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THE IRON WARRIOR

THE NEWSPAPER OF THE UNIVERSITY OF WATERLOO ENGINEERING SOCIETY

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<http://iwarrior.uwaterloo.ca>

First-Ever WEC a Resounding Success

KEVIN LIU & MIKE MCCAULEY
WATERLOO
ENGINEERING COMPETITION

Last week our school played host to the first-ever Waterloo Engineering Competition (WEC). With over 110 students from all engineering disciplines participating, the competition was a huge success!

The mission of the WEC is to select the most talented engineering students to represent UW at the Ontario Engineering Competition (OEC). The Spring 2009 WEC spanned five days and encompassed five different categories: Junior Team Design, Senior Team Design, Consulting Engineering, Sanford Fleming Foundation (SFF) Debates and SFF Technical Speaking.

The competition week started off with SFF Debates. The six registered teams had heated debates over topics that ranged from genetic modification to “which one’s better: a nerd or a geek?”

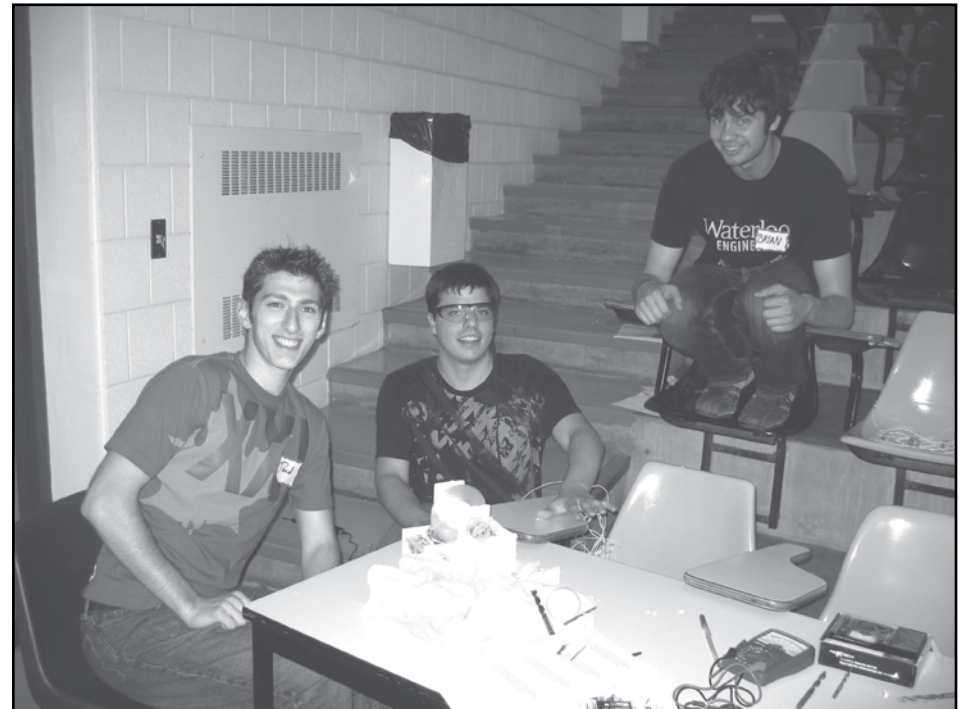
On Thursday, SFF Technical Speaking

took place with students delivering presentations on contents from their work term reports.

The competition week came to its peak over the weekend, with 24 teams of students coming together to compete in the design competitions. The Senior Team Design students signed in just before 6 p.m. on Friday. Their task was to build a waterproof vehicle capable of traversing through rugged terrain and putting out candles at various locations throughout the course.

An hour later, the Junior Design competitors signed in and started their competition. Their task was slightly different – develop a system to collect rice krispies from a platform at the top of a steep ramp and deposit as many as possible at the bottom; all without the use of electrical energy.

See **DESIGN AND DEBATE** Page 3



Kevin Liu

David Coskun, Alex Simovic, and Brian Houser put the finishing touches on their entry during the Senior Team Design competition

Waterloo’s Rapid Transit Reality

MATT CASSWELL
2B CIVIL

On June 24, the Waterloo Regional Council approved the construction of its \$790-million Light Rail Transit (LRT) system that will connect Waterloo, Kitchener, and eventually Cambridge. Council approved the proposal in a decision of 15-1, which will begin construction in 2011 and 2012, will full operation beginning in late 2014.

As mentioned in a previous article in *The Iron Warrior*, the route will roughly follow the existing iXpress route for the most part. Starting off at Conestoga Mall, the rail line will run north along King Street, before turning west onto Northfield Drive. From Northfield, the line will follow along-side the existing railway spur line through the Research & Technology Park, past campus, and down through Waterloo Park. At the intersection of Erb St. and Caroline St, the line will split, running north along King Street through Uptown Waterloo, and south along Caroline and Allen Streets. The lines will rejoin at King Street, and head south towards Kitchener. In downtown Kitchener, the route will split, going north on Duke Street and South on Charles Street, reconnecting again at Charles and Fredrick Streets. Finally, the route will then follow Charles Street to Ottawa Street, then along the CN rail line to Hayward Avenue, Courland Boulevard, and Fairview Road to Fairview Park Mall.

At Fairview Park Mall, the system will connect to a Bus Rapid Transit (BRT) system, which will follow the existing iXpress route into downtown Cambridge along Highway 8 and Hespeler Road. Part of the BRT system will also feature dedicated bus lanes and hard shoulders on a

soon-to-be-reconstructed part of Highway 8 between Fairview Road and Highway 401. The BRT system will, however, feature separate bus Right-of-Ways (ROW), transit-priority signals, and other features to make it faster than the iXpress system. The BRT system itself is expected to be completed by 2011, due to a much smaller EA process, lower costs, and faster construction. As ridership grows, the Region will look at expanding the LRT system all the way to downtown Cambridge.

The system will feature 13 to 14 stations along the LRT portion in Waterloo, and an additional 6 stops along the BRT portion between Fairview Park Mall and downtown Cambridge. In Waterloo, there will be stops at (from south to north) Conestoga Mall, Northfield and Parkside, the R&T Park, UW (outside DC), Uptown Waterloo, and at the Grand River Hospital. In addition, there may be a “special events” station located at Seagram Drive in Water-

LRT Fast Facts:

Cost: \$790 Million

Committed: \$160 Million

(Federal)

Construction: Starting 2011

Cambridge BRT: Opens late 2011

K-W LRT System: Opens 2014

Stations: 13-14 LRT + 6 BRT

-Introduction of express bus routes will compliment the system

-New multi-modal transit hub at King and Victoria Sts. in Kitchener, serving LRT, GRT Bus, Greyhound, GO Transit

-Expected 10 min headways peak, 15 off peak, 30 evenings & weekends

loo Park.

LRT will benefit everyone:

Dr. Jeffrey Casello of Civil and Environmental Engineering and of the School of Planning, who has been working with the Region of Waterloo in urban growth strategies since 2004, and who has been on a research contract with the Region since September 2008, had the time to sit down with *The Iron Warrior* to detail the construction and impacts that the LRT system will have on the Region.

The proposed LRT system will greatly benefit UW students, especially those living north of campus, in Uptown Waterloo, and attending UW’s School of Pharmacy. Having a station adjacent to the existing iXpress stop will provide easy access from those travelling from around the Region to quickly get to their classes, and will not have to worry about buses being too crowded to get on. For comparison, one standard bus can hold about 90 passengers, while one single LRT car can hold up to 200 passengers. As most modern day LRT systems operate trains with at least two cars per train, at least 400 people could fit on a single train – the equivalent of over four busloads of passengers. Additionally, the creation of the LRT system will improve all bus connections in and around UW, creating more of a “hub” bus system rather than the current “grid” system.

The LRT system will also create an alternative for those who currently drive to school, including faculty and staff members. As UW continues to grow, the need for more buildings will grow, and the best places to put them will be on Waterloo’s surface parking lots (see E6 Construction article – pg. 5). In particular, the large lots to the south of University Avenue along Seagram Drive have been designated as

key growth areas by the Campus Master Plan, and a parking structure will not be able to restore the number of parking spaces lost over the next ten years.

For the rest of the Waterloo Region’s population, the LRT system will also provide a new alternative method of transportation for getting around. As the region grows by over 250,000 in the next 20 – 25 years, road congestion will become much more of a problem than what it is now, and will become something that buses alone will not be able to handle. LRT systems are often regarded as a “higher” form of transportation, and as such attract more people than a typical bus. In addition, the Region is looking at concentrating 40% of its growth along the “central transit corridor,” whose backbone will be the LRT system. This type of intensification will mean that people living in that area will not have to rely on cars as heavily as they would otherwise. The LRT system is not meant to be a “Park & Ride” system, as it is to encourage 100% public transit travel. However, it is possible that park and ride lots may be constructed at the ends of the system to accommodate those travelling into the Region by car who wish to use public transit.

Costs, funding, and the changing face of the GRT network

The projected cost for the LRT and BRT system has been projected at \$790-million. Already, the Federal government has committed \$160-million to the system, but it is unknown if the Region will ask for more funding from them, or how much the Provincial government will kick-in to offset construction costs for the Region.

See **LIGHT RAIL TRANSIT** on Page 3

Letter from the Editor



MICHELLE CROAL
EDITOR-IN-CHIEF

Well, here we are again in the IW cave on a fantastically beautiful summer Saturday. It's quite busy in here, with lots of people in and out, copy editing, layouting and just being generally awesome. For probably the first time in IW history, all exec reports were in before 5pm on Friday! Woo thanks guys, it makes a big difference!

IW staff then took the night off on Friday to attend semi-formal, which was amazing by the way! If I took your picture with the TOOL, drop me an email and I can send it to you (or stop by with a USB stick). Also Canada Day last week was a nice day off, and despite the torrential on and off rain, was a success. However I spent most of Thursday thinking it was Monday, and with my Friday deadlines, actually wishing it was Monday...

After having so much going on lately, I didn't have time to come up with a proper editorial topic, but I have a few ongoing thoughts with modern society's obsession with technology and connectivity. We spend our lives rushing around, constantly surrounded by technology, people and workloads. We're overworked, over-involved, underplayed and underpaid. We struggle to balance the academic, extracurricular, family, social and physical needs that surround us everyday. Technology and media give people the power to connect with anyone, at any time, but less and less

do people actually connect with themselves. The mind needs disconnection, time alone and time in quiet, to think, remember, love and remain healthy. I challenge you to turn off your iPod for a week and listen to your surroundings for once. Birds, traffic, and children playing are not things you can download but a reality that gets forgotten, ignored and blocked out by our technology obsession. Smile at a stranger, or play hide and seek with a child. Engage in the life that surrounds you, and disengage and turn off when you need to. The internet is full of strange and bizarre things, but so is the real world, and you just have to take some time to notice them, instead of having everything at the touch of a button.

Technology gives us the ability to do things we could've never dreamed of half a century ago, especially in fields of research, medicine and other aspects of society. However, with this ability to do everything faster and better comes an extreme pressure to in fact *do* everything faster and sooner. We want instant gratification, and we want it now!

Blackberries give you the ability to be in constant contact with others, but it means that people expect you to be reachable at any time, regardless of it being 3am Sunday morning or not. The answer to this is spending time in areas with no cell phone signal, such as RCH basement, or the Canadian North. And for heaven's sake, stop freaking out when you don't have signal – take a deep breath, relax and don't panic – whatever is going on now will probably still be there when you're finished or back in another area... Although created in 2006, last year saw the huge rise in the use of Twitter and microblogging, leading to an oversaturation of "too much information". How can you have a conversation with someone at the end of the day, if they've been following your tweets all day? How can you miss someone if they're never gone? Do we really need to know each detail of your life, as it happens on the hour? I resisted Facebook for a little while, but still gave in relatively early. However, I realized on my last workterm that Facebook is in

with friends, family or even a pet.

The Canadian summer has the rare months where you can be outside comfortably, so take advantage of the greenery and the chance to stockpile your vitamin D. For thousands of years, humans have settled near bodies of water, and for reasons more than physical needs. As painters know well, water is never still, always moving. Even a lake as calm as glass ripples at every breath of the wind, and no computer screensaver can simulate that (in my mind anyway). Clean water, air and green soothe the mind and soul, so though the ocean be miles away, perhaps you can find calm at a streamside, lakeside or even in the rain.

Do some physical activity, get some sleep for once, next term prioritize and drop an activity that's burning you out... Learn to play music or write or paint – a creative outlet can go a long way to decreasing stress. Remember that without your physical and mental health, all your other commitments become secondary. (Now I just sound like a yoga instructor here...)

This issue has lots of great content, and thanks to my newly acquired bribery skills, much of which was submitted early! (Candy is here in the IW office, and I'll get P**5 points to the box downstairs) We have an obligatory construction article (in fact expanded to an article and a PCP concerning E6), an obligatory job crisis article, as well as some actual non-obligatory news items, events and our regular columns. Also, I received a message from Robin Jardin, the Student Relations

Officer with details and further developments on how Women in Engineering fits into Waterloo Engineering's Vision 2010 plan. You can check those out at http://www.engineering.uwaterloo.ca/Vision2010/2009planupdate/Vision2010_PlanUpdate2009_WomeninEngineering.pdf.

Something interesting and coincidental, was the article by Michaelangelo Finistauri in the last issue of *mathNEWS* concerning the numbers and statistics of men in university. If you missed it, the gist was basically that males in higher education are actually fewer than women (due to a number of reasons) and the proliferation of pre-existing stereotypes that may no longer apply. Interesting perspective, and good to see that *mathNEWS* had something other than impenetrable coding humour for once... I call for an interfaculty student media collaboration party!

Anyway, after clicking "word count" only 8 times this editorial, I think I'm finally done. Now I'm off to write a lab report!

Enjoy the paper.



IW staff pose for a photo with the TOOL at the Spring Semi

fact, actually, really pretty boring. It's useful for sending event invitations to many people at once, instead of having to hunt down their email addresses or phone numbers individually. Realistically though, I don't really care about photos of people I don't know or events I didn't attend. Wall posts let me keep in touch with you when we're apart, but it's still nowhere close to sitting on your couch and staying up until dawn talking about life. Having 700+ "friends" on your profile can't add emotional happiness and fulfillment to your life – that's what real social interaction is for, be it

WANTED:
Humour, Satire and
End-of-Term
Commentary for our
last issue of term –
The Tin Soldier

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LRT to Meet The Needs of Regional Growth

LIGHT RAIL TRANSIT
From Page 1

Unlike other systems in Ontario which charge a premium fare for higher-level transit service (such as York Region Transit's VIVA bus system), it is not expected that regular fares for the LRT system will be any higher than what will be the fare to the bus system. However, the GRT is looking into advanced fare-collecting technologies, similar to those used in some cities in Europe and Asia, which will start charging by the distance travelled rather than by having one flat fare. The idea revolves around having a card-based system, where passengers swipe their cards when boarding or disembarking from transit vehicles, and they are charged depending on how far you have travelled. Some cities who use this system use pre-paid cards (think of a Tim's card), where the passenger can pre-load their cards with enough money to last them however many trips they would like to take. The Greater Toronto Transit Authority (GTTA) is also looking at implementing a similar system across the entire Greater Toronto Area, but it is unclear if any such system for the GRT will be integrated with that system as well.

In addition to new fare technologies, the LRT system is likely to have a substantial impact on what the transit map for the Region looks like, as well. As previously mentioned, one possible change that may occur is that the transit system may switch from being a "grid" transit system, where buses primarily follow along gridded streets (imagine Waterloo as a grid- I know, it's hard) and transfers are made at intersections, to a "hub" system, where buses will all radiate out in different routes from a central point (and LRT station, for example), and most

connections and transfers are made at those points. A new "transit" hub will also be constructed at King and Victoria Streets (where the UW School of Pharmacy is), which will become a new multi-modal central hub for all inner and inter-regional travel. The station will hold multiple local bus connections, the LRT connection, as well as possible connections for Greyhound and GO Bus and Train service (it is along the main CN corridor that any GO Train expansion to Kitchener will run along). One other addition to the GRT network, which will be coming sooner rather than later, will be the introduction of Sunday evening bus service in Cambridge, which will be well-received by residents and especially the students at UW's Architecture campus.

