



Vulnerable Persons Registry: First in North America

The announcement on an eight year initiative by the Sault Ste. Marie Innovation Centre's Community Geomatics Centre was met with great interest after news broke that the Vulnerable Persons Registry (VPR) was open to the public for registration.

The VPR is a groundbreaking comprehensive model in partnership with over 25 local agencies which assists authorized personnel in emergency situations. The VPR provides an additional safeguard that is free, voluntary and confidential for persons at greater risk during emergencies. This communication tool provides local first responders and PUC with the key information they need to help increase safety in situations of power outages, home emergencies, and large-scale emergencies. This initiative is the first of its kind in North America and has been designed to be transferable with the hopes of becoming a model that communities across Canada could adopt.

"After eight years, we are proud of what the VPR has become and what it has the potential to do for the community, and hopefully elsewhere in North America" says Kimberley LeClair, VPR Coordinator

The VPR pilot accepts registrations from Sault Ste. Marie residents who live at home without 24-hour support and experience difficulty with mobility, vision, hearing, and develop-



The Community Geomatics Centre (CGC) created the Vulnerable Persons Registry (VPR) to assist those at risk in emer-

mental, cognitive and mental health. Those living in the townships of Prince or Dennis and Rankin Reserve, who rely on electricity for life-sustaining equipment such as life support, oxygen and dialysis, are also eligible to register.

There are two registration locations open to the public which include the Accessibility Centre located at the John Rhodes and Canadian Red Cross. The public can also register from home by visiting www.soovpr.com or submitting a form by mail. Clients of partnering support agencies such as Alzheimer Society and CNIB can also register directly with their agency. A registration kit can be mailed directly to a registrant's home by contacting the VPR Coordinator.

The VPR initiative is in memory of Lewis Wheelan who passed away during the widespread black out in August of 2003.

"We cannot stress enough the importance for the VPR and believe it will make a difference in our community. We are certain he would be truly humbled that lessons learned from his life have inspired such an initiative" says the Wheelan family.

For more information on the Vulnerable Persons Registry please contact Kimberley LeClair, VPR Coordinator, at 942.6938 x3041 or info@soovpr.com.

"After eight years, we are proud of what the VPR has become and what it has the potential to do for the community, and hopefully elsewhere in North America"

- Kimberley LeClair

SSMIC Welcomes new VP of Development

The Sault Ste. Marie Innovation Centre (SSMIC) announced today that Jason Naccarato has been appointed to the VP of Development role. Jason will be leading market development activities in science and technology including the Algoma Games for Health (AGFH) initiative.

Jason brings a wealth of business and technical expertise in areas including advanced development, engineering, project management and purchasing and procurement. Prior to joining SSMIC, Jason held positions with Magna as Advanced Purchasing and Business Development team leader, Nissan North America as Senior Program Controller in Cost Economics, Nissan Technical Centre North America as Cost Reduction Project Manager and Siemens VDO as Engineer-Dynamometer Test and Production Support.

Jason has completed his Project Management Professional (PMP) designation and has an MBA from Wayne State University. Jason completed his Honors Bachelor of Engineering Science in Mechanical/Materials Engineering from the University of Western Ontario.

"Jason's significant corporate experience, education background and passion for our community make him a great fit to lead our market development activities," said Tom Vair, executive director, SSMIC. "We see tremendous opportunity for the science and technology sectors in our region and we are pleased to have Jason return to Sault Ste. Marie to join our team."

"I am elated to return to the city where I was born and raised to serve the community."

- Jason Naccarato



Above: Jason Naccarato joins SSMIC as VP of Development

"I am eager to embrace the challenges of this new position and to utilize my strategic thinking to help our team bring further prosperity to the Sault Ste Marie area" said Naccarato. "I am elated to return to the city where I was born and raised to serve the community."

Jason will be based out of the SSMIC headquarters in the new Bio-Sciences and Technology Convergence Centre located on the Algoma University campus.

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SSMIC and AU Partner to Restore St. Marys River

The Sault Ste. Marie Innovation Centre (SSMIC) and Algoma University, along with Environment Canada, the Ministry of the Environment and other government agencies are playing a key role in the restoration of the St. Marys River through the Remedial Action Plan (RAP).

