

The Citizen Lab

BY LYNDIE BOURGON



The Citizen Lab's Ron Deibert

The Munk School for Global Affairs, tucked inside the downtown campus of the University of Toronto, is a labyrinthine building that can easily confound visitors trying to get inside and downstairs, below the stone pillars. Persistence is rewarded, however—beneath the stately halls where political discourse occurs is a computer lab where some of today's most important human rights work is taking place.

The Citizen Lab, the winner of this year's CJFE Vox Libera Award, is a pioneer in the world of "hacktivism"—its members document cases of cyber-espionage and Internet censorship around the world.

Founded in 2001, The Citizen Lab is based at the University of Toronto. It is a partner of Ottawa's SecDev Group, and has received research funding from The International Development Research Centre and the MacArthur Foundation.

Through their efforts to unmask the online world's censorship villains, the team at The Citizen Lab has become a veritable group of heroes dedicated to championing free speech for all while making it harder for governments and private companies to censor information online.

Through its ongoing OpenNet Initiative and The Information Warfare Monitor research projects, Citizen Lab tracks the trackers, determining who's watching the web activity of non-governmental organizations and human rights groups that

suspect they're being monitored or attacked through malware online. (Malware is software designed to infiltrate a computer's system without consent.)

In March 2009, the lab announced that it had uncovered GhostNet, a cyber-espionage network operating out of servers in China that was responsible for attacking hundreds of computers in 103 countries, including those linked to the Dalai Lama's offices and various embassies. Though The Citizen Lab wasn't able to identify the people behind the servers, its findings were proof that a cyber-espionage system was breaching computers belonging to important institutions.

In April 2010, The Information Warfare Monitor and the Shadowserver Foundation released *Shadows in the Cloud*, a report that builds on work started in the Tracking GhostNet investigation. The report documents the "increasingly dangerous ecosystem of crime and espionage and its embeddedness in the fabric of global cyberspace."

With about 10 to 15 employees working on various projects, and an international cast of on-the-ground workers in countries including Vietnam and Iran, Citizen Lab is working towards a difficult goal: an open, public Internet. "Our method is to start with victims who are suspected targets of espionage or surveillance, typically through malware and suspicious email attachments," explains Ronald Deibert, The Citizen Lab's director and a political science professor at the University of Toronto.

PHOTO: GLENN LOWSON

“We’ll work with a group—for example, Human Rights in China—and do a kind of forensic audit of their offices and undertake a very long, detailed investigation... We’re raising awareness and putting a spotlight on what’s going on.”

Citizen Lab may have even assisted your media organization—in 2006, it helped develop a tool called Psiphon, which provides circumvention services for users abroad who are unable to access certain Internet pages. “Say you live in Canada and you have a friend in Iran or China and you want to help them get access to the free Internet,” explains Deibert. “You set [Psiphon] up on a computer at home and it turns it into a proxy. You give them the connection to your computer, they connect and then fetch content.”

Psiphon is widely credited with helping to provide Internet access during the media crackdown in Iran before, during and after the disputed 2009 presidential election. Workers at the lab gave people in Iran links that led to Psiphon’s web server, allowing unrestricted access. This made it easier to communicate, share information and coordinate a response to the crackdown.

After that, Deibert says, the researchers realized that there was a market for a service like Psiphon. A friend at the BBC told him that the broadcaster was investing heavily in its Internet presence, but was being filtered in countries like Vietnam, Iran and China. He asked Deibert, “Can Psiphon help us?”

Now, Psiphon Inc. is an independent company that offers services to clients including the BBC, Voice of America, Radio Free Asia and Radio Farda. (A portion of the profits support research.) Deibert insists that The Citizen Lab doesn’t work to enable protesters or dissidents, and that it simply places a spotlight on and raises awareness about Internet censorship. But its work supports those who speak out against repressive regimes, and allows the sharing of information with fellow citizens and across borders. “It’s not just research for research’s sake,” he says. “The aim of The Citizen Lab is working in the arena of Internet, global security and human

rights... And a lot of that [affects] journalists.”

Deibert says journalists are regularly targeted with malware. The Citizen Lab has worked with foreign correspondents in China who were attacked through email attachments. “When you hear somebody is appreciating [your work], especially from a community like CJFE, it makes us think we’re on the right track, and we’re in it for a good reason.”

In the future, The Citizen Lab hopes to help more human rights groups, adds Deibert. “We need to work with the organizations, to help them better defend themselves from these attacks, and to find out where they’re coming from.”

He also wants to help establish Canada as a leader in preventing and punishing cyber-censorship, especially considering our already-established peacekeeping reputation. “I feel very strongly that we, as a nation, can do so much more,” he says. “We’re a country that has a strong appreciation of the importance of communications. We’re a large landmass, and communications have held us together for the time we’ve been in existence. But when it comes to cyberspace, where are we? We’re absent.”

Deibert notes that the United States has a cyber command, and that its military has defined the Internet as a domain where it wants to fight and win wars. “Whatever you think of those things, at least they have a concerted strategy of it,” Deibert says. “A lot of work needs to be done [to nurture] the Canadian government to understand the importance of this area. In the past, I would do things more from the outside—shake my fists and so on. But now it’s so important to engage.” 🍁

For more information about The Citizen Lab, visit citizenlab.org.

LYNDSIE BOURGON (LYNDSIEBOURGON.COM) IS A FREELANCE WRITER BASED IN TORONTO. HER WORK HAS BEEN PUBLISHED IN *CANADIAN BUSINESS*, *THE GLOBE AND MAIL* AND *THE NATIONAL POST*.