**NEWS** thursday, 24 may, 2007

### THE GATEWAY

#### The Gateway is hiring a Circulation Public **Affairs Liaison (Circulation PAL)**

The position's duties include:

THE GATEWAY IS

- delivering the Gateway to designated locations on and around campus as soon as possible after delivery from
- mailing out all issues of the *Gateway* to subscribers every two weeks,
- sorting incoming newspapers and other publications and displaying them neatly in the Gateway offices, and
- · coordinating collation of the year's issues of the Gateway for the production of bound editions at the end of the

The successful applicant will:

- be reliable and hard-working with excellent organization and time-management skills,
- · be available Tuesday and Thursday mornings and early afternoons (meaning no classes before 2pm on those
- possess a valid driver's license and be able to produce a clean driver's abstract, and
- be registered in at least one course for credit during each of the Fall and Winter terms.

The position requires ten hours per week (less if you're speedy), runs from September 1, 2007 until 30 April, 2008, and pays \$329.96 per month. We are seeking to fill this position immediately, and will close the position as soon as we find an acceptable candidate.

For further information or to apply, contact Steve Smith, Gateway Business Manager 3-04 Students' Union Building T: 780.492.6669 F: 780.492.6665 biz@gateway.ualberta.ca

# and The Oxford comma - A nerdy grammatical convention that Want to improve your writing, learn crazy grammatical rules, and have an all-around grammatically correct time? Then head up to SUB 3-04 and ask for Natalie or Ryan to delve into the grammatically awesome world of Gateway News! THE GATEWAY Arguing about comma usage since 1910.

## Peak oil film no barrel of laughs

OLESIA PLOKHII **News Staff** 

Edmontonians concerned with the growing peak-oil crisis threatening global sustainability met on 16 May for an advanced screening of Escape from Suburbia: Beyond the American Dream. The film follows the lives of individuals changing the way they live in what they consider to be an unsustainable, oil-thirsty 21st century.

Edmonton was just one of several cities that took part in the screening, which was organized by Public Interest Alberta—a province-wide organization focused on education and advocacy.

The evening also included a panel of local speakers with a vested interest in environmental initiatives aimed at easing the life-altering ramifications associated with peak oil.

Don Iveson, Ward 5 electoral hopeful stressed the need for Alberta's citizens to be more environmentally responsible and to demand a redesign of their economy.

"How are we going to live in the 21st century without oil?" Iveson asked. "Well, it's going to be people-scaled, with local, walkable, trans-oriented transport-neighborhoods. If you really think that change is good, I need you to tell your friends and get them to tell their friends [about peak oil]."

Peak oil occurs when the efficiency of oil production is maximized, meaning it will only become less productive from that point on. The film strives to prove that the American government, along with other administrations, have been negligent in informing their citizens of the need to adapt their lifestyles to survive in a world that is powered on finite resources.

David Parker, a representative for the Green Party of Canada, offered the audience a chance to influence public policy on the issue of peak oil by voting for the party's proposed green tax shift, which would see a more stringent tax levied on oil producers in an effort to regulate emissions.

"Governments have been taxing the things that are good for us and exempting the things that are bad," Parker stated. "We've got to completely reverse that policy."



**FINITE FUELS** Bill Moore-Kilgannon warns of the perils of being addicted to oil.

The film predicts that oil will become so scarce that it will be divided

life will be affected. Echoing views voiced by other speakers, Liberal Party MLA Bruce Miller urged people to get involved politically to ensure Alberta's future. Miller said that the Province's prosperity is currently being impeded with congested roads, expanding oilsands,

only amongst the richest nations in the

world. Consequently, the price of gas

will rise so drastically that all facets of

and resource exploitation. "I think we're going to need some kind of grassroots political-protest movement [to make a difference]," Miller said. "If we don't start investing in alternative energy sources, we're going to miss a huge opportunity.

"I think there is amazing political potential in Alberta, and with awareness, we can turn things around."

According to statistics presented in the film, 34 per cent of the largest oil producers in the world are currently declining in production, suggesting that they've already hit peak oil. It also argues that since North Americans import 66 per cent of the oil they use—much of it from Alberta's steadily depleting oilsands—people will need to create new ways to interact, move, and feed themselves.

**Executive Director of Public Interest** Alberta Bill Moore-Kilgannon added that, although Albertans are already having difficulty affording oil and gas today, they haven't seen the worst of what's to come if the world's population continues to use up oil readily.

"[Oil] is expensive now, but just wait three years and see how expensive it's going to be," he said.

The film examines various alternative energy sources that could be used to ease the reliability on oil. These include non-conventional methods of energy production such as hydrogen and bio-methane, as well as substituting bicycles for cars. But most importantly, the film emphasizes building local, environmentally-friendly habitats centred on cultivating community gardens or biospheres to alleviate rising food prices related to an insufficient supply of oil.

"What are we going to do about it?" Moore-Kilgannon asked. "Are we going to leave our heads stuck in the tar sands thinking that everything is going to carry on as is, or we can look around and say that we need to find a whole bunch of creative solutions?"

## NINT aims small with big funding

SARAH TREIT

In response to the Stelmach government's announcement that it plans to pump \$130 million into nanotechnology research, the University of Alberta is starting to attract a lot of attention and top researchers to its National Institute for Nanotechnology (NINT).

The province's decision, announced on 2 May, aims to take hold of the nanotechnology market by investing in research, commercialization and product development, and recruitment of top scientists to institutions like NINT.

Dr Richard McCreery, a leading American chemist, recently joined the team at NINT as a Principal Investigator and Alberta Ingenuity Scholar. He left Ohio State University, where he was a faculty member for 32 years, to pursue opportunities in Canada.

"Here, not only do you have a university and a national lab, you have a province with billion-dollar budget surpluses," McCreery said. "If you talk to a typical American academic scientist, they will say that they are spending more and more time looking for money. Well,

I don't need to spend time looking for money. I've got to do science and teach and deal with students."

McCreery conducts research on molecular electronics, a field that works towards using molecules to replace silicon in electronic components. This could potentially circumvent the fundamental size limitations of silicon and create electronic devices that are faster, cheaper, use less power, and have a greater memory capacity.

"We've done some nice things with silicon, and I don't think silicon is going to go away. But chemists know that molecules have all kinds of different energy levels and all kinds of shapes and sizes and all kinds of potential purposes ... [and] if I play my cards right, then I can get these functions.'

McCreery added that one of the fundamental advantages of using molecules in place of silicon is that there are ten million molecules to choose from, whereas silicon is a uniform crystal structure. Moreover, the use of molecules has potential applications, such as biological sensing, that are currently impossible using silicon.

Integrating molecules that are only

1-2 nanometres in diameter (a nanometre is one billionth of a metre) into electronics is no easy task and can't be done in any ordinary lab. The labs at NINT are state-of-the-art "clean rooms" that prevent contamination by dust particles, which are about 1000 nm on average. A clean room has around 100 dust particles per cubic meter—a significant improvement over the 1 000 000 particles per cubic metre in a typical room.

McCreery is optimistic that the field of molecular electronics will bear significant results.

"It is something which has enough headroom to it that it may have lots of different applications, just like silicon did when it was figured out in 1946. People knew it was going to be important, but they had no idea what it was going to end up doing."

McCreery lauded NINT as a leader in nanotechnology, and is confident that new ground will be broken here.

"I firmly believe that significant things will happen, but whether they are the ones that we imagined, I don't know; I don't have a crystal ball. It's certainly true that there is enormous potential here."