The St. Marys River provides a unique habitat for many types of plants and animals along its length, as well as supplying drinking water to a number of communities. The river was designated as an Area of Concern (AOC) in 1987 due to cumulative environmental impacts in the river's ecosystem. The AOC extends from the head of the river at Whitefish Bay and extends downwards to encircle St. Joseph's Island and includes the Canadian and U.S. cities of Sault Ste. Marie. While upgrades to municipal and industrial wastewater treatment has achieved significant improvements in water quality, the legacy of industrial and urban development along the St. Marys River has caused other environmental issues which are still being addressed.

The Remedial Action Plan process, created to provide a means of addressing the 43 AOCs around the Great Lakes, involves three stages: identify the environmental problems and sources of pollution; evaluate and carry out actions to restore the area, and; confirm that these actions have been effective and that the river has been sufficiently restored.

Within the St. Marys River AOC, projects currently being undertaken include the creation of

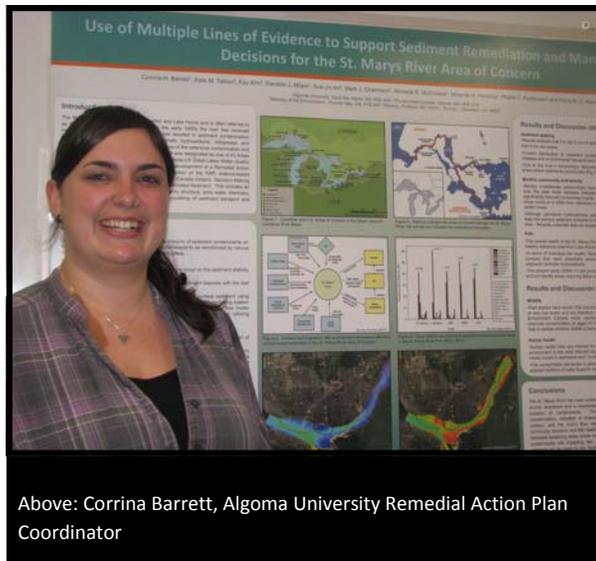
an Implementation Annex (a document that specifies the actions, timelines, resource needs, and roles and responsibilities of agencies involved to address remaining issues), and the formulation of a sediment management strategy (for priority areas where sporadic occurrences of

ing essential input and feedback in this highly collaborative endeavor being lead by Environment Canada and the Ontario Ministry of the Environment.

The RAP team from SSMIC and Algoma University is comprised of Dr. Paula Antunes (SSMIC Science Development Officer), Corrina Barrett (Algoma University RAP Coordinator), and Marcus Scornaienchi (SSMIC Water Sustainability Intern). The RAP team focuses on raising awareness on water sustainability and related issues within the Algoma region through research publications, participation in outreach events, development of communication products, which includes the launch of a new Water Portal website (soon to be released). Together, SSMIC and Algoma University are working to bring the sustainability initiatives of all local agencies to the forefront, and to connect people and resources in a manner that helps to maximize collaborative partnerships and ultimately ensure the sustainable use and management of valuable freshwater systems.

The St. Marys River RAP is a partnership between Canadian and U.S. federal governments, provincial (Ontario) and state (Michigan) governments, with cooperation from the Bi-National Public Advisory Council (BPAC).

For more information relating to the Remedial Action Plan (RAP) and the Bi-National Public Advisory Council (BPAC), please visit www.lsu.edu/bpac.



Above: Corrina Barrett, Algoma University Remedial Action Plan Coordinator

toxicity within the uppermost layers of the sediment are still observed). For the Implementation Annex in particular, a number of local agencies, including the City of Sault Ste. Marie, Algoma Public Health, the Conservation Authority, the local offices of the Ministry of the Environment, Department of Fisheries and Oceans and the Ministry of Natural Resources have been provid-

RAIN Symposium marks inaugural regional discussion on agri-innovation

The Sault Ste. Marie Innovation Centre and NORDIK Institute are hosting an inaugural Rural Agri-Innovation Network (RAIN) Symposium on November 4th and 5th at Algoma University.

The two day event will feature an evening reception with locally-produced and traditional Anishinaabe foods, including a welcome and opening prayer by an Anishinaabe Elder. Ron Bonnett, President of the Canadian Federation of Agriculture, will kick off the event with a keynote address on Friday, November 4th at 7 PM.

