

RCMP



ROYAL CANADIAN MOUNTED POLICE

SERVING THE POLICE COMMUNITY SINCE 1938

GAZETTE

Q&A
FILMMAKER
CHALLENGES
PERCEPTIONS OF SEX
TRADE WORKERS P.34

VOL.74, NO. 4, 2012

POLICE IN ACADEMIA APPLYING RESEARCH TO REAL-WORLD PROBLEMS

ACADEMIC WISDOM
AN EVIDENCE-BASED
APPROACH TO POLICING P.7

QUIET EYE
RESEARCH LINKS EYE
MOVEMENTS TO
SHOOTING PRECISION P.20

**THE SCIENCE OF
FOOT PATROL**
PHILADELPHIA POLICE PARTNER
WITH UNIVERSITY P.24

FIRST AIR CRASH
FORENSIC RESPONSE
AFTER ARCTIC TRAGEDY P.32

RCMP - GRC . G C . C A



Royal Canadian Mounted Police Gendarmerie royale du Canada

Canada



**CANADIAN
POLICE
COLLEGE**

**COLLÈGE
CANADIEN
DE POLICE**

EXCEED YOUR POTENTIAL



ADVANCED AND SPECIALIZED POLICE TRAINING

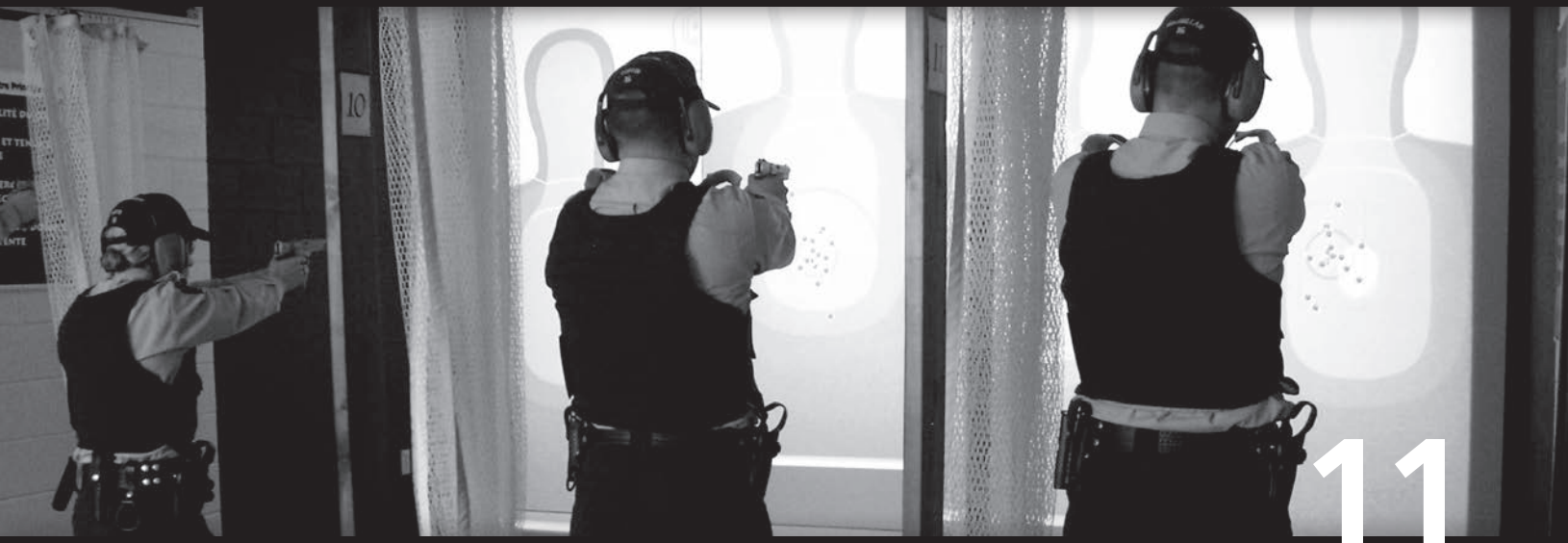
Ottawa • Chilliwack • International

www.cpc-ccp.gc.ca



Royal Canadian Mounted Police
Gendarmerie royale du Canada

Canada



COVER SECTION

- 7 How the academic world can help us police better
- 10 The exercise-cognition connection
- 11 Simulator training unit gives cadets an edge
- 12 Panel discussion: What's the ideal relationship between police and academia?
- 14 Auditory testing study finds more officers fit for duty
- 16 Police-academic partnerships in a knowledge-based economy
- 18 Designing courses to meet police training needs
- 19 Cold-water research points to gentle extraction techniques
- 20 Quiet eye characteristics that can save an officer's life
- 22 Cincinnati police find value in academic partnership
- 24 The science behind the Philadelphia Foot Patrol Experiment
- 26 Research finds link between police stressors and disease
- 28 Launching the first forensic entomology study up North

DEPARTMENTS

- 4 Editorial message
- 5 News Notes
- 29 Just the Facts: Knife crime
- 30 Featured Submission: The OPAPA human trafficking case
- 32 Featured Submission: Forensic response to First Air crash
- 34 Q&A with documentary filmmaker Rosie Dransfeld
- 35 New Technology: Web-based program uses Twitter to track incidents
- 36 On the Leading Edge
- 38 Emerging Trends: Embedded journalists get front-line perspective





PUBLISHER: Nancy Sample

EDITOR: Katherine Aldred

WRITER: Sigrid Forberg

CONTRIBUTING WRITER: Mallory Procnunier

GRAPHIC DESIGN: Lisa McDonald-Bourg

ADMINISTRATIVE SUPPORT AND CIRCULATION: Sandra Levett

TRANSLATION: RCMP Translation Services

PRINTING: Performance Printing

GAZETTE EDITORIAL BOARD:

S/Sgt Lori Lynn Colbourne, Insp Craig Duffin, Sam Jaroudi, Dr. Roberta Sinclair, Dr. Brian Yamashita