Besides the introduction of the LRT, the biggest noticeable change to the GRT system will be the phasing out of the existing iXpress system, and the introduction of new express bus routes in the Region. Dr. Casello has predicted that the GRT will keep the iXpress brand, but will apply it to new routes that may be distinguishable by colour or by number, ie. iXpress Blue route, iXpress Red route, etc. Several routes have already been identified that may qualify for an express bus system, particularly East-West routes throughout the region. Some of the east-west routes include Highland Road and Victoria. Additionally, an additional North-South route on the western side of Kitchener-Waterloo, such as along Fischer-Hallman Road or Ira Needles Boulevard may also be possible.

Beyond 2014 and the Cambridge extension, there are no other existing plans for the future of the LRT system or any extensions

or additional routes it may have. Once completed, Waterloo's system will be the first true LRT system in the province, so the impacts it will have are still only speculations. While some additional extensions, such as those to St. Jacobs, loops along King and University to connect with Laurier, and a line travelling east-west along University Avenue to connect the newly-approved mega-mall at University and Ira Needles Blvd in Waterloo's west end, have been proposed by private citizens and committees, any future extensions will depend directly on the success of the initial system. The success of the system may also attract – or deter – other cities in Ontario looking at constructing LRT systems, including Hamilton and Mississauga, to invest in the construction of rapid transit networks.

The technical aspects

The system is expected to be constructed using standard gauge for tracks, as opposed to the narrower gauge that Toronto uses for its streetcar and subway network. Additionally, unlike Toronto, which has recently signed a \$1.4-billion deal with Bombardier to build and deliver 204 new, 100% low-floor streetcars for the city, it is likely that the light rail vehicles in the system will only be 70% low-floor (ie. 30% of the train will not be wheelchair accessible). The benefit of this is that only one motor is needed, whereas a 100% low-floor vehicle requires an individual motor for each wheel. While no exact model has been chosen yet, the most commonly-used LRT vehicles used around the world are the Bombardier Flexity and the Siemens SD70.

Headways (time between trains) for the LRT system are likely to be quite high, with

expected headways to be every ten minutes during rush hour, every 15 minutes off-peak, and every 30 minutes on evenings and weekends. Again, however, headways will depend on the popularity of the system. The entire system will also run on its own dedicated Right of Way (ROW), either along its own rail line, down the centre of the roadway (ie. along King Street), or along the edge of the road (in Uptown Waterloo and Downtown Kitchener). This will ensure that vehicles do not get stuck in traffic or "bunch up," like what is sometimes seen with the streetcars in Toronto.

While the construction costs of an LRT system is substantially higher than that of a BRT system, the overall costs are substantially lower. Labour costs associated with running an LRT system are usually much lower than those of running a BRT system, since less drivers are required. For example, at 1,000 passengers per hour, the labour cost for operating a bus is \$840/hr, where as the cost of operating an LRT is only \$420 per hour. As ridership grows, costs for a bus rise to \$1,645/hr, whereas an LRT is only \$840/hr. Similarly again, at 3,000 passengers per hour, buses cost \$2,450, where an LRT costs \$1,225.

The construction and completion of Waterloo's LRT system will have a dramatic affect on the future growth and commuting patterns in the region, and will have a broad range of effects, that will affect both students and residents alike. Regardless on the initial success of the system, it will continue have Ontario and the rest of Canada regard Waterloo as the progressive, forward-thinking region that it is already known for, preparing for the future in ways other cities aspire to reach.

When asked for his final thoughts, Dr. Casello simply had one statement: "It rocks!"

A noticeable change to the GRT system will be the eventual phasing out of the existing iXpress system

Onwards to Ontario Engineering Competition

From DESIGN AND DEBATE Page 1

The design phase of the Junior and Senior Design competitions finished up by 1 a.m. on Saturday morning and thanks to all the volunteers, they went very smoothly and came to a successful end. Engineering Novelty items were given to the tremendous volunteers for their dedication throughout the night.

Consulting Engineering started off bright and early Saturday morning in the WEEF Lab and was coordinated by Chris Togeretz, a 2009 Civil Engineering graduate. Each team had to come up with an economically feasible solution to KW's clean water supply situation; a problem that the city has local consulting firms currently working on. We were happy to have Rachel Vailancourt, from the Region of Waterloo, who is currently working with the water supply

issues in the region, as one of the judges for the Consulting Engineering competition.

Not too far away in RCH, Senior Team Design competitors were delivering their presentations and demonstrations. Each team was required to make 10 minute presentation and despite the fact that teams had barely enough time to sleep between design and presentation, all of the presentations were impeccable. Teams were able to demonstrate how carefully they considered their designs, the highlights the features, and were able to sell their products to the judges. Out of the eight designs, five were able to manoeuvre the course and successfully put out candles. The testing phase saw designs splashing water as far as four meters - forcing audience members to adjust their seating positions to avoid getting soaked.

As for the Junior Design Teams – they

didn't fare as well. The challenge was quite difficult and out of the 11 teams that participated, only one design was able to successfully reach the rice crispies.

Winning teams from each of the competition categories walked away with a nice cheque in hand but more importantly, a trip to the 2010 Ontario Engineering Competition where they will represent A-Soc this coming February. The University of Waterloo is excited to be the host of the 2010 OEC and we wish the winners of the Spring 2009 WEC the best of luck!

Competitors praised the event and shared that the friendly competition was a lot of fun. Many teams are already looking forward to next year's competition. If you are interested in competing in future competitions, be sure to stay tuned and check the WEC website (wec.uwaterloo.ca) for future updates. A-Soc will be hosting next year's WEC in the Fall 2010 term and B-Soc can look forward to their competition next term.

A special thank you goes out to all the

volunteers. Their input ranged from reviewing the competition problems, to purchasing supplies, to helping at the actual event. Without the volunteers, the design competitions would not have been possible.

Finally, the WEC could not have happened without the two directors – Kevin Liu and Caleb Bailey. The two spent hundreds of hours organizing the event, after which, both agree the huge success was well worth the hard work!



Kevin Liu

Competitors watch as Junior Team Design entries are tested on Saturday

First Place	Second Place
Junior Team Design	
Ray Zhou	Mark Khaitman
Fred Ting	Frank Zhao
Wilfrid Ngo	Leon Rabinovich
James Anselm	Jaspreet Dhillon
Senior Team Design	
Daryl Tiong	Maple Leung
Sean Anderson	Jeff McClure
Kirk MacTavish	Cody Prodaniuk
Brian Cheung	Nevin McCallum
Consulting Engineering	
Artem Burmistrov	Phuong Dinh
Oleg Artemenko	Erik de Jong
Kyle Collier	Kathleen Lui
Gregory Niestrawski	Goran Vlacic
SFF Debates	
Jeffrey Aho	Jason Tang
Aditya Sharma	Simon Chen
SFF Technical Speaking	
Rana Tehrani Yekta	David Ng

EDTW- Engineers Design The World

Target and Destroy: Nanoparticles as ammunition



ANDREW WONG
2B CHEMICAL

In the world of engineering we can view phenomenon, problems and situations all as an aggregation of some kind of system. Everything and anything can be separated into defined systems that are to be treated or analyzed for answers. It shouldn't come as a surprise that the most widely regarded system common to centuries of scrutiny and continued attention is the human body. The most important functions that exist are the ones that most directly affect us; specifically there

is nothing that is seemingly more critical and complex.

Ways to treat and target issues of human health has been a concept that isn't new. In saying so, there are always new advancements in technology that make it possible to achieve more than what was once thought plausible.

An interesting development that is becoming more popular in medical and diagnostic based engineering is the use of nanoparticles. Researchers at the University of Central Florida have specially engineered nanoparticles for the purposes targeting and destroying tumours which may potentially eliminate the need for chemotherapy. Utilizing a popular cancer fighting drug called Taxol for their exper-

iments, researchers have engineered the Taxol carrying nanoparticles along with a vitamin derivative (folic acid) that is taken in high consumption by cancer cells. Using this as a delivery method, specific targeting can be achieved with reduced side effects that the drug may cause.

What's interesting about the use of these specific nanoparticles is that they carry fluorescent dyes as well as a magnetic iron oxide core. Using optical and magnetic resonance imaging, the use of these particles can see how tumours are specifically responding to different treatments as well. With its ability to be a diagnostic and therapeutic agent, these nanoparticles can also be engineered to not contain any drugs. Therefore, if there is

no cancer, this material can biodegrade while the magnetic iron core will be used as regular iron by the body.

The potential shown here is an outcome of engineering aligning with possibility. Research and development into the field of diagnostic devices and therapeutics have only scratched the surfaces of solving some of the world's longest running problems. The systems we're looking at may not have changed, but clearly the variables we've defined for ourselves have been constantly reassessed. Bringing to the forefront the opportunities of medical engineering, I believe that the convergence of a solution will soon exist; even if it's built one nanoparticle at a time.

Students Gear-up for Second Round of Interviews



MATT CASSWELL
2B CIVIL

As the Fall 2009 work term for students starts to approach, many students in engineering and across UW are still looking for a co-op placement after the first interview cycle ends and the second one begins, and it does not look like job prospects are getting any better as the year goes on.

According to CECS, approximately 10% fewer engineering students are currently employed for the fall co-op term this year – currently at a rate of 51% employment – compared to the same time last year, which was 61%. For predicting final numbers, CECS points to the summer's co-op term, which currently has a 91.6% employment rate, compared to a 94.6% employment rate in 2008.

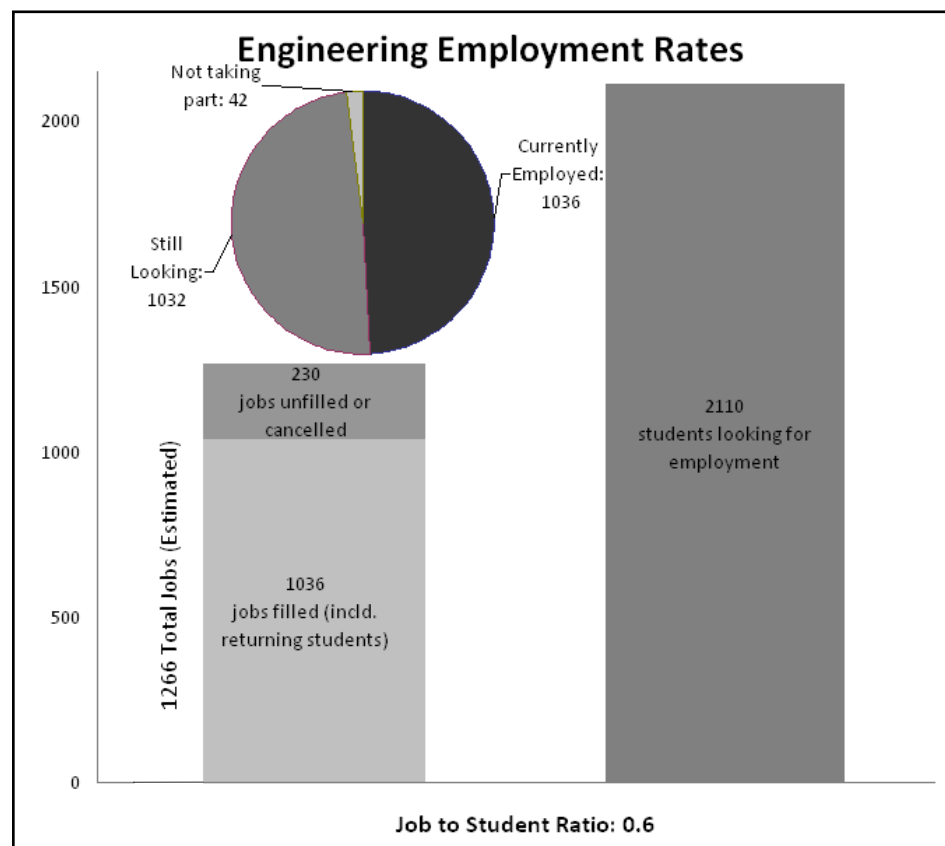
The 51% of students currently employed for the fall represents 1,036 of 2,110 engineering students scheduled to be on a Fall 2009 co-op term, including those who are returning to their previous positions. 42 students were not participating in the job process, and 1,032 remain unemployed. With a ratio of 0.6 jobs per engineering student prior to the end of the first interview cycle, it is estimated that there were 1,266 total jobs

for engineering students, meaning that 230 positions either went unfilled or cancelled.

As students know, CECS is still pushing for students to approach former employers to return for a second work term, and they are trying to pursue and develop new job opportunities to help students through the process.

"As we did for students who were looking for a spring/summer work term, we will work hard to raise this [Fall 2009 employment] rate by the end of this on-campus term and higher still following the beginning of the work term," says Olaf Naese of Communications & Public Relations at CECS. He continued to say, "The outlook for the winter term is too unclear for us to be able to judge at this time [what employment rates will be like]. We are certainly very concerned."

Engineering students require to work for at least 5 of their 6 work terms, however, if it appears that a student will not be able to achieve this minimum, the Faculty of Engineering will sometimes allow a student to obtain the required work term experience following their final academic term, either by going through the CECS job application and interview process, or by counting the experience from the four months of a subsequent full time job. After this occurs, the student will then be considered for graduation.



Search Results							View Short List
Job Identifier	Job Title	Employer Name	Unit Name	Location	Openings	Apply	
00108527	Operations Analyst and Administrator	Coco Group of Companies	Coco Paving Inc	Toronto, Ontario	1		
00108560	Distribution Business Development	Hydro One Inc		Brampton	1		
00108532	Youth Outreach Officer	University of Guelph	School of Engineering	Guelph	1		
00105961	Startup Developer	Unsynced		Toronto or Waterloo	2		

Statistics and searches both show bleak numbers

Upcoming CECS Events Calendar

Monday July 6	Tuesday July 7	Wednesday July 8	Thursday July 9	Friday July 10	Saturday July 11	Sunday July 12	Check out up-to-the-day event postings on the CECS website at cecs.uwaterloo.ca  
Exploring Your Personality Type (Myers-Briggs Type Indicator) Part I 2:00-3:30 TC 1112			Career Exploration and Decision Making 2:30-4:30 TC 1112		Are You Thinking about Med School? Perspectives of a Waterloo Grad 10:00-12:00 TC 2218		
Exploring Your Personality Type (Myers-Briggs Type Indicator) Part II 2:00 - 4:00 TC 1112	Interview Skills: Preparing for Questions 10:00-11:30 TC 1208	Interview Skills: Selling Your Skills 2:30-4:30 TC 1208 Career Interest Assessment 10:30-12:00 TC 1112	Business Etiquette & Professionalism 3:30-4:30 TC 1208				
	Job Information Session for Graduating Students 10:30-11:30 AL 116	Work Search Strategies 10:30-12:00 TC 1208	Business Etiquette & Professionalism 3:30-4:30 TC 1208				

Opinion: How to Balance a Budget -Toronto Style

ERIN MATHESON
IT CHEMICAL

After sitting through the most recent EngSoc meeting and all of the donation proposals, I got to thinking about how shockingly mature the group of us can be. I sat through what was at least a half hour of people presenting reasonable and defensible arguments as to how to split up the \$2500 for this term. There were even moments of empathy as several people pointed out that some school teams who were just starting out deserved more money than well-established teams who already had access to several resources. I figured, if we can manage to balance a budget every four months, how hard can it really be?

A lot more difficult than I originally thought, apparently. I'm talking of course about the current situation in Toronto, and the thousands of city workers on strike at the moment. The force behind this strike is once again CUPE, the Canadian Union of Public Employees, a tyranny of an organization based on the beliefs of outrageous demands for its workers and striking whenever possible. This national organization represents just over half a million workers in the areas of health care, education, municipalities, libraries, universities, social services, public utilities, transportation, emergency services and airlines. Anyone who has spent any amount of time in Toronto can recognize the name, as the

numerous local unions that can be found within the city have made the news almost every time their working contracts come up for renewal. Growing up in the big city, I can clearly remember at least once a year being inconvenienced by striking janitors, teaching assistants, healthcare providers, and even the TTC stopped running for two days in the summer of 2008. CUPE even has a National Strike Fund and an entire section of their website dedicated to tracking the duration and current status of strikes all across the country.