A workshop and panel discussion will feature local farmers and researchers covering topics including Policies and Programs to Grow Agricultural Capacity in the North, Sustaining Soil and Crop Productivity, Crop Trials in Northern Ontario, Specialty Foods and Value-Added Products, Livestock Production in Northern Ontario, Healthy Food for Sustainable Communities and Challenges and Opportunities.



Left to Right: Elaine and Will Samis and Ray Pres-tidge from Penokean Hills Farms

"The University of Guelph and The Ontario Agricultural College are pleased to be involved with this unique symposium and the efforts by RAIN to build greater food and agriculture knowledge networks across all of Ontario" says Rene Van Acker, Professor and Associate Dean

in the Ontario Agricultural College, University of Guelph.

Attendees will have the opportunity to hear from speakers including Dr. Pedro Antunes from Algoma University, Dr. Tarlok Sahota from the Thunder Bay Research Station, Dr. Connie Nelson from the Food Security Research Network, Ira Mandell from the University of Guelph, along with twenty other presentations from organizations including the Ontario Ministry of Agriculture Food and Rural Affairs, National Sciences and Engineering Research Council and the Algoma Food Network.

For a full agenda or to register for the Rural Agri-Innovation Network (RAIN) Symposium, please contact Diana Medaglia at 942.7927 x.3138 or dmedaglia@ssmic.com.

Toyota unveils health-care robots

CBC Nov 1, 2011

Toyota unveiled its ambitions for high-tech health care Tuesday, displaying experimental robots that the auto giant says can lift disabled patients from their hospital beds or help them walk.

The company aims to commercialize products such as its "independent walk assist" device sometime after 2013 — seeking to position itself in an industry with great potential in Japan, one of the world's most rapidly aging nations.

Eiichi Saitoh, a professor in rehabilitation medicine, demonstrated the "walk assist" device on Tuesday, strapping the computerized metallic brace onto his right leg, which was paralyzed by polio.

He showed reporters at a Toyota facility in Tokyo how the brace could bend at the knee as needed, allowing him to walk more naturally and rise from a chair with greater ease than the walker he now uses. Wearing a backpack-like battery, Saitoh walked up and down a flight of stairs, smiling with delight.

Saitoh said he had tried Toyota's machines with patients and was confident they helped people recover more quickly from strokes and other ailments that curtailed movement.

"It may be difficult to predict the future, but the era of an aging society is definitely coming," he said. "We need partner robots to enrich our lives."

Toyota also demonstrated an intelligent machine with padded arms that can help health care workers lift dis-

abled patients from their beds and then carry them around. Another mobility aid worked like a skateboard to help people relearn balance.

Toyota officials said technology for autos such as sensors,



Above: Eiichi Saitoh, a professor in rehabilitation medicine, wears an independent walk assist robot. (Yuriko Nakao/Reuters)

motors and computer software are being used in such computerized gadgets to help people get around, and what they learn about mobility for people will likely be of use in future cars.

Prices and overseas sales plans of all the machines are still

undecided, according to Toyota.

General manager Akifumi Tamaoki said more tests were needed on more people to insure safety and reliability, and gain user feedback, but the commercial products in the works were going to be smaller and lighter than the prototype versions shown. "We define gentle and smart machines as partner robots," he said.

Toyota has previously shown human-shaped robots that played the trumpet and violin, and those that move around and talk about Toyota cars at showrooms.

Rival Japanese automaker Honda Motor Co. has developed a sophisticated humanoid robot called Asimo, which can run, talk and dance. But Asimo has been limited to showrooms and labs and has yet to enter any hospital or home.

Toyota faces competition from other manufacturers that are all working on gadgets to tap into the health-care business. Honda also has demonstrated machines worn on the legs that help people move, as have some universities. Hirohisa Hirukawa, a robot expert at the government-backed National Institute of Advanced Industrial Science and Technology, said more time would be needed to see the full businesses potential of the Toyota machines but was upbeat.

"I feel that the walk-assist device has real potential to sell to consumers," he said in an email.

Tamaoki said Toyota is keeping its offerings simple, compared to those from Honda, so they can enter everyday life easily.

ARTIE reaches 700 students during National Science and Technology Week

The 4th Annual ARTIE (Advanced Research Innovation & Technology Expo) drew over seven hundred students from eleven different schools. Exhibitors from the 4H Club, Knights of Alloy, Northern Lights, Solar, Algoma Games for Health, Water Sustainability, Clean North, Sault College, maple syrup, and forensics presented to both elementary and high school-aged students.