The *Gazette* (ISSN 1196-6513) is published in English and French by the National Communication Services of the Royal Canadian Mounted Police in Ottawa. The views expressed in any material published in the magazine or in its online version are those of the authors and do not necessarily reflect the official opinion of the Royal Canadian Mounted Police. Cover design and contents are copyrighted and no part of this publication may be reproduced without written consent. Canada Post Publications Mail Agreement 40064068. The *Gazette* is published four (4) times a year and is issued free of charge on a limited basis to accredited police forces and agencies within the criminal justice system. Personal subscriptions are not available.

The *Gazette* welcomes contributions, letters, articles and comments in either official language. We reserve the right to edit for length, content and clarity. © 2012 RCMP.

HOW TO REACH US:

Editor: RCMP *Gazette*
73 Leikin Drive,
M-8 Building, 1st Floor, Room 801
Ottawa, ON K1A 0R2
CANADA

Phone: 613-843-4570
E-mail: gazette@rcmp-grc.gc.ca
Internet: www.rcmp-grc.gc.ca/gazette

STAY CONNECTED WITH THE RCMP

Visit our website:
www.rcmp-grc.gc.ca

Follow us on Facebook:
www.facebook.com/rcmpgrc

Follow us on Twitter:
Twitter.com/rcmpgrcpolice

Watch us on YouTube:
www.YouTube.com/rcmpgrcpolice

Subscribe to RSS updates:
www.rcmp-grc.gc.ca/rss/index-eng.htm

THE SCIENCE OF POLICING

If you found a partner agency that could help your police department provide better service, solve more cases, save money or make your officers safer, would you reach out to them? For most of us, that's a no brainer.

But what if you had to drastically change your way of thinking and doing business to accomplish these improvements? What if you had to rely on the advice of academic researchers who had no policing experience?

Despite a natural instinct to resist the help of "outsiders" who don't understand police or to hold onto what's always been done, there are many police departments that are willingly and successfully partnering with academics.

As you'll learn in this issue of the *Gazette*, these partnerships are successful not only because police gain the measurable and impartial results of what works and what doesn't, but they open the door to other possibilities, such as tailoring programs and techniques to the specific needs of those departments.

In our cover article, Sigrid Forberg writes about some of the work that RCMP members have undertaken with the help of academia — in such areas as hitchhiking patterns and domestic violence response training — to improve policing in Canada.

Contributing writer Mallory Procnunier describes two projects, an RCMP fitness program and a simulator training unit, both of which have been made possible with the help of academic research.