The current superstar CUPE unions are local unions 416 and 79, representing "outdoor" and "indoor" workers respectively within the city of Toronto. Who does this cover exactly? City workers that range from garbage collectors to lifeguards, daycare workers to animal services, and almost everything in-between. They're currently on strike to protest the fact that they have lost "bankable sick days". Traditionally, employees of the city are entitled to 4.5 sick days per 3 months of full time employment, after their first 3 months of work in a probationary period. This works out to 18 days per year, which can be accumulated over several years of work if they're not used. Back when the economy was doing much better than it is now, the incentive to cash in these unused sick days at retirement

I figured if we can manage to balance a budget every term, how hard can it really be?

was introduced to both discourage people from taking extra time off and encourage them to retire. If someone who worked for say, 25 years, and only took a few days of work of per year, they could receive the equivalent of almost a years pay upon retirement. However, due to the increasing number of baby boomers retiring, and the decreasing cash flow in the city, this policy has since been taken away. Is the re-introduction of this policy a legitimate point

to bring up in say, city hall? I'd say so. But is it enough of a reason to go on strike? Absolutely not, considering it's leaving thousands

without a source of income, families across the city are struggling to find accommodations for their children during the day while they're out of school, and the most noticeable is the garbage pile-up (I hear Chinatown smells fantastic right now, especially on a nice, hot summer day). The worst part? The city has opened up public garbage dumping areas in public parks across the city, damaging whatever little green-space is left in the area.

So who exactly allowed this to happen? The wonderful David Miller, of course. Back in 2006, CUPE supported Miller during his municipal election campaign because they realized he was the type of person who would allow them to pull these kinds of stunts without saying any-

thing. Needless to say, Miller is holding up his end of the deal beautifully. Regardless of the hardships faced by the citizens of his city, he has no intentions of forcing these people back to work via either his own power or provincial legislation, on the grounds that negotiations will only continue after doing so. This time around he does have an ulterior motive however; with the entire media spotlight on the strike and negotiations themselves, people of the GTA are starting to forget about the severely unbalanced city budget passed at the end of March. The proposed spending plan has been called "too rich" by some city councilors, and will lead to a proposed 4% tax hike, along with eating up most of 2008's surplus in order to break even. I guess Miller forgot to mention his cost-cutting secret: not paying employees.

Some insiders have predicted that this strike might run as long as 6 weeks (which wouldn't be surprising for CUPE, this strike will have been on for 2 weeks as of July 5th). That's 6 weeks' worth of wages for 24,000 full- and part-time employees of the city not being paid, which just might cut out that rich factor of the budget so many were complaining about. My only question is this; when the budget comes up for review next year, how exactly is he going to explain how the numbers magically worked themselves out without spilling his secret? At least that will give him something to ponder while he hides behind the picket lines.

Madoff Sentenced With 150 years



**MIKAYLA
MICOMONACO**
2B ELECTRICAL

On Monday, June 29th, Bernard Madoff, a 71 year-old multi-billionaire learned where he was going to spend the rest of his life – jail. Madoff was sentenced to 150 years in jail and to pay 170 billion dollars in restitution after pleading guilty to 11 charges of defrauding investors through an elaborate Ponzi scheme.

A Ponzi scheme is an investment scheme which operates by offering unusually high or consistent returns for people's investments. As word spreads about the "amazing" investment opportunity, more people begin to invest in it. The person running the scheme can then use new investors' money to pay out returns to the existing investors. The existing investors usually reinvest some of their money, which means that the scheme is paying out very little in comparison to what it is taking in.

Bernard Madoff has run a securities firm since 1960. He has admitted to operating a Ponzi scheme since the 1990s, although federal investigators believe that he may have begun in the 1970s. Throughout the scheme, more than 170 billion dollars (US) have flowed through the bank account he used to operate the scheme, and it is estimated that Madoff has defrauded investors of as much as 65 billion dollars (US).

Madoff's Ponzi scheme worked until the financial crisis began. With a strug-

gling financial industry, more and more investors wanted to pull their money out of the securities firm -the amount of money Madoff claimed to have invested on behalf of his clients. Unable to pay off his investors, he decided to pay out several million dollars out in bonuses to his employees, as he could see that the end of the scheme was near. His sons, who worked for him, confronted him on these bonuses, at a time when the firm could not even pay investors, and Madoff admitted to them that it was a Ponzi scheme. His sons reported Madoff to the authorities, and he was arrested for investment fraud.

Madoff claims that he operated the Ponzi scheme alone, without the knowledge of his family. Federal prosecutors

A Ponzi scheme operates by offering unusually high returns for people's investments.

allege that he could not have operated such a large scheme on his own; that he would have required help to file reports, forging the books, and other activities necessary to create the appearance that the investments were legitimate. It has been suggested that Madoff's lack of cooperation with investigators is due to him protecting his family. Madoff's wife, Ruth Madoff, filed for a divorce the day he was arrested, and has made a deal relinquishing 800 million dollars in assets as part of the 170 billion dollars that Madoff has been ordered to pay as restitution. The deal leaves her with 2.5 billion dollars in cash.

Madoff's fraud destroyed lives, as some who had invested with him lost their life savings. He apologized to his victims at his sentencing and said that he would live with that guilt for the rest of his life.

More Construction Headed Towards UW



MATT CASSWELL
2B CIVIL

Just as the race between the new DC doors and E5 construction ends (with the DC doors placing first), the completion of the Optometry Building extension, and as the Quantum-Nano Centre creeps above ground for the first time, students at Waterloo will be able to breathe a sigh of relief – or dust – that more construction is coming soon...

A few weeks ago, the university received funding from the federal and provincial "infrastructure" job creation grants, which carries the condition that work be completed by 2011. The funding received by UW is to be spent on three new buildings on campus, as outlined in the Campus Master Plan (available on the Waterloo Plant Operations website). The first building is actually an extension to Environment 2 building, which is to be three stories along Ring Road to hold new space for the growing Faculty of the Environment and its School of Planning. The second building is to be constructed for the Faculty of Math for new space for its Actuarial Science and CS departments, and will be located on the eastern part of the BMH green, between MC, the General Services Complex, and Photovoltaic Research Centre (completed last year). The third building will be Engineering VI.

Engineering VI is to be located on parking lot B, to the south of East Campus Hall, and South-East of E5. The project is being dubbed as a 'design-build' project, which means that the contractor chosen to build the facility will also be in charge of designing it, and most of the design work will occur as the building is constructed. This is

being done in order to meet the criteria that work begins before the end of 2009, and is completed by 2011.

The Faculty of Engineering has yet to determine the construction costs of the building, nor have any final designs or building renders been released yet, though they expect to have shovels in the ground by August or September this year, and the building will be completed in March 2011. The building will eventually be connected to E5 via E7. Engineering 7 will be attached to E5 via an atrium, allowing floor tenants to expand their space horizontally across the two buildings. From there, it is likely that another bridge (similar to the one being constructed between E3 and E5 over Ring Road) will connect to E6. One This has been completed, the Faculty of Engineering has identified its next step of construction to be Phase II of E6, which will extend Eastwards onto land currently occupied by East Campus Hall.

The building is to house the Chemical Engineering Department, and will provide a little more than half of what Chemical Engineering will require as per the Vision 2010 Plan. The first step of moving the Chemical Engineering Department from their current home in DWE will be by vacating C-Wing (the part closest to CPH), which would then be remodelled, upgrading mechanical systems and completing asbestos removal, and be re-allocated to research facilities for the Department of Civil and Environmental Engineering.

The Faculty of Engineering is looking to create a ripple effect to create more space as departments move around, freeing up more space left by departments that have moved into Engineering V, VI, and VII, and creating more space for research laboratories or new disciplines of engineering that the Faculty might look at introducing as it expands.

Canada Day @ UW

TIM BANDURA & MICHELLE CROAL
2B MECHANICAL & 3A CHEMICAL

July 1st saw Canada turn another year older, and on Columbia Lake we celebrated our nation in style, despite the rainy weather! A lot of the set up was done on Tuesday, but there was still a lot that needed to be done Wednesday morning. Water slides needed to be set up, a dunk tank needed to be filled, obstacle courses needed to be filled with... obstacles, a tug-of-war rope required untangling, and various other little details were arranged.

Being productive engineers and having some great volunteers from other faculties allowed us some free time to enjoy our games and events. We tried out the obstacle course, had a few touch football games, tried the tug-of-war, and most fun: tested the water slides! They were FUN-tastic!!! The weather was a bit dour and rainy in the morning, but luckily by late afternoon the rain somewhat disappeared.

In fact, the TOOL came out for a visit! Little kids could dress up as Toolbearers and get their photos with the TOOL, which was really cute! The TOOL also dunked a few unlucky volunteers who happened to be in the dunk tank at the time.

Other locations on the Columbia Lake fields hosted local vendors selling art and everything from sunglasses to henna tattoos, a wide range of food (cotton candy, ice cream and the best gyros we've ever had!) and finally a veritable city of bouncy-castle toys. Alumni Affairs hosted face painting, and the Region of Waterloo Fire and Police Departments were present, in addition to many other groups such as Engineers Without Borders and Boy Scouts.

Later in the evening, we saw even more hordes of people heading north to Columbia Lake. After finding a seat that was tragically close to an ant's nest, the ceremonies came near an end, with a rousing rendition of "Oh Canada!". Then there were FIREWORKS! Wow, we have to say, Waterloo, that was an incredibly impressive show! There were some that we had never seen before, such as the ones that exploded but the sparks remained glowing and fell almost to the ground... Some exploded almost in spirals, and others with the standard poofy-firework shape. The SONIC BOOMS were also pretty cool! The grand finale consisted of red, white and gold fireworks in rapid succession, with impeccable timing.

So Happy Birthday Canada! Hope you had a great party!



Micheal Seliske



An Observation of Canadian Spirit



CAILIN HILLIER
2N GEOLOGICAL

When I was younger, I remember Canada Day as being a pretty big deal. I always wore red and white, had exciting (and childish fun) plans, and looked forward to some awesome fireworks to conclude the festivities. Looking back now, Canada Day seems as though it has diminished in grandeur everywhere I look. Perhaps this is not due to what I am observing but rather the new perspective I have on the day itself. Canada Day celebrations seem to be geared towards children for the most part. As I get older, I find that there is less and less to do on Canada Day (or at least less that I can get away with doing).

This year I went to the largest city in Canada, Toronto, in hopes of observing some Canadian spirit. In Toronto, due to the city worker's strike, Canada Day celebrations were more limited than they would normally have been. Although this is understandable, with the piles of garbage stacked throughout the city, it was difficult to muster patriotism. Even still, at Queen's Park, Ontario's Parliament located in the heart of the city, activities were in full swing, but very visibly were intended for children. Face painting, weird children's performers, cotton candy, and miniature train rides all had long lines of kids waiting to have tons of fun. The adults looked bored all around. The same type of kid games and rides are typical of most Canada Days, but maybe with a waterslide, dunk tank, three-legged race, or obstacle course scattered in. Again, of course, for kids. In the evening, I expected some more young adult appropriate events to materialize, but this never really seemed to happen. The fireworks at Ontario Place could be viewed all along the lake's shoreline. Many people gathered at the Harbour Front to watch the colourful pyrotechnics light up the night sky... which did not really happen at all. Toronto had dismal fireworks, which was the most disappointing thing of all. However, I remained hopeful; maybe there would still be

something exciting going on! Nathan Phillips Square? Jazz festival— but you had to buy concert tickets for admittance. Yonge-Dundas Square? Well, it was supposed to be a Multicultural Canada Day event; however there did not seem to be much in the way of organized events or a great turnout. All in all, it was like it was not a special day for our country, just a day off work to party, relax, or do some yard work.

Canadians are stereotypically passive and peaceful people, not really ones to boast or be overly boisterous about anything, especially ourselves. Apparently not even on our country's birthday. It's almost as though there is a stigma associated with Canada Day and patriotism. I think that many Canadians feel that being patriotic is an American characteristic and that it is closely associated with war and large egos. As Canadians, we want to distinguish ourselves as being as different from this as possible. To most of us, the way American's commemorate Independence Day may seem over the top and even arrogant. However, patriotism in Obama's America appears to be more unifying than anything else.

We treat Canada Day as a minor holiday mostly for kids to have fun and learn about the country in which they live. But for adults, it's much less significant than that. Those that do dress up in Canadian paraphernalia, sporting flags and wearing maple leaves, may be viewed by the general public as being juvenile, crazy, or simply uncool. I don't see this as being the case at all. Being loyal to Canada should not have a negative connotation associated with it. It doesn't mean you don't like other countries or think that you are the best; it doesn't mean that you don't want to travel or can't be patriotic to another country as well. It's a celebration (forget the politics). I am so happy to live Canada. We have a great deal to take pride in, whether we are Canadian citizens or not. I think we can all agree that this is an amazing place to go to school. So yay for Canada and our awesome hockey teams, inventing insulin and the telephone, winning in the battle of Vimy Ridge, creating snowmobiles, and having cheerful looking money.



Micheal Seliske

Local Fairs and Festivals: PoultryFest

TIM BANDURA & SARAH SCHARF
2B MECHANICAL & 3A ELECTRICAL

On Saturday June 27th, we (Sarah Scharf, Ross Ricupero, Chris Szybalski, and I) decided to pile into a truck and head out to a little town called Smithville for their annual PoultryFest. Smithville is out in the Niagara Region, not too far from Grimsby. It was their 10th time running this very hoppin' festival! There was a lot happening all day! We got there just in time for an amazing brunch featuring chicken sausages, eggs, and hash browns! Very delicious! (*Much like Joint Council's brunch will be*)

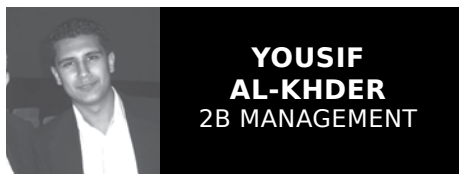
There were a lot of other activities, events and demonstrations around too! We could walk through a small tent that showcased various prize-winning poultry including turkeys, pigeons, chickens, geese, and ducks. There were even DISCO DUCKS!!!! There was an entire tent dedicated to exploring poultry farming. You could examine a mock-up of egg farm to see how it works and how they sort the eggs. If you were patient enough, you could watch a chick

or duckling hatch! Or hold a really cute duckling! Also there: the usual assortment of markets, children's games and activities, and food vendors. In the far back corner there was a tractor show and historical car and truck display. Rumour has it that there was even a De Lorean! Unfortunately, it may have jumped back to the future by the time we walked up to check it out.

We wanted to enter ourselves in the Poultry Idol contest as a barbershop quartet, but after observing the junior (14 years old and under) category, we wisely thought that perhaps our talent would be better appreciated elsewhere. But we did enter an egg drop contest! They drop eggs from a cherry picker starting from 20 feet off the ground and only move up from there. AND TYLER GALE EVEN JOINED IN WITH US!!!! We gave it our best shot, but none of us got past the third round. Oh well, perhaps next year.

Overall we had not a great time, BUT AN AMAZING TIME! It was a lot of fun and we highly recommend you pack your friends into a car and take them out next year.

iPhone OS 3.0 Comments and Features



**YOUSIF
AL-KHDER**
2B MANAGEMENT

About 3 weeks ago, Apple released their new iPhone, the iPhone 3GS, which I believe is not a big leap from the iPhone 3G. However, Apple also released an update for their iPhone's operating system, OS 3.0, which impressed me much more than the new iPhone itself. I was really excited about some of the new features in it, although I still believe that some of them should have been included in the older versions of the phone's OS. I am however, still upset that Apple still didn't tackle some of the major problems that the iPhone has which could be solved easily. Here is a list of some of the new features that came with the new software update:

- **Spotlight Search.** Finally a way to search through the tonnes of emails that I have, and throughout my whole iPhone! Now, I can easily find anything that is stored on my iPhone, whether it is an email, a contact, an event, or a song. This was probably the most notable improvement to the iPhone, as Apple talked a lot about it and promoted it more than any other improvement.

- **Cut, Copy & Paste.** You can now copy or cut text from one application to the other, which is a feature that I would have expected to be on the older versions of the iPhone. You now also have the ability to highlight and select paragraphs and sentences (ie. for copying and pasting), but that is all you can do with that. What about deleting a whole paragraph with one touch? I bet it would be faster than holding the backspace button for a while.

