped exploit.

With the ITRC as a partner, Dr. Wilson has commenced academic interactions with CSTAR; Robarts; the faculties of Anthropology, Kinesiology, Health Sciences, Education, and Radiology. The projects across this interdisciplinary demography range from the technical to pedagogical and many areas in between. The areas of increasing expertise by ITRC and graduate students are filling an important gap in the academic environment; where theory meets technology.

As more studies on the efficacy and use of three-dimensional education tools are unveiled, we will soon be able

to demonstrate that 3D education is a favoured trend of future educators and students alike. Eventually, we hope to implement this technology into the curriculum, and continue our goal of enhancing students' learning experiences. To that end, we are also experimenting with the capabilities of migrating the 3D virtual environment currently developed in Amira into the online virtual world of **Second Life** and allow a fully robust online environment that is readily available to students anytime, anywhere.

In addition to the 3D visualization aspect of teaching, we are also trying to open up new ground in user interaction by attempting to incorporate 3D spatial tracking devices into our consortium of expertise. Recently, two new ITRC student consultants, Nate Smith and Richard Vacheresse, (students in Computer Science) have joined the

project and are exploring new possibilities in visualization. During the summer, Christie Digital, a world leader of digital projection systems, will come to the CRIPT to share their experiences in 3D tracking and to exchange ideas with the ITRC and CRIPT staff.

This model of cooperation among academia and industry is not new but the idea of sharing information with ITRC consultants at the grass roots level is a unique approach and one that we welcome. The multiple layers of responsibility, innovation, and goal driven outcomes with gross anatomy as the testing vehicle reveals a wonderful model of cooperation and rich grounds for new thinking.

For tour requests and further inquiries, please contact Dr. Wilson at ext.81587 or email
<*tim.wilson@uwo.ca*>

Yang Ding has been an ITRC student consultant since May 2006 and has worked continuously on the Anatatorium Project since that time. He is in the Bachelor of Medical Sciences program.

Dr. Tim Wilson is a faculty member in the Department of Anatomy & Cell Biology in the Schulich School of Medicine & Dentistry.

Figure 1. 3D Reconstruction of Male Cadaveric Thorax from Computed Tomography (CT) Data
(The thorax model is modifiable for virtual dissection and can be visualized in stereoscopic or 3D views)
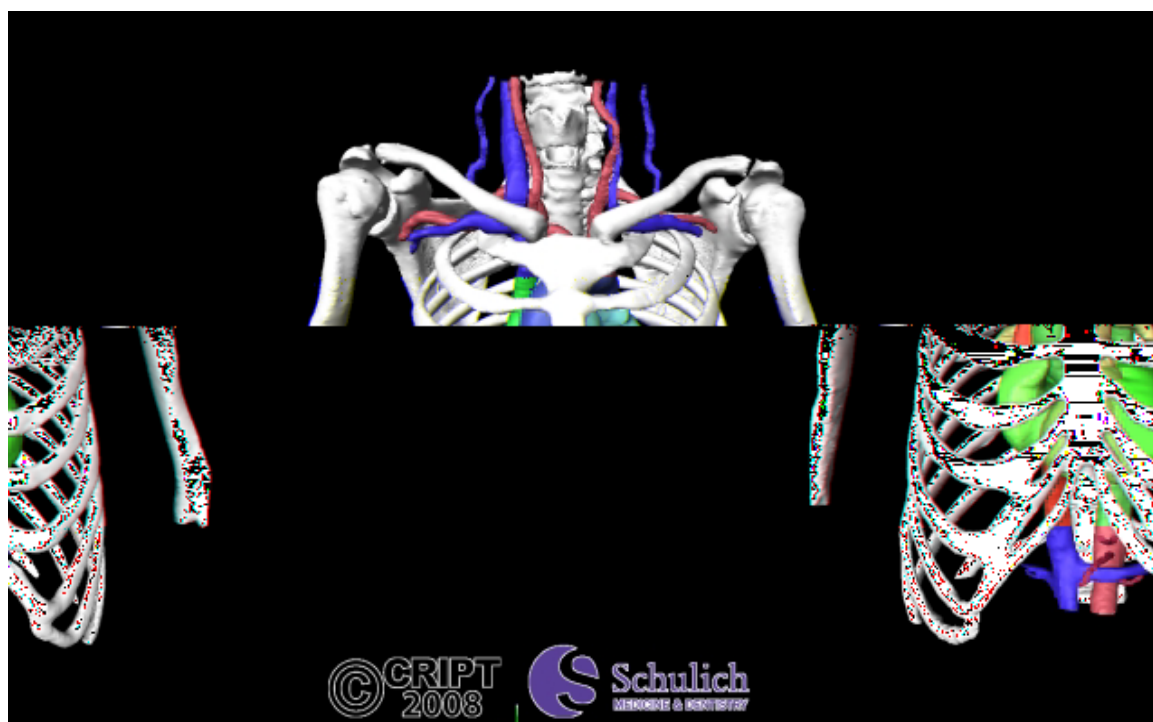
Commonly Used Numbers

ITS Support Centre	NSC237	519 661-3800 ext.83800	*helpdesk@uwo.ca*
Voice & Data	NSC237	519 661-3800 ext.83800	*helpdesk@uwo.ca*
General Office	NSC108	519 661-2151 ext.82151	FAX No.519 661-3486 ext.83486
Computer Accounts Office	NSC229	519 661-3800 ext.83800	*accting@uwo.ca*
Computer & Network Operators		519 661-3525 ext.83525	*operator@uwo.ca*
ITRC	NSC118	519 661-2111 ext.85513	*itrc-admin@uwo.ca*
ITS Non-Credit Courses		519 661-2151 ext.82151	*its-courses@uwo.ca*
Dial-in Line (all modem speeds)		519 640-5305	
E-mail Postmaster		519 661-3800 ext.83800	*postmaster@uwo.ca*

Facilities

ITS Support Centre	NSC237	General Purpose Labs	UC2, NSC110, SH1310
PC Lab	NSC101		NCB105, SVB13, SVB14,
ITRC	NSC118		SVB16

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