Det. Cst. Michael Arntfield of the London Police Service in Ontario talks about how Canadian police departments are showing a genuine interest in developing a scholarly sphere in policing. Arntfield, who also teaches and conducts research at two Ontario universities, discusses the

best prospects for bridging academia and front-line operations.

We hear from other agencies that have made strides in closing the researcher-police gap.

The Philadelphia Foot Patrol Experiment was a joint effort in 2009 between the Philadelphia Police Department and Temple University. Professor Jerry H. Ratcliffe explains how the experiment was designed and conducted to assess the actual effectiveness of foot patrols in the city. That relationship continues today.

Lieut. Col. James L. Whalen of the Cincinnati Police Department describes how his department reached out to the University of Cincinnati for advice in assessing and reorganizing its crime-analysis functions. Despite some initial doubts within the force, Whalen explains how the value gained by both far exceeded the cost.

There's also a growing body of research that helps police officers better understand and improve their health and safety.

Dr. Joan Vickers of the University of Calgary writes about her original research into the eye movements of elite versus rookie police officers during shooting scenarios, and which characteristics result in better performance. Dr. John Violanti shares the results of his research into the connection between police stress and disease, and how police departments can better address this unfortunate link.

The relationship between researchers and police is not always an easy one, as Dr. Ratcliffe points out, but with collaboration and trust, it's possible for them to work together and advance the science of policing. ■

— Katherine Aldred



B.C. ENSURES FUGITIVES FACE WARRANTS

Offenders who flee to British Columbia (B.C.) after committing a crime in another Canadian province or territory won't find it as easy to hide anymore.

Since September 2011, the province's Fugitive Return Program has been targeting individuals who live in B.C. who face arrest warrants elsewhere in Canada.

"We want to make sure that the option of going somewhere else and starting a new life is no longer available to them," says Cpl. Jennifer McDonald, B.C.'s Fugitive Return Program co-ordinator.

It used to be easy for fugitives to hide in B.C. because the practice had always been for law enforcement to simply alert the other jurisdiction that the individual was found. In the meantime, offenders could leave the area and hide somewhere else.

"A lot of offenders are under the belief that their warrants are no good here in B.C. and that's why they're here to evade prosecution for those warrants," McDonald says. "The realization that they can be arrested is now starting to spread."

The program is a joint initiative between the Government of British Columbia, the B.C. Sheriff's Office, the Vancouver Police and the RCMP. Its goal is to give some comfort to victims of crime and put dangerous offenders behind bars.



Program liaisons are located at the majority of RCMP detachments and police departments within B.C. If general duty members come across an offender who has an out-of-province warrant, they can alert these liaison officers and the process can begin.

McDonald then liaises with the Crown prosecutor in the jurisdiction that holds the warrant to see if she can negotiate their return. There's also a cost-sharing option for both provinces, and sometimes the

program will offer to cover the entire cost of the return, depending on the candidate and severity of the warrants.

"If we can remove individuals and hold them accountable for their crimes, then perhaps we can bring some closure to their victims and really make a dent in whatever activities they're doing here within other communities," says McDonald. ■

— Mallory Procnier

HOTLINES HELP TIP THE SCALES

When police are working on major time-sensitive cases, they might not have the resources to spare to man the phones 24/7.

But directing calls to the 911 service has its downfalls as well. With all that's going on, investigators might miss the one tip they need to break the case and 911 operators might miss a call about a crisis in process.

Hotline services are a common way around these issues. Alternative Answers (AA), a Canadian company that provides the Crime Stoppers service, now also provides non-anonymous hotlines where information is gathered so police can later follow up.

"The world is becoming smaller and smaller," says Donna Harms, the creator of Alternative Answers. "You can watch Youtube and see a crime happen in Spain and it's in everybody's visual within minutes.

So why not have a number available for everybody to post information?"

Bob Paterson, a retired Ontario Provincial Police officer and a consultant with the company, says his years in the field have taught him how important the first hours and days of an investigation are for collecting information — especially in cases where time is of the essence.

"They're good for anything that attracts the media attention: missing children or seniors, terrorism threats, contamination of food or water, abductions or serious assaults," says Paterson. "It can be really handy for police agencies in the opening hours, it just takes the pressure off."