- **MMS.** You can now send MMS mes-

sages from your iPhone, these include photos and audio files. Again, MMS is not something new to cell phones and I think that this new feature should have been in the older editions as well.

- **Voice Memos.** Apple added a built-in voice memo application to its other applications. As the name suggests, you can now record conversations using your iPhone. Personally, I don't see this application as a major change for the iPhone, because voice memo applications were already available and could be downloaded from the App Store for free.

- **Enhanced Stocks Application** If you actually use the stocks application and track them all the time, then you will absolutely love the improved version. You can now view stock charts in landscape view, which gives you a better and clearer look at these graphs. In addition, you can now select specific points of the graph, get more details about them and compare them with other points.

- **Internet Tethering.** A very cool and useful feature. If you have a data plan on your iPhone, and you are in an area that is not a Wi-Fi zone but you want to connect your laptop to the internet, then simply connect your iPhone to your laptop via Bluetooth or USB, and you can access the internet on your laptop.

From my perspective, the update did improve some of the flaws that the iPhone was suffering from, but it did not solve some of the major problems. One of the problems that really upsets me is the incapability of the iPhone to multi-task. Multi-tasking is a very basic feature that many phones have been doing for many years, and I'm pretty sure that Apple can develop that. Now, to find a way to get this article to Apple and land me a job there...

International Studies Option

PETER ROE
DIRECTOR OF
EXCHANGE PROGRAMS

At this time of the term, when people are choosing courses for next term, it's a good idea to plan ahead and keep your options open. Some of the "Designated Options" in Engineering have special course requirements. Among these is the International Studies in Engineering option, which includes a requirement of six courses. Most of these are what might be called CSE-type courses, which can be counted both towards the Complementary Studies requirements and towards the option itself. So if you are choosing a CSE to be taken when you come back to campus for the Winter term, consider filling your "List A", or "Impact" course with a course from the ISE option list. Thus, you could choose ANTH 102 or SOC 232 (they're both good courses.) on the chance that you might need them later for the ISE option. If you don't take the option, no harm is done; if you do decide later to take the option, you will have filled one of the course requirements.

What is the ISE option anyway? It is a recognition on your degree that you have enhanced and enriched your program through study, work or volunteer activities abroad. After completing your degree at Waterloo the fact that you

have satisfied the requirements of the International Studies in Engineering option will signal, to prospective employers for example, the fact that you have under your belt eight months or more of international experience and have supplemented this with six courses of study with international flavour, including, if you wish, up to three language courses.

Here are the overall requirements of the option:

1. **Experience abroad.** To qualify for the option a student must take during the undergraduate program at least:

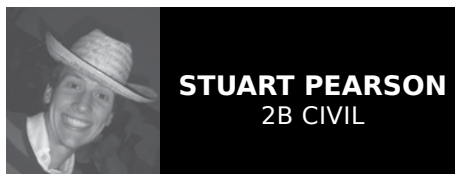
- Two terms on academic exchange outside of Canada, or
- Two work terms in a country outside of Canada, or
- One work term and one academic exchange term outside of Canada.

Internships of at least four month duration with a non-government organization, such as Engineers Without Borders, count towards this requirement.

2. **GENE 303.** After completion of the overseas requirement, a student must register for General Engineering 303. The only requirement of this course is the submission (both electronically and in hard copy) of a written report to the option coordinator. If the report is judged to be satisfactory the grade for GENE 303 is "CR".

3. **Six approved courses for the option.**

Getting into the Swing of Things EngSoc's Spring Semi-Formal



STUART PEARSON
2B CIVIL

What did you get up to last Friday night? If your answer wasn't "semi-formal", then you really missed out. The Spring term's Engineering Semi-Formal dance was held on Friday, July 3rd at South Campus Hall and was a smashing success by all accounts. This time around, the theme was 1940s swing dance, and in the spirit of Big Band music and swing, *With Respect to Time*, the engineering jazz band was invited to play a set.

The night began with a delicious chicken and salmon dinner in the completely-transformed Festival Room of South Campus Hall. The event's directors did a fabulous job of decorating the hall with streamers and music paraphernalia, giving the normally dull cafeteria a rich atmosphere. After dinner, the Jazz Band took the stage, playing a forty-minute set that featured some slower songs as well as a few more lively numbers for dancing to. Many of the guests got up on the dance floor to try their hand at swing dancing to the live band with varying degrees of success. However,

even the rhythmically challenged seemed to have fun with it. The Jazz Band put on a good show as always, and were quite warmly received by their audience.

After the Jazz Band left the stage, The Tool made an appearance, and guests had the opportunity to have their photos taken with it. Out-of-town guests witnessing The Tool for the first time were awed, needless to say, by its magnificent shiny splendour. Once our beloved mascot departed for the night, the DJ began his set and people began to dance again. The night went on for several more hours and a good time was had by all. Journey's "Don't Stop Believing" recalled fond memories of the Silver Spur for many students, and attendees had a chance to show off their finest dance moves (most notably Tim Bandura's impressive Ukrainian jumps and Devon Hall's wicked breakdancing spins).

As the night wound to a close, everyone seemed to agree that the dance was a bonafide success. A big thank you goes out to semi-formal directors Kristen Roberts, Nicole Copeman, and Natalie MacDonald, whose tireless efforts over the past few months in preparation for this event resulted in one of the best semi-formals yet. Their hard work truly paid off.

See you all at Semi-Formal Winter '10!



Michelle Croal

With Respect To Time playing up a storm



Music themed decorations and photo ops with the TOOL

- There is a list of courses that have been approved for the option in two categories:

- i. Language courses.
- ii. General courses with international content.

- No more than three language courses will be approved.

- Courses taken at an overseas university may be submitted to the option co-ordinator for approval. Many courses on the ISE approved list can also be

counted towards the Complementary studies component of the degree. Note that the "List A" requirement can be fulfilled in this way, by taking ANTH 102 or SOC 232.

So, if you are hoping to do a work term abroad, in the USA for example, or maybe an internship with Engineers Without Borders, or to go on exchange to one of our partner universities around the world, think ahead, and choose your CSE courses wisely!

ENGINEERING SOCIETY EXECUTIVE REPORTS

Presidential Report



SARAH SCHARF
PRESIDENT

Hello Engineering Society. I hope that your midterm marks have not affected your joy of engineering at UW too much. Your Engineering Society has completely ramped up again since hell week (or weeks, for some people), so hopefully you had a chance to enjoy TalEng and/or MOT. On the presidential side of things, I did not have too many meetings since the last issue of IW, so here are updates from those ones I had.

Nano Motion: After the reception of executive suggestion made at Council Meeting #3, the executive team and I decided to create a committee separate from council and exec which would focus on a solution to the issue of 8s and late 4s students running for executive positions. At meeting #4, a motion to create the committee and the purpose of the committee was presented by the exec and was passed. The committee was to consist of members from the Nano department, as well as exec, and anyone else interested in the situation. In the end, all 3 groups of people are well represented. The committee consists of Sean O'Neil, Tim Bandura, Cat Hay, Mina Labib, Nikki Weckman, Dan

Taylor and Stuart Pearson. If anyone has any ideas/questions/concerns about this committee, you can contact any one of the above named members. The committee has a goal of presenting something at Council Meeting #5, which is July 8, 2009.

FUGS: At last week's FUGS meeting, David and I were again the student representatives during discussions regarding proposed course number and course calendar changes from every department within engineering. At this meeting the focus was mostly on Chemical, Management and Systems Design, with a brief discussion on complementary studies electives. David and I felt that all proposed changes did not impact students in a negative way, but any concerned students are welcome to speak with either David Liu or myself. Nothing is official until it is passed by the Undergrad Senate, on which David has a seat.

Other updates: I now have access to the First Year Engineering Report, and my goal is to have a condensed version out to you by next week. Two new appointments have been made recently within the offices of the University. Our very own Professor Leo Rothenburg has been appointed to Associate Vice President, International for 3 years as of July 1st. The second appointment was of Janet Passmore to the position of Associate Provost, Human Resources for 5 years starting on July 1st as well.

VP External Report



MIKE MCCAULEY
VP-EXTERNAL

Looks like the sunshine has found us once again... let's hope it's here to stay this time!

Well, I've decided to stick with the all-caps theme that you have hopefully grown to associate with the WEC. The WATERLOO ENGINEERING COMPETITION took place last week and the event was a huge success! A big congratulations goes out to all of the 110 competitors and especially to the winners who will be representing A-Soc at the 2010 Ontario Engineering Competition (OEC) this coming February. Thank you to the volunteers who did a tremendous job throughout the weekend and special thanks to the competition directors - Kevin Liu and Caleb Bailey who were outstanding. For a full recap of the event as well as a list of all the category winners, check out the front page article of this issue.

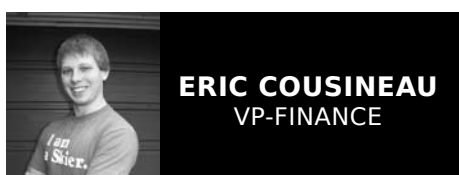
Hopefully many of you were able to partake in the famous UW Canada Day celebrations last week. As always, Engineering was a key participant and included an appearance from the TOOL. Be sure to check out the article on Can-

ada Day for all the details of the day's activities. A special thanks to those who volunteered for the event and to Kristine Campbell and JD O'Leary, the Canada Day Directors.

And on a final note, for those of you who are interested in attending the CFES (Canadian Federation of Engineering Students) Complementary Education Course at the end of August, I have been able to secure some funding! It will be given out on a first come, first serve basis and there is up to \$150 available per person (enough to cover the delegate fee and travel). If you would like to take advantage of this, please email me once you have applied and are ACCEPTED to attend the course. For those of you who aren't familiar with the course, the University of Toronto is hosting a Complementary Education Course from Aug. 16-22 on the topic of 'Engineering in Sport'. This is a fantastic opportunity to meet engineering students from across Canada in a fun and informative setting that will also allow you to explore the greatness of downtown Toronto. I encourage you to check out the course website (toronto-ce-2009.cfes.ca) for more details and registration information.

That's a wrap! As always, feel free to come see me in the Orifice or email me (asoc_vpext@engmail) if you have any questions. -Mike :)

VP Finance Report



ERIC COUSINEAU
VP-FINANCE

Well it's the end of another busy week, and by the time you are reading this it's probably halfway through the next. I've been very busy working hard for you guys, so I'll let you know what I've been up to.

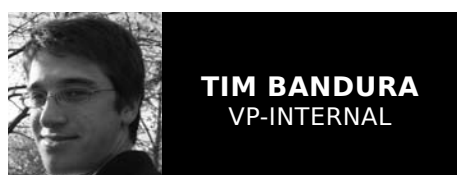
The sign design contest is over, and the winning design was submitted by Sarah Scharf and Tim Bandura. They were the only ones to match the 'look and feel' of the CnD sign, and are the winners of the \$50 gift certificate to Novelties. Flask orders are done, and I got 16 orders, so I am going to get them engraved by a local company ASAP. There will be a Novelties sale in CPH Foyer on Thursday July 16th and Friday July 17th, come on out and check out the sale prices! We ordered a colour printer for the Orifice, so soon directors will be able to print colour posters for advertising their events, yay!

Retail Services is hosting a jacket day on

July 8th, and they now have lower prices. You can now get a jacket for as low as \$360 with a few reduced options or the original jacket that most people have including zipper, inside pocket and both grad year and program on the sleeves for \$25 less (than the original price) at \$390! This is because EngSoc has been in contact with Retail Services, and asked politely if there was any way possible of lowering the price of the jacket, and they responded very kindly! :) Please show your appreciation by purchasing one on Leather Jacket Day on July 8th!

I am still looking for ideas for Novelties, especially for women's clothing. WOMEN! Please send/tell me what you would like to see in Novelties! Submission period is open for class t-shirts, so get your design and money to me before July 9th, and your class could be stylin'! I am also still trying to find out more about increasing the number of Advertising TV's we have (henceforth known as the Event-A-Tron). As always, I would love to hear from you about anything! Drop me an email at: asoc_vpfin@engmail.uwaterloo.ca.

VP Internal Report



TIM BANDURA
VP-INTERNAL

Yet another week has gone by, and it was packed with a few amazing events! Last Wednesday June 24th saw our 4th Council Meeting. A lot of fun and some great historical speeches were made by your exec dressed as U.S. Presidents! One might even say that June 24th was a day that lived in infamy? Or possibly there were some great discussions on change and change and change of family values?

Anyways, Friday June 27th was MOT!!! It was a great Outback theme! The POETS Managers had set up a system of speakers and a projector "outback" on the POETS Patio. There were plenty of blokes, a sheila or four, all gobsmacked at the space out in the bush Down Under. Crikey! I'd reckon I saw a croc or two and possibly some dingoes! It was all quite the rage! I can't wait until

EOT! June 30th saw a fair number of important celebrations for students graduating in 2011 and 2012. Only about 1000 more days for 2012 and only about 600 more days for 2011! WAHOOOO! There was great fun for both classes, with free ice cream for 2011 and free nachos for 2012.

The Engsoc Cricket Tournament has been pushed back a couple weeks due to some scheduling issues, but not to worry! Just keep an eye out on the white board outside the Engineering Society Office for more details. Also upcoming is Joint Council on July 11th! Brunch and dinner tickets are now on sale in the Orifice! It's \$4 for brunch and \$8 for dinner if you buy your tickets before then. BUT we have a special deal because we love you so much! If you buy both the dinner and brunch ticket together at the same time, you can get them both for only \$10!!!! So come on out to Joint Council!

To ALL DIRECTORS!!! Keep your eyes open for some messages from me about events!

Everyone have a good time!

Seeing Your Donations at Work

HopeSpring Cancer Support Centre



TIM BANDURA
VP-INTERNAL

Last term in the winter, a competition (a "Penny Pincher" where pennies are good, and larger change is bad) was organized between us and Math. In the end we lost only because it was easier for Math to drop large amounts of change in our buckets than for us to get pennies to counter (Not that we didn't try. Banks need some advance notice to get large numbers of pennies). Regardless,

it wasn't about who won, but about the amount we raised, which was just over \$700 (not bad for mainly pennies). We also donated all proceeds from Pi Week to HopeSpring.

Cat Hay, Sarah Scharf, and I recently got a chance to see where your charity fundraising efforts go. In appreciation for our efforts in the winter term, HopeSpring invited us to an open house they held for all groups who donated to their organization in the last year. HopeSpring currently has two active support centres, with one in Cambridge and the other located not too far away from Grand River Hospital. It is a beautiful house, with a

wrap-around porch and front garden.

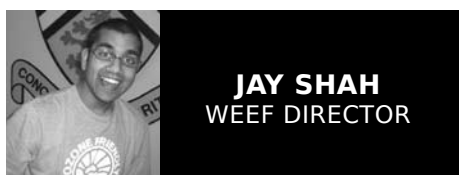
HopeSpring offers many workshops and services for those fighting cancer as well as those affected by cancer through another person in their life. Here is a description of the tour we were provided upon arrival: In the main reception area, they maintain a small library of inspirational books and other literature that anyone can borrow free of charge. Across the hall, there is a small room designated for quiet reflection or peaceful escape from the hectic hassles of life. Within this room is also a collection of wigs in various colours and styles and hats which are also free of charge for

people who need them. They also have two rooms in which they host various seminars and sessions. These include group discussions, therapeutic massage classes, yoga classes, and Tai Chi classes. Courses are also offered to help people adapt and deal with any changes to their lifestyle.

We were glad to see that our hard earned money went to such a great organization. If anyone is interested in more information about HopeSpring or in volunteering for the cancer support centre, their website is www.hopespring.ca.