During National Science and Technology Week, the two-day event incorporated gaming technology for high school students. On Friday, October 21st, David Brevik, President and

CEO of Gazillion Entertainment, spoke to students on gaming, work-in the industry, "the golden

ages," and Diablo II—the hit game Brevik co-created.

Northern Lights, a Sault Ste. Marie

students. The exhibit incorporated a discussion on the use of lasers and graphic design images to create a laser show.



Above: Students observing the Knights of Alloy robot with exhibitor Jonathan Budau

Innovation Centre incubator client, debuted their laser light show display for elementary and high school

Clean North displayed a composting exhibit on both days of the event. The Clean North composting display allowed students to gain a better understanding on composting while prodding through dirt and worms. This hands-on exhibit allowed students to gain an appreciation for how composting works, how to create a compost indoors using food scraps and a bin, and the components of composting.

ARTIE 2011 took place at the George Leach Centre on the Algoma University campus on October 20th and 21st and will continue again next year.

UPCOMING EVENTS:

Sault Ste. Marie Innovation Centre
1520 Queen Street East, Suite BT 200

www.ssmic.com

November

S	M	T	W	T	F	S
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6	7	8	9	10	11	12
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Lasers Power Pentagon’s Next-Gen Artificial Limbs

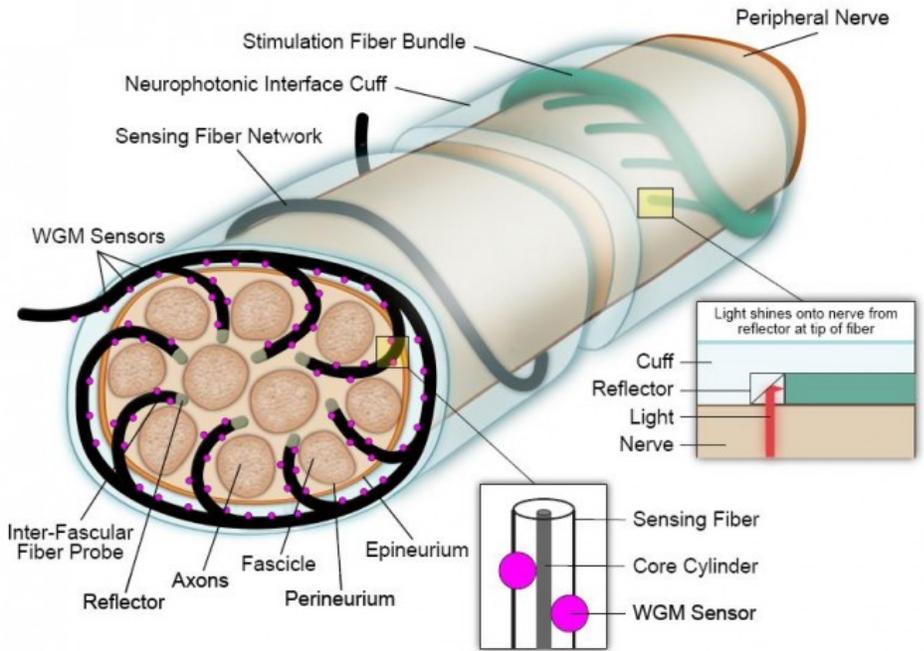
Wired.com: In 2005, researchers at Vanderbilt realized they could trigger a nerve using infrared light. The finding catalyzed a handful of research projects investigating the prospect of laser-powered prostheses, and DARPA last year doled out \$5.6 million for the creation of the Neurophotronics Research Center, led by SMU, for the development of prosthetic devices powered by infrared lasers.

Visit www.wired.com for more on this article.

November 4, 5
Rural Agri-Innovation Network
(RAIN) Symposium

November 17
Festival of the Trees

For more information
about any event
or to *RSVP* contact
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3138 or dmedaglia@ssmic.com



“It’s the same way the internet put thousands of phone calls on one wire,” says Dr. Marc Christensen, the program’s leader of the method, which he expects to test in mammals next year. “Right now a prosthetic can pick up or transmit maybe two signals. We think we can turn that number into thousands.”

Photos: U.S. Army; Southern Methodist University

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