A pressure Sidney Newman is familiar with. The executive director of the Baton Rouge Police Department solicited AA's

hotline services when in the middle of a serial killer investigation, his previous answering service folded.

In just a few short hours, AA was able to set up a line for him. Since then, he's used their 24/7 service to collect tips coming in afterhours, which he adds has been invaluable. He gives the example that if someone is calling in at 2 a.m. to give a tip that someone is bringing a gun to campus the next morning, that can't wait until regular office hours.

"Let's say you have five or six calls and that's the fifth call," says Newman. "If somebody's coming to school with a gun, you miss that valuable time to come up with a plan to address that. I couldn't put a price tag on that." ■

— Sigrid Forberg



ORGANIZED AGAINST CRIME

Funding from the British Columbia (B.C.) provincial government is helping the Combined Forces Special Enforcement Unit (CFSEU) continue to combat gangs and violence within the province.

Comprising 14 member agencies, the CFSEU-B.C. created its gang task force in 2004. In 2009, the government committed \$53.3 million to the unit through the federal Police Officer Recruitment Fund. In February, it ensured another three years with a commitment of \$66 million.

"The CFSEU is like the lightning rod to bring all those police agencies together," says C/Supt. Dan Malo, CFSEU-B.C.'s chief officer. "We bring together a regional approach and focus for a co-operative targeting of those individuals that pose the

highest risk to public safety."

In nearly 10 years, the unit has accomplished several successful long-term goals such as the disruption and the successful investigation of several high-ranking figures in the United Nations gang.

With its more than 400 employees at the CFSEU-B.C., they've been able to focus on putting more than 60 significant gang members in jail since 2009.

Prominent drug investigations like E-Pintle, which led to the drug conviction of a notorious gang member, as well as E-Nightshade, a recent investigation that led to murder charges laid against two full-patch Hells Angels members, have resulted in the reduction of gang-related crime in the province.

Gang-related homicides in the Lower Mainland of B.C. have gone from a high of 35 murders in 2009 down to approximately eight in 2011. And B.C.'s crime rate is at a near 40-year low.

But Malo says the biggest success of the program has been the integration of all 14 B.C. agencies.

"When they come here, they still respect the shoulder flash that they have but they're now part of this integrated model and are able to move around and investigate and partner with all the police agencies very openly and quickly because of the fact that we have people from all over here," says Malo. ■

— Sigrid Forberg

SHIPRIDER SETS SAIL

Seven years after the concept was drawn up on a napkin, Project Shiprider has become a reality.

The *Integrated Cross-Border Law Enforcement Operations Act* received Royal Assent on June 29, 2012, which gave the Integrated Border Enforcement Team Program (IBET) the go-ahead to staff the program's highly sought-after 22 positions in British Columbia and Ontario.

"I think we stopped counting after 500

emails about the positions," says Sgt. Joe Czenze, program reviewer for IBET. "We had 150 applicants for those 22 positions."

The integrated, cross-border maritime program works by removing the international boundary in maritime environments and allowing the United States Coast Guard (USCG) and the RCMP to cross freely over the border to better prevent cross-border smuggling and human trafficking.

And now that the legislation has passed,

these members will soon be able to police in each other's jurisdiction.

"It's a great opportunity to leverage each other's resources and assets and it's a great tool for any kind of cross-border criminality that occurs within a maritime environment," Czenze says.

The border between Blaine, Wash., and Surrey, B.C., as well as the border between Windsor, Ont., and Detroit, Mich., will soon be equipped with full-time Shiprider teams, comprising a sergeant, two corporals and eight constables.

While on Canadian vessels, three RCMP members and one USCG member, who has peace officer status, operate under Canadian laws. In the United States, the RCMP member acts as a United States Customs officer and works alongside USCG officers on the American vessel.

"We've done enough proof of concepts that we know that Shiprider works without a doubt on both sides of the border," Czenze says.

Shiprider can also be called upon to work high-level events that require maritime security. It has already stretched its legs at the G20 summit and the 2010 Vancouver Olympic and Paralympic Games. ■

— Mallory Procnier

An RCMP instructor talks to law enforcement officers taking part in joint Canada-US Shiprider training exercises in Charleston, South Carolina.