ENGINEERING SOCIETY EXECUTIVE REPORTS

WEEF Report



JAY SHAH
WEEF DIRECTOR

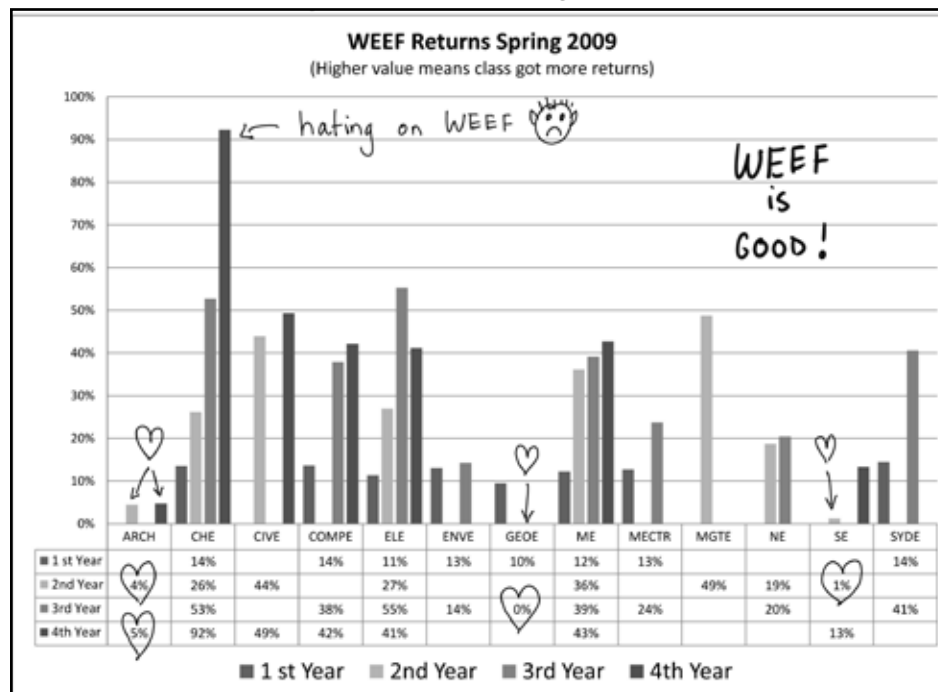
By the time this paper hits the stands, the WEEF Funding Council (comprised of 100% students) will have come to a consensus on how to allocate this term's \$85000 of funding. This outcome of this meeting will be published in the next Iron Warrior publication and is available on our website at www.weef.uwaterloo.ca.

The lovely graph on the INSERT DIRECTION HERE indicates the percentage of each class that got their donation return. The higher the number, the more people requested their donation to be returned, i.e. bad for WEEF. Kudos to Architecture, Geo Eng, and Soft. Eng for having extremely low return rates.

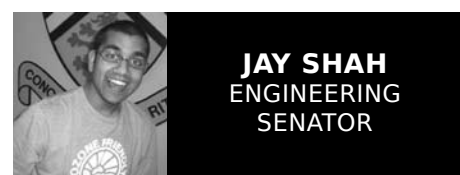
Don't forget, WEEF is designed to be for students by students – its 100% up

to the council of students (Reps from each class) to decide where we put the money. WEEF is good =).

Questions, comments or suggestions are always welcome - email me at weef@engmail



Senator's Report



JAY SHAH
ENGINEERING
SENATOR

Senate is on summer break, so there isn't a whole lot to report back at the moment.

Fun Facts from Senate:

1) Campaign Waterloo (Fundraising Campaign) raised 17.4 Million via Students, 13.1 Million from Staff

2) Target for number of engineering undergrads accepted for Fall 2009 was 1267....1350 have confirmed so far.

3) Target for number of international engineering undergrads accepted for Fall 2009 was 110; 148 have confirmed so far.

4) MASc, MSc, PhD in Nanotechnology degrees available through joint Faculty of Engineering and Faculty of Science collaboration.

5) Canada ranks 1 of 20 (among OECD countries) for Post Secondary Education among workers

6) Canada ranks 11 of 20 (among OECD countries) for R&D spending @ 1.9% GDP

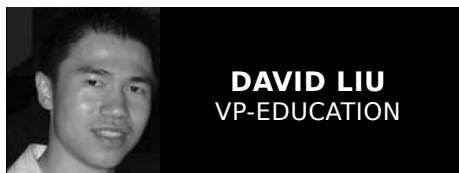
7) Ex-Dean Rothenburg has been appointed UW's VP International for a 3 year term

8) Faculty of Engineering has modified their acceptance criteria such that every applicant must maintain a 70%+ in each required course. (Designed as a filter for students who do well in most courses, but 'bomb' one or two other ones)

I welcome you to contact me about anything listed above or anything you think I should be pursuing on behalf of all engineering undergrads. I'd love to hear from you. (jashah@engmail)

Let's be proactive!

VP Education Report



DAVID LIU
VP-EDUCATION

Hey A-soc,

Hopefully the resume critique and interview skills sessions brought you by your Engsoc directors helped you land on a job. If not, don't give up. Keep trying because CECS is always looking to get job openings to you.

The 2nd general Academic Class Rep meeting went well on Tuesday, June 23rd. After hearing the associate dean, they have gained more confidence in dealing with difficult situations. Also, the Engineering Ex-

change Director passed on overseas opportunities to the reps. The general issue about engineering final exam scheduling will be looked into further.

Engsoc hosted a motivational speech by Andy Thibodeau and it was a great success. Nearly 100 students came out on July 2nd evening to hear Andy speak about "Make Care Contagious", so "Share Your Care!"

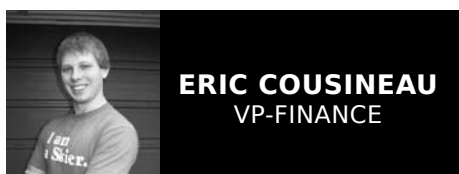
Course Critiques are just around the corner. Course critiques are a very important process for all faculty members because they are used to determine the promotion outcome for professors as they move on in their career. Hence, it is important for us to be fair and provide detailed feedback for them.

PDEng external visits happened on July 7th and July 8th. The associate dean of engi-

neering, Wayne Loucks has generated a list of faculty members, students and PDEng staff. The 3 external reviewers - the dean of University of British Columbia, the president-elect of Professional Engineers Ontario and a former dean of Queen's University - have chosen the people from that list and will have face to face questionnaire meetings. The result will be made available to public by end of the year.

Innovative Engineering was on Tuesday, July 7th in the evening. Students came out to present their innovative and new ideas & designs to a set of high profile panellists - Industrialists, Lawyers, marketing advisors and start-ups presidents. Contact Ayush Gupta (a28gupta@engmail.uwaterloo.ca) for details. That's it for now...

What EngSoc Actually Does ... and why we try so hard to get your attention



ERIC COUSINEAU
VP-FINANCE

I've been exec for a few months now and this question has been posed to me several times, and each time my answer gets longer and more elaborate. What does EngSoc even do for students anyways? Well now I am going to help the rest of you answer this elaborate question.

First of all, you are all probably aware that EngSoc hosts parties and drinking events, so I'm going to focus on the rest, and trust me, there's a lot of it. Though for a full description of our well known events such as SCUNT, Semi-Formal, Genius Bowl, OT Parties and more please see the directorship section of our website (<http://engsoc.uwaterloo.ca>).

EngSoc has a TON of services, and all students that pay their EngSoc student fee can take advantage of them. I'm going to list them ALL off quickly: exam bank, work report centre, course critiques (those forms that you fill out to evaluate your professor each term), resume critiques, academic rep training, work term report writing workshops, novelties (that swag shop beside POETS that's open at lunch), cheap photocopying, binding, laminating, faxes (all in the Orifice), courtesy phone (In E2 Foyer, free local and

on campus calls), Orifice front desk is staffed 8:30-4:30 to answer miscellaneous student questions, POETS (we maintain it, provide entertainment, student space, games and activities, venue for student group events, and bring in bar services Thursday/Friday at lunch), sports equipment (football, soccer ball, dodgeball, frisbee), and certainly not least the CnD (Really cheap; coffee, snacks, and food). I know this is a long list, but EngSoc provides a lot of services EVERY DAY to students.

Guess what? It doesn't stop there either, since we are your OFFICIAL representation to the faculty and the rest of the University. The President, VP Education and a few directors sit on countless committees, councils, groups, and even tribunals. Yes, EngSoc fights for your rights as well! A few highlights that you may or may not have heard of: Co-op Committee, PD Eng Steering Committee, WEEF Board of Directors, and dozens more. I will hopefully post a full list on our website sometime soon.

As if we didn't represent you enough, we love you so much we even leave this campus we call home and travel, Ontario, Canada, and even the world to make sure Waterloo Engineering has a voice, and believe me it's a strong one! Our student society is a member of ESSCO (Engineering Student Societies Council of Ontario) and CFES (Canadian Federation of Engineering Students), and in-

teracts with students from other parts of the world as well. For example, Waterloo just hosted the Annual General Meeting for ESSCO, and almost every Engineering School in Ontario attended.

One person you should know about is Mary Bland. She is the most wonderful person alive, and she makes EngSoc as strong as it is. She is the Official Business Manager of EngSoc and has been working for us since the late 90's. If you ever see her in the hall, make sure you smile and say "HI MARY!", because she deserves all the recognition and thanks she can get, and more. Just so you have an idea, she helps out with Frosh Week, A LOT, she helps GradComm A LOT (IRS, Gradball, Yearbook), and she even helps to run WEEF. She runs the Orifice, the CnD, and keeps our financial records nice and tidy! I could elaborate these things into pages of information, but let me tell you, there's a reason Mary Bland is so high up on the EngSoc Hierarchy of Life (and the shot glass in Novelties).

EngSoc does care about people who aren't engineering students as well, since we run so many charity and community outreach events. Some community charity events that have been hosted in the past include head shaves (very successful), Bus Push (though really a pull), Movember, Wheelchair Basketball, and team participation in charity runs. We also have a float in the local Santa Claus

Parade every year, host a Remembrance Day Ceremony in CPH Foyer every fall, and have a huge part in organizing Canada Day Celebrations (a small part in funding them too).

That was a quick factual explanation of what EngSoc does for students, especially things we do for the entire student body. EngSoc is here to represent the interests of all students, and we really try our best to reach out and positively affect as many students as possible. We would really like to see significantly more students getting involved in the Engineering Society, and come out to our events and have a blast! If you have any questions about what I said here or you have an idea of your own for something EngSoc can do/run, please don't hesitate to drop any of the executive a line, and tell us your thoughts.

Guess what!? Everything, and I mean everything that I listed here is student-run and organized (with some help here, and a ton of help there from Mary), and they all give you the chance to build your leadership, communication, and other management and soft skills. I highly suggest that YOU get involved in the Engineering Society either by attending events we work hard to put together for you, making use of our services, or even becoming a director or executive. It is a very rewarding experience, and allows you to make the school a better place for everyone, and isn't that really the point?

POINT VS. COUNTERPOINT

POINT

COUNTERPOINT

AMRITA YASIN
3A CHEMICAL

Every term the number of students on campus seems to increase. With the many new programs that have been introduced in Engineering in the last 5 years (such as Nanotechnology, Mechatronics, and Management Engineering) we are bound to see increased enrollment in Engineering which then puts strains on our services and facilities. Expansion of campus is a natural requirement and consequence of ever increasing enrollment. Engineering Faculty will be seeing three more buildings: E5 (which is near completion), E6, and E7 covering current parking lots on east side of the campus. Among these, construction of E6, the new Chemical Engineering building, is expected to be started before end of 2009 and completed by 2011. In order to deal with shortage of time, the administration has decided to go ahead with design-build system of construction rather than the conventional design-bid-build, which is raising a lot of questions among some people.

I would like to point that construction does not only include planning and designing the building. Money is a huge issue before any project can be undertaken. Luckily federal and provincial governments have granted \$36 Million (to be shared between Math and Engineering projects) to UW for infrastructure building on the condition that work be completed by 2011. We know that more space is needed to meet the needs of our growing campus and if not now, E6 will need to be constructed in a couple of years anyway. If we are being provided funding

E6 will need to be constructed in a couple of years anyway. Why not take advantage of funding now?

on a condition that is perfectly achievable why not take advantage of it? Why should the construction be halted just for the sake of using the conventional construction system?

Counter-point will try to highlight the disadvantages of using a build-design system for the construction of the building. I would like to say that it is just a different method of construction from the more traditional way of design-bid-build. Both methods have certain advantages and disadvantages and for E6 construction build-design seems to be the preferable choice.

This plan also includes renovation of DWE C-Wing (wing in close proximity to CPH) which will later house Civil

Editor's Note:

Point Vs. Counterpoint is a feature meant to stimulate discussion on thought-provoking topics. The views and opinions expressed here do not necessarily reflect those of the authors, *The Iron Warrior*, or the Engineering Society.

Should E6 be built with "Design-Build"?

and Environmental Engineering research facilities. Being one of the oldest buildings on campus, DWE has suffered a lot of damage and the building is in need of repair.

I myself have worked in one of DWE labs as a co-op student and I have seen and dealt with the damage to the infra-

This is a desperate call for more space that can be alleviated by E6

structure that has occurred over the years. We do not want our graduate students to be bothered by leaking roofs and floors or broken pipes while conducting their research. Renovation of DWE is required as soon as possible to prevent any mishap in future.

DWE, the Chemical Engineering building is housing Nanotechnology until the completion of their building on the B1 green. In my previous study term Fall 08, a lot of classrooms in DWE were also being used for Management Engineering. We, the chemmies, did not have any classes in DWE. One of our professors wanted to have a classroom changed because that particular room did not match well with his teaching style combined with our class size, but he could not because there were no rooms available. Even this term (one of those lucky days) when the whole class shows up it is sometimes a challenge to find space in our own designated room. This is a desperate call for more space that can be alleviated by E6.

Another point that I want to make relates to Vision 2010. Through this campaign UW plans on raising \$120 million to expand its graduate programs and strengthen its undergraduate programs. This expansion includes hiring more faculty, building more space, giving scholarships etc – the goal being the betterment of Engineering Faculty and its recognition as the best Engineering school in Canada. One of the major obstacles in achieving this goal is the need for more space. Construction of E6 will help us inch closer to the goal by providing more space for classrooms and better laboratories. And since a bulk of funding for this construction is being granted by the government, money raised through vision 2010 can be steered towards achieving other goals.

This is how I see it: the need for more space for better research facilities and classrooms due to ever increasing enrolment, the need to repair old buildings so they do not affect the quality of our education and research and provision of grants all point towards the immediate need for E6 building.

ALEX GIROUX & STUART PEARSON
4A MECHANICAL & 2B CIVIL

In May 2009, the University of Waterloo received 36 million dollars from the Ontario government for new construction for the Math and Engineering faculties. The University of Waterloo chose to spend a significant portion of this money on the construction of Engineering 6. E6 will be used to house chemical engineering, replacing the aging DWE as the department's primary location. In order to receive this money, construction must begin before the end of 2009, and must be substantially completed by March 2011. To meet this tight schedule, the University is foregoing the traditional design-bid-build process in favour of a design-build process.

Traditionally, most construction projects go through a design-bid-build process, where the building is designed, then put out to tender. The contractor that submits the winning bid then constructs the building as designed. Design-build is a construction process where, to expedite the construction process, the contractor forms a partnership with the designer and work in tandem to design the building as it is being constructed. This can be useful for projects with strict deadlines, or projects where there are no special requirements, but the logistics of erecting a building that is still in the design phase pose numerous issues.

E6, like all engineering buildings at the University of Waterloo, will be required to have specialized facilities for research and teaching. This is not your grandfather's engineering building. Since the building codes have been updated many times since the construction of DWE, and since technology has advanced rapidly, these things need to be taken into account during the design process. Labs and research facilities using toxic chemicals may require complicated HVAC systems, and rooms where hydrogen will be stored or used will require additional safety measures.

Undergraduate labs may also have additional requirements for plumbing and compressed air lines. Lead time for equipment can also be a problem, as any custom designed equipment that is needed must be designed first, and manufacturing and shipping this equipment will also increase the required wait time. This

can significantly delay the construction progress, especially if the required equipment is on the critical path for project completion.

Once ground has been broken and construction of the building is actually underway, there are many things that can go wrong. Stuart has been involved in a design-build project, and has experience with some of the problems associated with Design-build. Design-build projects are a co-ordination nightmare, as constant communication between the architects, the design engineers, the contractor and subcontractors and the owner is necessary. Requests for information (RFIs) are abundant, and the design is constantly being adapted to fit what has already been built or installed. This

"Good, cheap, fast. Pick two".

means that the completed building may deviate from the original design intent, and parts may not be completely suitable for their desired use. Not having an overall vision of the completed project also creates difficulties for those making decisions on site. If the design is either not completed, or is unclear, the number of RFIs can increase rapidly. RFIs frequently lead to Change Orders, which can also delay the project, and increase the cost. Depending on the change, these delays and cost increases can be significant.

In typical design-bid-build projects, the contractor is already at the mercy of the architect and their "creative vision". In a design-build project, the "vision" of the building may change significantly over a very short period of time. This causes even more headaches for everyone involved. In addition, the cost associated with these changes could significantly increase the overall cost of the project. If this happens it is very likely the project will be over budget by the time it is completed.

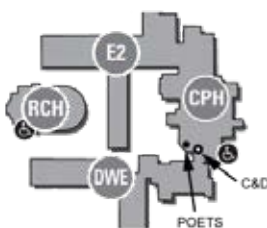
Now that Stuart has stopped crying at the thought of the hundreds of RFIs he's dealt with... Back to the subject of E6. A common saying in industry is "Good, cheap, fast. Pick two". This is true for almost every construction project. A quality building on a tight construction schedule is not going to come cheap, and sacrificing quality for meeting budget and scheduling requirements means that the building, and more importantly, the users of the building, will suffer down the road. If this causes retrofitting or renovations to be needed, these can be expensive and will reduce the functionality of the building.

Neither of us believe that a new Chemical Engineering building is not required, or that taking advantage of available government money is a bad idea, but if the University does not want to take the time to ensure that they are getting a high quality building for students and faculty without encountering problems during construction, then design-build is not the best way to go about it. Taking the time to approve a final design for E6 may mean losing government funding, but in the long run may result in a better building, fewer problems, and may cost less both for initial construction and for operations and maintenance afterwards.

MORE THAN JUST COFFEE & DONUTS

The EngSoc C&D has more than just Coffee and Donuts. Stop by for a variety of freshly prepared sandwiches, baked goods, soups, and more! It is run by students for students, so the prices can't be beat!

There are a variety of specialty coffees available - including fair trade. Bring your own mug to help the environment too!



HOURS OF OPERATION
MONDAY-THURSDAY 7:30AM - 7:00 PM
FRIDAY 7:30 AM - 5:00 PM

ENGINEERING SOCIETY



Mansion Review: The Keefer Mansion Inn



AMANDA LEDUC
2B MANAGEMENT

A few weeks ago, on my trip to Niagara with Steve, we spent the night in an interesting historic old mansion called the Keefer Mansion Inn, located in Thorold, Ontario. We were invited by Steve's mother and her husband who had found this beautiful inn a year ago.

The Keefer mansion is a 10 bedroom, 9000 sq. ft. mansion that was built 122 years ago by John and Hugh Keefer. In fact, the Keefers went on to become one of Canada's most important engineering dynasties, planning and directing the build-



Amanda LeDuc
Secret door behind the bookcase

ing of our railways, bridges, water & sewer works, the Welland Canal and our nation's new Parliament. Despite their engineering prowess, they lost the mansion a mere eight years after building it due to property back taxes.

The mansion changed hands quite a few times over the following hundred years, until it was scheduled for demolition because it had fallen into such a state of disrepair. Fortunately, the city of Thorold purchased the mansion and a team of volunteers worked for 3 years to restore it to its original grandeur.

Today, the Keefer mansion is operated as a full service inn, spa and fine dining room. Unlike traditional hotels where each room is a carbon copy of the rest, at the Keefer Mansion Inn, each bedroom has a unique character to it and is named for the member of the Keefer family who originally occupied it. For instance, we stayed in the most popular room called the George Keefer suite located on the second floor. It had 2 chandeliers, a bay window, wooden mouldings throughout, a four-post bed and a lowered washroom.

Although the rooms are awesome, the most interesting feature in the house is the one they do not advertise. The man-

sion has a secret passage way! On the third floor near the room in which Steve's mother was staying, there is a nondescript bookcase built into the wall. Nothing exceedingly different about the bookcase, except that it is surrounded by an ornate border (a door frame) and it has non-noticeable hinges.

Below one of the shelves, there is a hidden latch. The bookcase swings open to reveal set of old wooden stairs leading to the attic below one of the peaks. Once at the peak, there is a very steep ladder-like set of stairs that lead up to a trap door overhead. This trapdoor opens onto the area of the roof known as the widow's peak.

The widow's peak is where the women would go every evening to see when their husbands would be coming home. It was quite a view from up there and definitely worth the creepy ill lit steep staircase. I can't imagine how women used to make that climb in a big dress.

The stay at the Keefer

mansion was an unforgettably wonderful experience. The staff was excellent, the food was the best, the rooms were exquisite, and best of all, the traditional old style atmosphere made you completely forget everything that was going on in real life (especially midterms). It was the perfect short term escape from reality. If you're ever traveling to the Niagara region and looking to add something extra to your trip, I suggest you skip the cookie-cutter hotels and stay somewhere with some old-fashioned elegance and grace.



Amanda LeDuc
Keefer Mansion was built in 1887

Review Based on the Trailer: Bruno



JON RADICE
3A CHEMICAL

I'll come right out and say it: when I first saw Borat in theatres, I don't think I stopped laughing for the entirety of the movie. The combination of outlandish scenes, great comedic timing, and obscenely gross scenes made that movie such a riot, that some of its catchphrases can still be heard echoing in the halls today. What made Borat work was a simple formula: place this clueless dolt in a situation where people don't know he's acting, and watch for their awkward subtleties to permeate via clever prodding by Sacha Baron Cohen. This simple formula is the same thing that keeps *Just for Laughs: Gags* online, not only does the audience love the reaction, but they feed off the fact that Borat's victims are unknowingly twisting in the wind for our enjoyment.

But this time around, I wonder how many people have not seen, or at least heard of Borat in these groups of people being fooled. When a movie has grossed over \$260,000,000 worldwide, and tacked on an additional \$60 million in DVD sales, it becomes a lot harder for him to get by unnoticed. Also, Sacha Baron Cohen has been in many popular movies since the last one, and being in movies such as *Sweeney Todd* and *Tale-*

dega Nights will only amplify the chance of the group of rubes to know what may be going on. But I guess that it is incredibly difficult for people to notice that Borat is the same person as Bruno; his features have been modified ever so slightly to make Bruno look like a completely new person. Also by taking him



to locales where people may have heard of him less, such as Milan fashion shows and daytime TV, I have a feeling very few people could suspect that those two are one in the same.

The trailer of the movie cannot possibly do justice to what the movie has to

offer, and that's what makes it difficult to judge. Looking back at the trailer for Borat, I would not have expected the hilarity that emanated from that movie. The Bruno trailer probably packed the most sanitized jokes in the movie in order for it to be able to be previewed in front of other movies, and to be honest, it comes off as funnier than Borat. While Bruno still exploits the ignorance of low-class Americans in some scenes, he's also subtly jabbing at many clueless fashionistas and bourgeoisie - people that claim that they are more knowledgeable and more accepting of homosexuals. This character, while standing out more in a flamboyant sense, is much more commonplace than a Kazakstani news reporter, and thereby he can slip by much easier. And in America, I feel that many people will let a gay man string them along more foolishly than they would a foreigner. All this combines to make a Perfect Storm of comedy; Bruno is given a lot of new freedoms that Borat couldn't try to touch without people thinking that the joke has gone too far.

But I'm rambling. In short, I'm hopeful. This movie has the promise to be better than Borat, but it needs to straddle the line between outlandish and obviously scripted in order to become a hit. But even if it falls short, you know it'll be good for a few laughs. I recommend you see it, so you'll understand the quotes everyone will be using in your class for the next few terms.

Voices of Trees



MICHELLE CROAL
3A CHEMICAL

What is it about pines, that their lonely sound when the wind blows through is like no other tree I've known? I want to know their names, the shapes of the leaves of their cousins, all the stars in the sky and the thousand reasons why. The North - bitter winters, beauty in isolation in the short summers. Palms and almonds on the coast sing with the same voice, when the ocean blows and the waves crash down. Palms sing less of loneliness and more of storm, but only after sunset when the tourists leave and all that remains is the sound of the souls of land and sea. Willows whisper calm to broken-hearted lovers in the late summer abandon; aspens quiver in the winds of the world they no longer control. What song do olives sing, in the breezes on the hills of the ancient worlds, where each breath is like a history? What songs would humanity sing, when it no longer has a voice with which to shout?



POETS

MOVIE SCHEDULE

SHOWINGS BEGIN AT NOON

Wednesday July 8 The Score The Whole 9 Yards Bon Cop Bad Cop	Thursday July 9 Classic Simpsons	Friday July 10 Bartender's Choice	Monday July 13 Val Helsing Hellboy Underworld	Tuesday July 14 Monty Python Day!
Wednesday July 15 Full Metal Jacket Good Morning Vietnam	Thursday July 16 The Office (Seasons 1 & 2)	Friday July 17 Bartender's Choice	Monday July 20 Kung Fu Hustle Kung Pao	Tuesday July 21 Pulp Fiction Kill Bill

Winology 102: Icewine and Late Harvest Wine



AMANDA LEDUC
2B MANAGEMENT

If ever I am asked “What is your favourite wine, regardless of price and versatility?”, the answer would always be the same ... icewine! Icewine typically comes as a white wine and has a deep golden colour, but I have tried a few red icewines and enjoyed them equally. Without question, I am completely infatuated with this unique type of dessert wine.

Canada is actually one of only two countries in the world who make authentic icewine, the other country being Germany. The process is very precise and ideal to the Canadian climate.

Canadian icewine is usually made from traditional late harvest Vidal or Riesling grapes, and there are very strict regulations to ensure its quality and allow it to be marketed as a Canadian icewine. In fact, the Vintner's Quality Alliance (VQA) is a Canadian association which regulates wines produced in Canada and places guidelines on any Canadian wine wanting to display the VQA symbol on their product. By purchasing a VQA wine, you know you are receiving a top quality Canadian wine that meets a stringent set of guidelines.

Icewine cannot be harvested until the grapes are frozen, and these grapes must be clean of the fungus which tends to attack the grapes that are left on the vine.

The grapes needed for icewine have to remain on the vine until the temperature drops to between -8 and -12 degrees Celsius for at least 24 hours. This means that the harvesting is typically done after midnight or before 8 am. If the temperature drops too low, then the frozen grapes will actually become too difficult to press. The combination of clean and frozen grapes results in the production of a true icewine.

The low harvest temperature ensures that the wine will have a low water content, and a sweeter, more concentrated flavor; as the pressing of the frozen grapes will remove the water from the grape as ice. A sugar index of 35 degrees or more is mandated by the VQA in order to legitimately call the wine Canadian icewine. This is what makes icewine so highly sought after.

A second pressing of the grapes yields

my second favourite wine; late harvest wine. The second pressing has the same complexity as the first, but is not as sweet; although, it is still far sweeter than any ta-



Amanda LeDuc

Typical icewine set on a bed of frozen grapes

ble wine.

So if I love icewine and late harvest wines so much, why don't I consume them instead of traditional white wines? As mentioned before, the production of authentic icewine means that the grapes have to be left on the vine to be naturally frozen; thus, the harvest cannot occur until after November. Also, a clean harvest will mean a smaller harvest than that of a regular late harvest wine. One kilogram of grapes may produce a bottle of wine, but it will only produce about 200 ml of Ice wine. Lastly, the fermentation process is much slower for Icewine. It takes months, instead of days or weeks, to produce.

As a result, the price of icewine and late harvest wines are rather high. Icewine and late harvest wines typically come in 200ml or 345ml bottles rather than the usual 750ml bottles in which table wines

come. The least expensive 200ml icewine I have ever seen is \$20, but the price goes up substantially from there. The least expensive 345ml late harvest I have ever seen is \$13, again the

price goes up a lot for different varieties. Occasionally, you will see 750ml bottles of wine marketed as “late harvest” and the price will seem reasonable for such a large bottle; however, I caution you, if it seems too good to be true it is. I have tasted a few of these “late harvest” wines and they are not the sweet wine that is generally associated with a late harvest. In fact, I have sampled a few that actually came in the small 345ml bottle disguised as late harvest and was disappointed to find that they were not sweet at all.

Although the price is steep considering the size of the bottle, the small bottle size is actually not a bad idea. Icewines and late harvest wines are not to be consumed on a large scale. Typically, a 2-3oz of icewine or 3-4oz of late harvest wine is about all you want at one time.

Both of these wines are classified as dessert wines. Try serving either after a nice dinner to complement a dessert or even on their own as the main dessert feature. A nice pairing for either type of wine is crème brulee or fruit.

I recommend you try a late harvest wine first, for two reasons: the sweetness is not as intense and the price is not as high as the icewine. Try the CEV Colio Estates 345ml late harvest which sells for about \$13 and is available at most LCBOs. I like to think of late harvest wines as “student icewine”. The taste is similar, but the late harvest wine isn't as sweet, and not nearly as hard on the bank account.

Cheers, Amanda

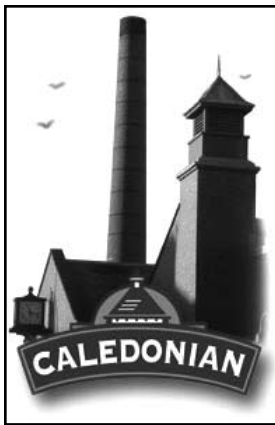
The Brew Man Group: Deuchars India Pale Ale



DAN ARMSTRONG
3A MECHANICAL
NEIL PARTRIDGE
3A CHEMICAL

For this edition of the Brew Man Group, Neil, being a hop-addicted wiener, wanted to review an India Pale Ale. Dan, being Neil's spineless lackey, conceded. The consequence of this decision was having to find an India Pale Ale (IPA) at a local store. Despite the style's immense popularity across the USA, it's taking time for it to catch on here. Though Ontario does produce a few good IPAs, they are mostly sold exclusively at the breweries themselves. Thankfully, a quick trip to the LCBO in Waterloo Square revealed Deuchars IPA from Caledonian Brewery in Scotland.

Neil: Caledonian (or ‘the Caley’ in Scotland), is a brand I hold close to my heart, and even closer to hand as finals loom near. Unlike many of the upstart punk-rock microbreweries we're observing in North America, Caledonian boasts over 100 years of history. Based out of Edinburgh, Caledonian began brewing as early as 1869, supplying the working class Scotsman with hopped goodness and convenient excuses to don a man-skirt on weekends (oh, the power of alcohol). Despite that, Caledonian remains true to the old methods of brewing, using open fired coppers (big, round pans) in the original Victorian style building. With all the old technology, it's remarkable and somewhat suspicious that they maintain the ability to export their product and meet worldwide demand. I'll give them the benefit of the doubt, and treat each sip as a nostalgic experience. The first beer from Caledonian



I tried was the 80/-, a strongly hopped Scottish ale with remarkable drinkability. With that in mind, I definitely vouched for the Deuchar's IPA, which may sound alarmingly close to but is not equivalent to “doucher's”. It can be noted that they also offer seasonal variants for those lucky enough call the Caley local.

Dan: Contrary to what Neil would have you believe, India Pale Ales are not in fact made in India (nor is Twilight the greatest romance of our time). The classic story is that in the late 1700s, the IPA was developed by English breweries as a beer that could withstand the long voyage to their troops in India. This was achieved by brewing an intensely hopped beer that was higher in alcohol, both features acting as natural preservatives. It is now thought however that the original IPA was produced simply as a variation on the classic pale ale and was probably not intended

to be shipped to India (but the other story is cooler). While the well-hopped beers fared well on the long voyage, it was also reported that porters and other styles arrived in fine condition; the receiving troops simply enjoyed the IPAs and kept them in high demand. Modern IPAs are largely brewed in the USA and UK. Most are in the 5-7% ABV range and all have a distinct hop taste that can be citric, floral, or piney. As usual, the USA also take things to the extreme with their Imperial IPAs which have an even more intense amount of hops and range in strength from 8-12% ABV. For the record, it must be noted that Alexander Keith's is NOT an India Pale Ale. For all intents and purposes, it is a generic lager. It's not an awful beer, but it is most definitely not an IPA and more Canadians need to realize that the Keith's

label is lying (more than Neil lies about the size of his... car engine...)