The RCMP in British Columbia has partnered with the University of Northern British Columbia to research hitchhiking. Police believe a series of disappearances along Highway 16, often referred to as the "Highway of Tears," are linked to hitchhiking.

FROM THE CRUISER TO THE CLASSROOM

PARTNERS HELP PERFECT TECHNIQUES

By Sigrid Forberg

Professions like policing put a lot of stock in tradition.

And while a strong connection to the past is important, relying upon long-standing police practices because it's always been done that way doesn't provide the best approaches for modern-day policing.

But members are questioning many of these "best practices," searching for new answers to problems and finding innovative solutions across Canada with a little help from some willing partners: academics and researchers.

IDENTIFYING ISSUES

Back in 2001, the RCMP solicited Linda Duxbury, a Carleton University professor of business, to investigate the well-being of its members.

Duxbury collected data from 30,000 people working in various positions all

across the country. The resulting report, *The RCMP: Yesterday, Today and Tomorrow*, found that the organization as a whole was resistant to change. Duxbury recommended that the RCMP "re-engage the heart" and invite all employees to participate in the process of necessary changes.

Ten years later, Duxbury was asked by the Canadian Association of Police Boards to collect data on Canadian police forces as a whole about work-life balance. She found that not much had changed in the decade since her initial research.

Based on a survey of 4,500 officers from 25 forces, Duxbury found that police officers across the country are suffering from stress and health problems as a result of working long hours, understaffing and substantial family demands.

"It's this whole idea of emotional fatigue," says Duxbury. "We've reached the

point of no return in respect to doing more with less. We have this stressed out workforce that's having challenges coping and that gives you all kinds of hidden costs."

Looking at it as an outsider and from a business perspective, Duxbury says she's in a perfect position to evaluate the results objectively. And with hard data coming straight from the employees, the message gains credibility.

"I don't come in with a predisposed set of ideas," says Duxbury. "This is a life and death kind of job and there is huge public scrutiny and the desire to reduce funding because it comes from the public purse."

BUILDING BRIDGES

In tight economic times, it makes sense that the public wants its police to be able to do more with the resources available. But it's a fine balance, especially when intervention



and prevention initiatives are first on the chopping block.

The RCMP in Saskatchewan are in the process of establishing Memorandums of Understanding with both the University of Saskatchewan and the University of Regina to conduct research on matters of interest to the force.

Supt. Bob Mills, with the Strategic Operations branch in Saskatchewan, says they've been focusing on various crime reduction strategies that are based on empirical evidence. The value in going to outside institutions, especially ones filled with researchers, as Duxbury suggests, is that it gives those findings credibility.

And it also helps the RCMP keep up with an ever-evolving world that they can sometimes lose touch with.

"We're not plugged into everything," says Mills. "We hear about it when somebody gets shredded in a trial or the latest research says something contrary to our practices. That was my inspiration; we need to be part of it."

It's a mindshift for many in the force. Academics are critical thinkers and it's their job to question everything. As a police organization, Mills says, the RCMP doesn't take well to criticism from "outsiders."

"We tend to be quite resistant to a whole bunch of new thinking organizationally," says Mills. "Whereas that's the world of academics, they love new ideas and they

like to propose and test things."

But Mills adds everyone involved stands to benefit if the organization can open itself up to these kinds of proactive partnerships. The MOUs are just one way of ensuring the RCMP doesn't get detached from the world of academia. And it will help it keep its techniques current.

INVESTING IN INGENUITY

Other provinces are also starting to recognize the importance of and formalize these kinds of relationships. Sgt. Frank Paulicelli, the non-commissioned officer in charge of youth strategies for the RCMP in British Columbia, says in the long run, those initial investments pay themselves off in spades.

"I think it's vital that we look at these things we do. And we're not qualified to do that alone," says Paulicelli. "We have partnerships with a number of universities, it's almost core business for us now and I've found they're more than happy to partner with us."

Paulicelli says it's about more than just credibility — it's a cost-saving measure. He adds the RCMP sometimes continues with decades-old initiatives just because of how much time and money has already been sunk into them without assessing their effectiveness, but that's starting to change.

Evaluations that would cost the force \$30,000 can be done through universities at a fraction of the price and affords graduate

and undergraduate students important learning opportunities.