Neil's thoughts: I swear, it's a 2.0 that drives like a 2.3T! Damn, maybe I should just come to embrace my engine size, much like how Dan has come to embrace his 5'7" sally-boy physique. Regardless, I'm hoping Deuchar's can live up to its award winning reputation. Upon first pour, this hazy and golden brew bubbled up to an off-white head, but quickly settled down after a couple minutes. A quick sniff eludes to a nice balance of malt and hops. This is certainly reflected on the first sip; tasty and balanced, followed up with a kick of hoppy bitterness. Overall, I found the tasting experience to be enjoyable based on my desire to immediately crack open another can. Although, Dan will probably go on about how his superior taste buds picked up some essence of BS, and continue to bash the beers I know and love. What Dan needs to remember is that, unlike his preferred club scene, beers don't need popped collars, flashy accessories or more relevantly, a cornucopia of fruity and floral notes to be delicious. [4/5]

Dan's thoughts: At first glance, this beer doesn't seem like much of an IPA. Neither the 4.4% ABV or pale golden colour are typical of the style, leaving me a bit suspicious. Fortunately, the smell confirmed that this beer did indeed contain some (props-

worthy) hops. The first sips showed some solid promise with my ‘superior taste buds’ picking out light floral/citrus hops and a bit of malt to balance things out. I found soon after though that while the flavour is good, there just wasn't enough of it. Like Neil on a first date, this beer showed some initial potential but simply failed to deliver in the end. Deuchar's IPA sadly did not leave me smiling and satisfied. Given the lower alcohol, this brew had a pretty nice flavour but it was too light and not quite what I'm looking for in an IPA, though it would make a fine session beer. [3/5]

Recommended for consumption if you enjoy: *Dogfish Head 60-Minute IPA*, *Sgt Major's IPA*, *Beau's I.P.Eh?*

Props to hops // Dan and Neil

Beyond the Ring

Engineering Alumni speaking about bridging the gap between university and the work force



Allen Chan
ELE MEng 2008

Jiazhi Ma
SYDE PhD 2008

Vincent Cen
ELE MSc 2008

Beat the Traffic – from University Avenue to Career Highway
Tips to gear you up for success!

Question & Answer Period to Follow

Wednesday July 22, 2009
11:30 am to 12:30 pm
DC 1302

Food and beverages will be provided

Lesser-Known Facts About Michael Jackson



JON RADICE
3A CHEMICAL

With the end of what some of us have been calling 'death month' with the likes of Billy Mays (of OXYCLEAN), Farrah Fawcett (of every teen guy in the 70's dreams), David Carradine (of Kill Bill and Kung-Fu), Karl Malden (Academy Award Best Supporting Actor in the 50's) and my pet hamster, Stinky, kicking the bucket this week, it's interesting to look into the strange behind-the-scenes workings of what these people actually did outside of working. And there is no one is more stranger or behind-the-scener than the former King of Pop, Michael Jackson. Putting aside all of his strange rumours that plagued him for the last ten to fifteen years of his life, Michael still proved to be a great

innovator and musical tour-de-force for his entire life.

I'm sure you know that his best work, *Thriller*, is the best selling album of all time, but it was also the first, and only album to have seven number 1 singles on it. *Billie Jean* was such a hit that its music video broke the 'Colour Barrier' on MTV. That's right, before *Billie Jean*, only white musicians were shown on MTV, who claimed that black music "wasn't 'rock' enough for MTV." Funny, I guess that *My Super Sweet 16* is 'rock' enough for MTV nowadays.

Jacko isn't just a stunning performer, he's an inventor too. Michael actually invented a type of 'anti-gravity shoe' that allowed him to perform that rockin' mega-lean that was in his *Smooth Criminal* music video. Only now he could use those shoes when performing live, or when walking through a grocery store.

In a series of baffling calculations, MJ had grossed about 700 million dol-

lars over his lifetime. The strange thing? He's sold over 750 million albums. The stranger thing? About 25% of his net worth came from him owning part of the Beatles' Song catalogue. If you ever needed to see an example of the record company screwing over an artist, look no further than the King of Pop himself. Now you don't have to feel bad for downloading his music, when less than half a dollar every album sold even goes to him.

A big fan of animals, Michael had a chimp named Bubbles, a rat named Ben, a ram named Mr Tibbs, a python named Crusher, and a pet llama named Louie.

Michael Jackson has three kids of his own; Paris Jackson, Michael Jackson Jr, and Prince (Blanket) Jackson. In addition, he is a godfather to many stars in Hollywood, including Nicole Ritchie.

Michael Jackson claimed that the abuse by his father in his early years is what made him act like a child yearning

to be free for the rest of his life. How bad was his father? Aside from tripping him intentionally into walls or holding him up by one leg and beating him while upside down, Joseph Jackson's piece-de-resistance of child abuse was that he climbed into Michael's room one night screaming and shouting wearing a Halloween mask. That apparently was a lesson to teach Michael not to leave the window open when the air conditioning was running...

Remember kids, no matter what Michael Jackson may have done in his later life, there was still that period of 15 years where he was on top of the music world. With every hit he made, with every video he produced, with every live show he performed, he went out there with originality and flair that has been unseen ever since. Nobody has been able to perform like that man could, and it'll be a long time before we see anyone that can again.

The Future of Gaming Mixing Up the Hardware



JON MARTIN
OBI JON1138

As an Xbox 360 owner and the sibling of a Wii owner, any perceived bias towards or against specific consoles is due to my lack of disposable income. If I could I would also buy a PS3, but as a student, that is not possible. Please forgive any disproportionate coverage; I do my best to cover issues that affect all consoles, without focusing on or neglecting individual systems.

There certainly seem to be a lot of gaming rumours going around yet again, only now they are about the confirmed products that were rumours only a few months ago. Things like the PSP Go and Project Natal, are getting a lot of press lately, as well as some further information, so here goes.

Sony has released new information about the PSP Go, stating that the choice to offer a system without the proprietary UMD drive has been their intention from the beginning. They just needed to wait till digital distribution reached the required level to support the system. Also the processor in the new system is listed as having a max

speed of 480 MHz, a substantial increase from the 330 MHz of previous generations. The increased power could mean that new PSP Go only games could be released, similar to Nintendo's recent DSi only games.

Also on the Sony Playstation front, it seems the PS3 Slim has been confirmed – in an unofficial way. Two Taiwanese manufacturers, Foxconn and Pegatron, have apparently been awarded the contract to manufacture the new system. In addition some photos have leaked of the box art for the product, which is rumoured to be shipping in August or September. Personally I think Sony would want to announce the new system more than two months in advance, in order to build up anticipation and drive up sales. Sony has recently patented a system that will allow it to emulate PS2 games to return backwards compatibility to the PS3. (Please excuse the bias, but the Xbox 360 has been using an emulation system for backwards compatibility since it was released, a system which Sony said was inferior to theirs – I just find that a little interesting)

On the Microsoft side there has been a huge response to the announcement of Project Natal, the new motion sensing camera system for the Xbox 360. The system

was recently showcased on the Late Show with Jimmy Fallon, where Fallon was able to try out two games. While response has been very good in general there are a lot of flaws being pointed out, such as delays in tracking and inaccurate movement. As the system is nowhere near completion there is plenty of time to work on the programming, which they need to do if another rumour is correct. Some analysts are predicting that Natal won't just be a peripheral release, but a whole new console release, with the system offered as an attachment for existing systems as well as built in to a new Xbox 720.

On a funny side note a winner of a recent Microsoft contest really got cheated when his prize arrived, a unique customized Xbox 360 console, featuring Fable 2 designs and accessories. When the winner opened the case he was confronted with a new 360 system inside of a first generation case, though that may not sound like a big deal it is when you look at the plugs. The original 360 just had a socket for the power cord, while the new systems have the power socket as well as an HDMI port. Unfortunately for this guy, the case covers half of both ports, meaning he can't plug in the power or connect it to a tv. I hope he

enjoys the paperweight.

As for Nintendo, they have already released their brand new technology, the Wii MotionPlus, bundled with Wii Sports Resort. As a result the game has become the third fastest selling Wii game, selling over 350 thousand copies in only four days. The second fastest selling game is Mario Kart Wii, with 608,000, and the fastest is Super Smash Bros. Brawl with 816,000, all in a similar length of time. None of these games will ever compete with Wii Sports, which thanks to being bundled with the system, has "sold" 45 million copies so far.

Though the rumoured WiiHD did not materialize at E3, it may or may not actually be coming any time soon. Some analysts are predicting that this console generation will last much longer than previous ones, due to the economy and lower than expected adoption rates. The big three systems are only now reaching the sales numbers achieved by the last generation, the PS2, Xbox and Gamecube. Whether the next generation is delayed till the economy strengthens and people are willing to spend the money on a brand new system, or if it starts tomorrow, there will always be new games and systems to replace the old.

Keep on Gaming.

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Countdown to the Vancouver 2010 Olympics



ANGELO ALAIMO
2N ELECTRICAL

In a mere 219 days, the eyes of the world will descend upon Vancouver for the 21st winter Olympic games beginning February 12th, 2010. For 16 days thereafter, the earth's top winter sport athletes will place years of training into action as they compete for their respective countries. Vancouver will mark the second time a Canadian city has hosted the winter Olympics with Calgary being the first in 1988.

Over 2800 athletes hailing from over 80 countries are expected to vie for medals in 86 events at venues not only in the City, but also at the resort-town of Whistler, B.C. which will be the home of the Alpine, Sliding, and Nordic Sports. Ski Cross will make its debut at the winter Olympics as the only new event unlike four new events debuted during the 2006 Torino Winter Olympics in Italy.

Ski Cross is an Alpine skiing event where competitors mass start in groups of four and travel down a curved course at high speeds, flying off jumps until the reaching a finish line. The top two of each heat advance until the last few reach the final medal deciding round.

Canada, being the host of the games, has set the very high goal of being the top medal winning nation and be in the top three in

terms of gold for these Olympics. Own the Podium – 2010, a program initiated in 2005 to nurture this goal into fruition has already been called a preliminary success as Canada did come 3rd in terms of total medals with 24 at the 2006 Olympics, compared to a tied 10th place with 5 medals total in Calgary 1988.

In order to curb excessive scalping, tickets are being released in phases – the first phase has already been initiated last year in the form of a lottery. Individuals had access for a month to create a package of tickets to their liking online. After the selection period closed, computers automatically decided the distribution of tickets. The second phase, released June 6, 2009, is of the traditional first-come first-serve basis. Another round of first-come first-serve tickets will be released in the fall of this year,

with the final fourth phase being released at venue ticket booths on the first day of competition at each venue.

Twelve days after all medals are awarded, and the closing ceremonies end with the extinguishing of the Olympic flame, the 10th Winter Paralympic Games will commence in Vancouver/Whistler for a total of 9 days. It will be Canada's first time hosting

the Paralympics as resources were not in place for Calgary 1988. Nonetheless, athletes representing countries from around the world will compete for medals in 20 events.

Like most Olympic cities, a flurry of economic activity in Vancouver and the surrounding area has preceded the games. Construction has boomed in preparation of the Olympics, with new venues, new transit infrastructure, and upgrades to existing facili-

ties all to make sure the games go off as planned. Most projects have already been completed, and it's unlikely any will not be finished in time, but of course, with such accelerated construction schedules, there have been overruns. Vancouver's Convention Center's extension – the home of international media and broadcast centre for the Olympics – did incur a \$388 million budget overrun from its original project budget of \$495 million.

Also, the yet to be completed Olympic Athletes' Village has ballooned to over \$1 billion in cost, igniting British Columbia to pass unprecedented legislation allowing the City of Vancouver access to unlimited funds to complete construction. After the Olympics, the Village has been slated to become condominiums to be sold to the public, but with the recent economic situation, experts are questioning to what extent money will be able to be recovered in said sales.

Overall, many residents of B.C. are billing this as a once-in-a-lifetime event for the province of British Columbia. To bring the world to Canada's most populous western city is a massive undertaking encompassing thousands of citizen volunteers and paid officials. Thousands of athletes, coaches, and their families will arrive on the doorstep come February amongst tens of thousands of tourists and event goers. Canada's athletes will hopefully realize their medal dominating goal in over two weeks of competition making this Canada's most successful winter Olympics ever.



Angelo Alaimo

The Countdown Clock in downtown Vancouver

2010 FIFA World Cup Qualifications



JOONHA SHIN
2B MANAGEMENT

At last, the next World Cup is under way! This is going to be the 19th World Cup and it will take place in South Africa. In case you forgot, 2006 World Cup took place in Germany, and Italy was the winner. While 2002 World Cup was hosted by South Korea and Japan, in which Brazil took the cup.

The 2010 FIFA World Cup South Africa will start approximately a year from now on June 11th 2010 and finish on July 11th 2010. However, the preliminary rounds started in 2007, and is now slowly coming to a close. Soon, we will have the full list of countries that qualified for the 2010 World Cup.

For those who are not familiar with the format of the World Cup qualifications, there are a total of 6 divisions: Africa, Asia, Europe, North/Central America & Caribbean, Oceania, and South America, which make up a total of 204 teams. Through round after round of preliminary matches, these teams are slowly whittled down to just 32 teams.

So far only the Asian division has finished playing all of their games and the following countries have qualified for the World Cup: Australia, Japan, South Korea and North Korea. In addition, Netherlands also qualified although the Europe division has not yet finished playing all the games. South Africa is automatically qualified since they are the host country of 2010 World Cup.

Currently, the division to focus on is

Europe. There are 9 groups in this division and as expected, the usual powerhouses are currently placed first in their groups with a comfortable lead. England has not lost a game yet, and is leading the group with 21 points, followed by Croatia with 11 points. Spain has also not yet lost a game, and is leading the group with 18 points, followed by Bosnia-Herzegovina with 12 points. Surprisingly, Portugal is currently in 3rd place in its group with 8 points. However, they still have 4 games ahead of them and it is too early to predict whether or not Portugal will make the World Cup.

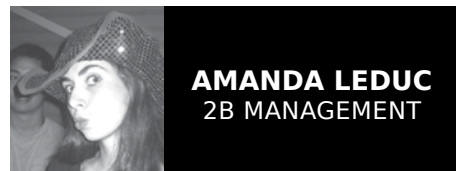
And here is my really extremely early major prediction about who will win the next World Cup: Brazil. Brazil is currently using their younger players with Kaka in the midfield guiding them through the games. They are quickly learning from one of the greatest of this, Brazil was down 2-0 against US in the Confederation cup finals in the first half. After half time, they picked up their game and unleashed their counter attack by scoring a total of 3 goals (it really should have been 4, it's not called a "save" if the goalkeeper blocks the ball when it's already in the net). United States' morale was destroyed after Brazil started unleashing barrages of attacks and soon crumbled under the pressure.

I am however, surprised that US did so well in the Confederation Cup. They went all the way to the finals, beating Spain, the second ranked team in the world, 2-0.

Looking forward to what happens in 2010 South Africa!



How to Throw a Beach Party ... Without a Beach!



AMANDA LEDUC
2B MANAGEMENT

The weather is beautiful, midterms are over, and you want to chill with your friends. But where is the ideal place to party this summer? Why the beach of course! Wait, there is no beach in or around Waterloo ... damn it.

I happened to have run into this exact predicament a few weeks ago. I really wanted to go to a beach, wear a swimsuit and get a tan with my friends. I was bewildered that there were no beaches within a reasonable distance. Not to worry dear beach party lovers, I devised a solution and will share it with you in four simple steps.

Step 1: Pick an awesome party theme. If you are serving alcohol at the party, try including the type of alcohol being served. Also, try to include the clothing theme people should follow. For instance, I threw a "Ladies' Tequila, Margarita and Bikini Party" which is a pretty descriptive title on its own. Another option could be a "Boxers and Beer Party" depending on the crowd you wish to attract. If throwing a beer party, try to find a way to differentiate the fact that it is a beach party and not simply another kegger. Decide if the party requires guests to bring something (BYOB, food, etc...) or if you will provide everything.