A partnership between Paulicelli's team and the University of Fraser Valley led to a recent pilot in four detachments. The university researchers created a database they loaded into a police car that, through informatics, encouraged members to refer clients and youth to different agencies as extrajudicial measures.

"There's tons of research being done out there but it's not being translated down to the front lines," says Paulicelli. "If we tell them what we need to evaluate and what the expectations are, it's very helpful. We get the cheap labour and they get a good paper out of it."

DIRECTING DISCUSSION

With academic and police collaboration, there's also an opportunity for the police to influence the research topics.

Insp. Eric Brewer, the commander of North District Traffic Services in Prince George, B.C., says he was inspired by a wildlife study done at the University of Northern British Columbia (UNBC).

Truck drivers were given GPS equipment and tasked with simply pushing a button when they saw wildlife on the road. He thought that the same principles might be applicable to a study on hitchhiking patterns.

Highway 16 in Northern B.C., which

RESEARCH CHAIR HELPS REDUCE CRIME

When retired Deputy Commissioner Gary Bass, the Commanding Officer of the RCMP in British Columbia (B.C.), realized how large the gap between universities and the police was, he came up with a solution to bring them closer.

Eight years ago, Bass created three research chairs, two of which are at Simon Fraser University and the final in crime reduction at the University of Fraser Valley. The current incumbent at UFV, Darryl Plecas, EdD, says the gap was making itself obvious in the kinds of studies academics were putting out.

"The police were constantly having this experience that academics weren't really grasping the practical side of the police world," says Darryl Plecas. "They

were reporting on things, they were doing studies, and not really capturing what the issues really were."

But the academics argued that without access to crucial police data and being close enough to the issues, police couldn't expect their research to be 100 per cent accurate. The solution, Bass determined, was to give a professor access to the information and be fully funded by police to look at policing issues 24/7 — something unheard of at the time.

In his tenure as research chair, Plecas has conducted 75 different projects, which have helped the RCMP make a dent in crime in B.C. Using the RCMP and undergraduate students as researchers,

Plecas has made recommendations and reports that have helped the RCMP become international leaders.

"There is no place in the Western world that has reduced crime to the extent that we have in British Columbia," says Plecas. "The whole notion and the strategies to reduce crime were really led by the RCMP."

Not only has the position helped reduce crime, but Plecas says many of his research students have gone on to work for the RCMP in research positions.

"From the university's perspective, the chair is hugely important," says Plecas. "If someone were to track the difference, we've produced more research in the last eight years than in the last 80. And we've created more learning opportunities for students than ever before."

— Sigrid Forberg



has often been referred to as the 'Highway of Tears,' has been the site of many disappearances in recent years. The Missing Women's Task Force in B.C. was starting to look at the role of hitchhiking in some of these disappearances.

To learn more, Brewer reached out to UNBC to uncover what those patterns might be. He felt people would be more likely to speak with academics than police officers in uniform about sensitive matters.

"We hear about the trust issue with the police and the First Nations community in particular all the time," says Brewer. "Real or imagined, if you can eliminate that, then I think the data you collect is much better, much more real. People are more willing to give candid, forthright answers than what you may want to hear."

It will likely be another year before they have empirical data they can use, but the RCMP is already benefiting from the information gathered. It's also making efforts to talk to people they see hitchhiking and keeping records of their interactions.

"One of the things we want them to understand is that if you go missing, we now have a starting point," says Brewer. "For most of the folks that went missing before, we had no starting point. We didn't know where they went missing from, they just disappeared."

FAMILIAR FACES

Having those connections and networks established already can make getting to those starting points much easier. Dr. Roberta Sinclair is a civilian member of the RCMP, who works at the National Child Exploitation Co-ordination Centre (NCECC), leading the research team.

Also an adjunct professor at Carleton University and as an academic herself, Sinclair is familiar with both RCMP and academic lingo and can inform both sides of recent developments and discoveries as well as anticipated future needs.

"For many years, we've kept law enforcement separate from the academic world," says Sinclair. "A lot of academics do want their research to be used in the field. They have a lot of information and if we use it correctly, both worlds can win."

Sinclair adds the people who are committing crimes of child exploitation on the Internet are working together and making use of evolving technology, so why



Insp. Richard Konarski's domestic violence training program is now set to become the standard training at Depot, the RCMP's training academy.

shouldn't law enforcement as well.