Step 2: Pick a Saturday and send out invitations on the preceding Tuesday. Why send invitations on Tuesday for an event on Saturday? Well, you want to know if the weather is going to be beach party worthy, right? Check the long-range forecast on Tuesday for Saturday's weather and hope the weather person knows what they're doing. Make sure you pick a Saturday where

everybody is not going home. I definitely made this mistake while planning my party by picking the Saturday after midterms.

Step 3: Go Shopping! You need to buy your supplies to ensure the epicness of your party. I decided that it would be easiest if I mixed the drinks for my party since I really wanted it to be a margarita party and besides me, who actually keeps three types of tequila on hand for just such an occasion? The easiest way to mix mass drinks is to go to Wal-Mart or some other such store and buy one of those 2.5L bucket drink kits which come in many varieties such as margarita, strawberry daiquiri and more. The buckets include the drink mix, all you have to do is add 750ml of the required alcohol, 850ml of water and put it in the freezer overnight. When you wake up, you have a large batch of perfectly slushy drinks waiting! You should also purchase some festive foods that match the theme of your party as well as some sunblock.

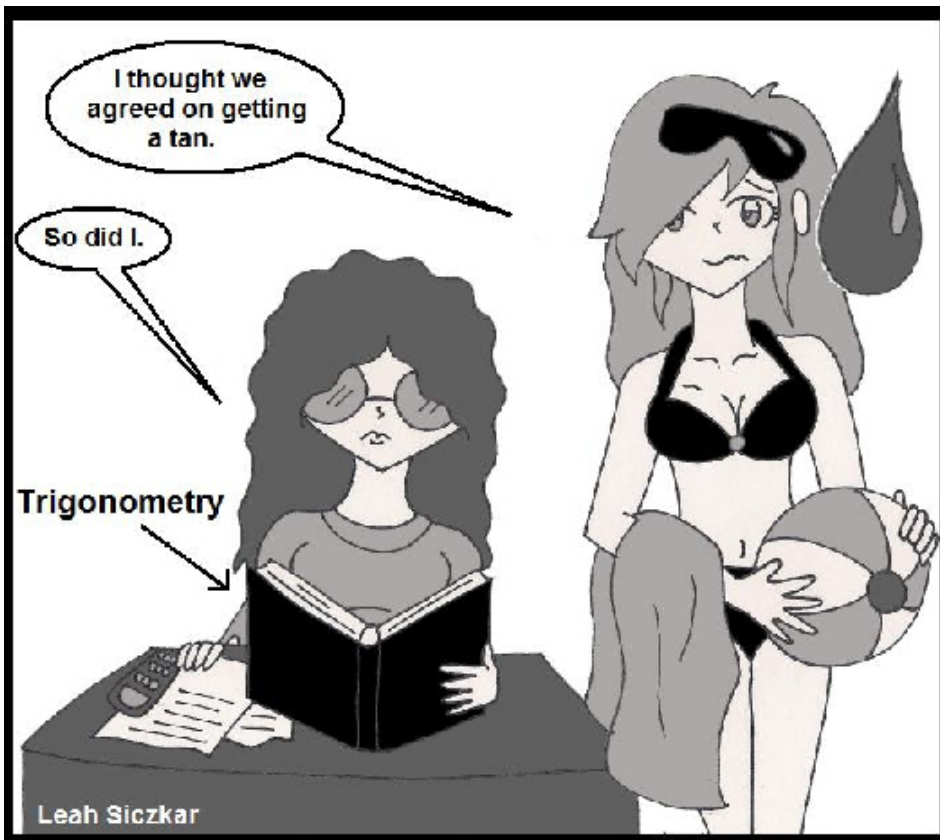
Step 4: It's party day! Wait for all guests to arrive and then serve your drinks and food outside in your backyard. When the day reaches its hottest, it's time to tan! Lay a blanket on the grass, pass around the sunblock and get a tan. After outdoor afternoon drinks and tanning, a nice way to finish the evening is to head off to an outdoor patio for a late dinner. We went to Barley Works after the margarita party and found the atmosphere to be the perfect ending to the party.

Bonus Tip: If you're really enthusiastic, you can go out and buy a kiddie pool like my roommate Karen did. This will complete the feeling of being close to water, even though it's a ridiculous plastic, 1.5ft deep kiddie pool. Also, it will make the neighbours stare even more than they already did.

There you have it! It is entirely possible to throw a beach party without a beach. Enjoy!

Summer Plans Ruined

LEAH SICZKAR
1B ENVIRONMENTAL



profQuotes

"That tree died so that you can go to Space Mountain and say 'Woo!'"
- L. Smith, ECON 102

"There's an experiment I've been trying to do for years, but they won't let me"
- M. Collins, ME 250

"This is personal exploration... opposite to spoon feeding"
- M. Ioannidis, CHE 322

"Now I can carry it back without it blowing up"
- M. Collins, ME 250

"I think the quickest way to crush a class' average is to put the hardest question first"
- M. Collins, ME 250

"I get paid to talk dirty to young people"
- V. Gulewitsch, ANTH 102

Issue 3's Mega Crossword Solution

T	O	N	N	E		A	U	R	A	L		I	D	E	A	L		A	N	T	R	E
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H	E	N		C	O	A	T	I		G	R	A	N	D	A	M		C	A	S	T	E
A	R	T		A	U	D	I	T	S		A	S	K	E	R		A	A	C	H	E	N
			T	W	I	S	T	I	E	R		H	E	R	A	L	D	R	Y			
S	C	R	E	E	N		U	N	I	O	N		R	E	G	I	M	E		P	I	G
A	H	E	A	D		A	D	E	N	O	I	D		R	E	M	I	T		O	R	E
T	A	C	K		C	H	E	R	I	S	H	E	D		S	I	R		T	O	R	R
U	R	L		B	R	A		A	N	T	I	C	I	P	A	T	E		A	H	E	M
P	L	A	G	U	Y		E	R	G		L	E	V	E	L		D	E	E	P	L	Y
	A	M	O	S		S	K	Y		M	I	N	A	R	E	T		A	L	O	E	
S	T	A	Y		W	E	E		C	O	S	T	S			E	S	T		O	V	A
O	A	T		P	A	L		T	A	U	T			B	L	A	H		K	H	A	N
A	N	I	M	A	D	V	E	R	T	S		F	R	E	E	R	U	N	N	I	N	G
P	R	O	P	R	I	E	T	I	E	S		C	O	N	V	E	N	I	E	N	C	E
S	Y	N	G	E		S	C	O	R	E		C	E	D	A	R		H	E	G	E	L

COMMUNITY EDITORIAL

Thumbs Up/Thumbs Down



Thumbs up to people who intervene with would-be drunk drivers.



Thumbs down to the new UW bookstore website. No one told us and it sucks!



Thumbs down to GRT summer bus schedule



Thumbs up to courses offered in W10 being listed on one page in Quest



Thumbs down to the lack of Ontario food in our supermarkets



Thumbs down to higher food prices



Thumbs up to weekends at the cottage!



Thumbs up to early submissions!

The Iron Chef

Peanut Butter Chocolate Rice Krispies

AMRITA YASIN
3A CHEMICAL

Ingredients:

- ½ stick unsalted butter, plus more for greasing the dish
- 10 ounces jumbo marshmallows
- ¾ cup creamy peanut butter
- 6 cups crispy rice cereal
- 6 ounces semisweet chocolate chips

Directions:

- 1) Melt the butter in a microwave or over low heat.
- 2) In a large pot combine butter, marshmallows, peanut butter and crispy rice cereal to form a uniform mixture.
- 3) Grease a 9-by-13-inch rectangular baking dish with butter and pour your mixture in the dish. Bake in preheated 350 degrees oven for 20 to 25 minutes.
- 4) Once the treats have cooled cut them into even squares.
- 5) Melt chocolate over low heat and dip the top side of the treats into the chocolate. Turn, chocolate side up, and let it set.

IW RECOMMENDS

Venue

Village Creperie
Belmont, Kitchener

Music

The Eternal
Sonic Youth

DALIA AL-ALI
1B ENVIRONMENTAL

DAN ARMSTRONG
3A MECHANICAL

Located at 703 Belmont Avenue, Village Creperie is a quaint restaurant in Belmont Village, Kitchener. Granted it does look somewhat sketchy on the outside, Village Creperie is all white linen, candle light, and delicious crêpes when you take a step inside. They also have a good selection of wines and flambés. The flambés, by the way, are prepared right before your eyes – so don't be too alarmed if you see someone else's plate on fire. Prices range from five dollars for small sugar crepes to fourteen dollars for meal-sized crepes. There is plenty of parking space in the vicinity but you can also take a ten-minute bus ride on the 8 bus heading West on University Avenue (step off at the first stop on Belmont Avenue). For some quality crepe combinations – like a salmon with curried vegetables crêpe or the fresh fruit with caramelized syrup (dulce de leche) crêpe – give Village Creperie a go.

Note: All food served by Village Creperie is fair trade and organic.

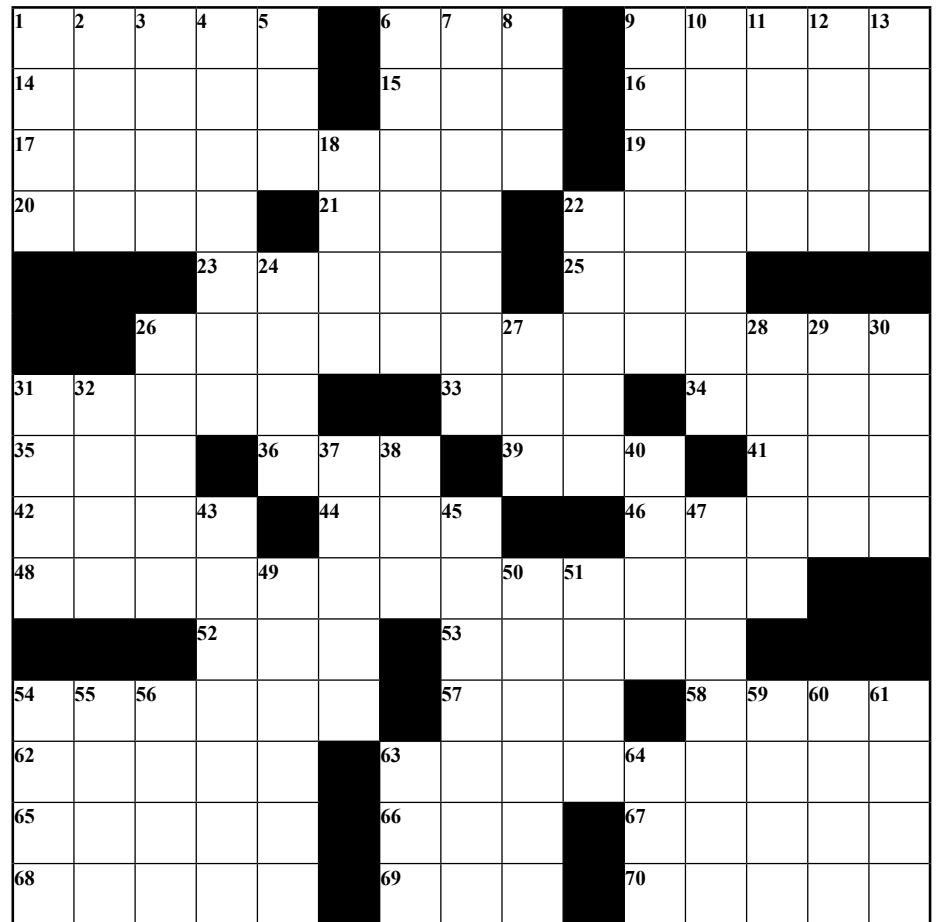
For the past few albums, Sonic Youth have been on major label Geffen Records. Though they produced some great material, their sound was noticeably poppier and somewhat toned down. With their recent move to Matador Records, The Eternal sees Sonic Youth returning to the indie scene and bringing back some of the punk and grunge elements from their earlier quintessential albums. Despite being almost 30 years into their career, the band has released an edgy and relevant album that yet again sets them apart from all others in the overcrowded alt-rock world. Be sure to catch them on tour if you get a chance; it's amazing how hard these 55 year-olds can rock.



The Iron Crossword

MATT CASSWELL
2B CIVIL

Across		Down	
1.	British slang for "to heat up" (2wds)	1.	Dagger handle
6.	Uniform Resource Locator (abbr)	2.	Shrek
9.	Angles less than 90° in a triangle	3.	Drudgery
14.	Fantasy RPG set in Harmundia	4.	Dirty
15.	River near Myrtle Beach, South Carolina (___ Dee River)	5.	The small, green, spherical seed of the seed-pod of the legume <i>Pisum sativum</i> .
16.	In shape	6.	Opposite of downside
17.	A dish of chicken or meat cut into pieces, and stewed in gravy	7.	Word on the political campaign posters of the area's incumbent
19.	Past tense of rating something	8.	Brand of jeans
20.	Be a snitch	9.	Son of Pelops and Hippodamia in Greek mythology
21.	Nothing. Zip. Zero.	10.	Flammable gaseous fuel made from coal, also known as manufactured gas, syngas, hgas, and producer gas
22.	From 'Ice Ice Baby:' "... anything less than the best is a ___"	11.	"Do ___ others as..."
23.	French for what you should be doing, rather than doing this crossword! (study)	12.	What you are/were from the ages of 13-19
25.	Small piece of carpet covering a hard floor surface	13.	The swirling of a fluid and the reverse current created when a fluid flows past an obstacle
26.	A necessity when barbecuing (besides the meat, beer, and BBQ itself) (2wds)	18.	To give the cold shoulder
31.	A brouhaha	22.	In WoW, a daughter of the titans, formerly a protector of all living things
33.	Don't give up, ___ it again.	24.	The best place to find shade on a hot summer's day
34.	The sound produced by the rapid movement of a finger from the tip of to the base of the thumb on the same hand.	26.	To cause or create
35.	A steakhouse and beer-containing device	27.	Ashes holder
36.	1998 film about an asteroid hitting the Earth (starring Bruce Willis, Billy Bob Thornton, and Ben Affleck)	28.	To remove a peg from something
39.	Your male comrades	29.	A piece of stiff paper
41.	A good thing (as in a list of good and bad)	30.	Swiss watch manufacturer
42.	Chilled	31.	Fat-free milk
44.	Japanese Airline Company (All Nippon Airways - abbr)	32.	Canadian Electrical Contractors Association (abbr)
46.	Plant that grows in marshes	37.	Nymphs that presided over fountains, wells, and streams in Greek mythology
48.	The process of becoming real or actual	38.	Deoxyribonucleic acid
52.	Large body of water	40.	Coarse sand grains or small stones
53.	Popular Southern-US breakfast food	43.	A state in which all hope is lost
54.	To exhaust one's savings (past tense)	45.	Capital of Algeria
57.	Atom or molecule with net positive or negative charge (ie. Cl ⁻)	47.	Catch
58.	What's between your eyes and above your mouth	49.	Thatched (past tense)
62.	Beg	50.	Pressed (as in clothing) (past tense)
63.	A definite liking or inclination (pl)	51.	The element with atomic number 30
65.	Creepy	54.	Erupt
66.	Rock that contains minerals such as metals	55.	The safe or leeward side, at sea
67.	Archives Records Information Access System (abbr)	56.	Character ___ Brown from the Doctor Who
68.	Bizarre	59.	"Don't bet ___!" (2 wds)
69.	"Acid"	60.	Luminous ball of plasma held together by gravity in space
70.	Metric unit for distance	61.	Latin for "to be"
		63.	3-letter national code for Poland
		64.	Meat cut from the thigh of a pig



The Iron Sudoku

MATT CASSWELL
2B CIVIL

	6	4	3		8			9
		8	4	7	9			
	3		1					
		6				3	4	2
3	9	2				7		
					7		5	
			6	2	3	8		
1			8		5	9	3	

THE IRON INQUISITION

Michelle Croal, 3A Chemical

"Where would you send the TOOL on vacation?"



Johnathan Fisseha
2B Management
"Germany in the fall - Oktoberfest!"



Paul Nogas
4A Electrical
"The Internet!"



The Toolbearers
A Class of Their Own
"The Beach."



Mike Strauss
3A Computer
"Anywhere without geese"



Rami Finkelshtein
mathNEWS Editor
"The molten centre of the earth!"