TAKING ADVANTAGE OF ESTABLISHED RELATIONSHIPS WITH UNIVERSITIES AND RESEARCHERS KEEPS THE RCMP UP TO SPEED ON NEW TECHNIQUES AND FIELDS OF STUDY. AND ACADEMICS LEARN A LOT FROM THE MEMBERS, WHICH ENHANCES THEIR APPROACH TO RESEARCH.

The NCECC also brings in both graduate and undergraduate students each year to conduct research and hone their skills. The students get a rare opportunity for a field placement in their desired line of work and the centre benefits from new and fresh eyes.

"The better we are able to investigate, the better we protect our communities and our children and the more that the message is sent that law enforcement is a force to be reckoned with in terms of these crimes," says Sinclair.

CONTINUING CURIOSITY

Finding the perfect balance between the interests of both worlds is something Insp. Richard Konarski has brought to his work with the RCMP over the last 34 years.

Konarski is currently the officer in charge of the Mission detachment in B.C. In the mid-1990s, he was asked to look at a domestic violence response team that was being started in another police agency. Realizing he was unfamiliar with the topic, he decided to go back to school.

In the process of getting his master's degree, he conducted a focus group with survivors of domestic violence. At the beginning of the session, he felt it necessary to disclose that he was also a police officer. And then he got a response that threw him.

"It was just an hour of being pummeled by every possible thing that has gone wrong with the interaction between the police and the victim," says Konarski. "It kind of flipped my thinking that maybe we should be asking the primary client what their needs are."

It was the tendency to see the victim as the problem and something investigators can't control or put in an evidence bag that got in the way of successful domestic violence investigations. And that left the victims with a negative perspective of the police.

Konarski developed an evidence-based domestic violence training program, which will soon become the standard training at the RCMP training facility. During pilots, they observed huge success with a 50-per-cent increase in convictions, a 50-per-cent decrease in dropped charges and an 80-per-cent drop in victim recantations.

All because Konarski says he challenged his own belief system and what had been determined as the "best practices."

"We need to celebrate critical thinking," says Konarski. "To think you've got the absolute answer to everything means that you're an absolute fool. Even Einstein never stopped inventing, standing on top of the shoulders of great people before him. That's what knowledge is." ■



THE BRAINS BEHIND THE BRAWN

RCMP RESEARCH SHOWS HOW EXERCISE AFFECTS COGNITIVE PERFORMANCE

By Mallory Procnier

For police officers, physical fitness is an obvious necessity. But a group of Ivy-league researchers has shown some RCMP members in Saskatchewan that exercise isn't only about slimming down or running fast.

Fiona Vincent, the fitness and lifestyle advisor for the RCMP in Saskatchewan, approached Dr. Lindsay Shaw, a sports psychologist and member of the Boston-based RTSG Neuroscience Consultants, to create cognitive performance tests that have become part of Saskatchewan's rePARE your PARE lifestyle behaviour modification program.

The 12-week-long program targets members who cannot complete the Physical Ability Readiness Evaluation (PARE) — a fitness evaluation for RCMP regular members to make sure they're fit enough to keep up with their operational duties — within the four-minute goal.

These members can volunteer to work with a professional from the fitness and lifestyle unit to strengthen weak muscles and improve their cardiovascular fitness to be able to do the PARE in less than four minutes.

Vincent was interested in finding out how an increase in cardiovascular fitness can impact the way police officers are able to think and process information.

"This was right up our alley and it was a great example of how exercise is being used as a tool to enhance performance, which is what we study," Shaw says.

PUTTING THEORIES TO PRACTICE

Shaw and her colleagues helped Vincent's group track the cognitive and emotional changes that are associated with exercise. The consultants also helped Vincent communicate to RCMP members how activity-rest cycles work, and how exercise impacts their sleep.

To do this, RCMP members wore accelerometers that tracked their movement and sleep. They also took timed tests to examine how their prefrontal cortex was working. This part of the brain is where executive functioning and higher-order



Researchers are working with the RCMP in Saskatchewan to educate members about the way exercise can impact cognitive performance.

cognition such as planning, organization and assessment occurs. In one test, participants were asked to name all the items in a kitchen, and in another, to identify as many words as they can that begin with a certain letter.

"We knew that exercise, from lab results, has a very positive impact on executive functioning, so we wanted to see if that holds for healthy, high-functioning police officers who are engaging in physical activity in a supervised capacity," Shaw says. "The first phase has shown us that there is an enhancement in cognitive functioning and emotional regulation."

EXERCISE FOR SANITY, NOT VANITY

Vincent, Shaw and their colleagues hope to show the law enforcement community that there are additional benefits to working out than just losing weight.

Strength and agility are important for police work, but a sharp mind is equally vital.

If a suspect is reaching into his or her back pocket to pull something out, Shaw says the brain has to decide very quickly whether or not it's a wallet or a gun.

"Those are the critical fractions of a second where things happen in the brain," Shaw says. "When you're fit, you're at a much greater advantage to perceive and process that information."

The rePARE your PARE program has

had 150 participants since it began in January 2010. These police officers, collectively, have lost hundreds of pounds and have also improved their PARE time on an average of 30 to 40 seconds.

"Not everybody has met the four-minute standard yet but I think it's made them appreciate why they need to work towards it and why that's important for them," Vincent says.

It's been easy for members to volunteer for the program because trainers meet them at their home detachments for a personalized workout that's geared towards making positive changes in their lifestyle. This was an important aspect for Vincent because she says it shows how committed the RCMP is to the health of its employees.

NEW APPROACH TO LEARNING

The research team is returning to Regina this fall to help analyze the findings of the study and work towards making the program applicable to police work. They're hoping to create a computerized test where members have to identify a suspect among other faces.

In the meantime, the program is continuing to improve the lives of Saskatchewan members, who are working to make fitness a top priority.

"In a policing culture, if you can't take care of yourself, you're no good at taking care of other people," Vincent says. ■

RCMP



A VIRTUAL REALITY

SIMULATOR TRAINING UNIT GIVES CADETS AN EDGE

By Mallory Procnier

Depot, the RCMP's cadet training facility in Regina, Sask., has a reputation for being a leader in police training. And with its simulator training unit (STU), it can also claim a top position in its use of educational technology.

TECH-SAVVY TEACHERS

In the past three years, simulators have become an integral part of training at Depot.

They're being used to complement the training that cadets receive in decision-making and hazard-recognition skills while driving a police cruiser and learning how to fire a pistol. They're also being used to develop cadets' judgment skills while in a use-of-force situation.

"We're creating efficiencies in training by exposing cadets to more learning opportunities," says Greg Krätzig, the training and innovation research analyst for Depot. "Cadets are getting a much more rich and realistic learning experience because they're doing it hands on."

Krätzig is part of the Canada-United States Simulation Technology Group, which brings together agencies such as the Federal Bureau of Investigation, Secret Service, RCMP, Department of National Defence, and Defence Research and Development Canada to exchange ideas and research and visit companies and universities to learn about the latest advances in simulation technology and research.

Krätzig is also pursuing his PhD at the University of Regina where he's exploring how skills learned through simulation training are transferred to the field. His academic background is bringing an evidence-based, experimental approach to simulation training at Depot.

"As we go forward, there will be good evidence that this technology works, but anytime that somebody wants to do something different, they need to take that approach," Krätzig says. "This technology is new to the law enforcement world, and they need to ensure that when this technology is added that they actually do the research to make sure that what they're doing is

defendable and that the desired outcomes are being realized."

BUILDING UPON KNOWLEDGE

The unit is currently equipped with eight driving simulators. Cadets sit in a car seat and, depending on where they are in the training program, they complete a series of increasingly complex driving scenarios on three side-by-side screens. During the simulation, they can be asked to clear an intersection, flip on their lights and sirens, or work together to respond to a call.

Cadets develop a skill in the simulator one day and then apply it the next day in a police car on either a closed track that mimics a city or outside of the training grounds, driving with civilian traffic in and around Regina.

"It's what we call 'scaffolding,'" Krätzig says. "They're building upon previous information and knowledge so they can do something live."

The STU has also recreated Depot's live fire range in the virtual world.

For research purposes, instructors taught the full 18-week course of fire — which teaches cadets how to shoot a pistol — in the virtual world to two troops of cadets, and they all passed their final qualification.

"We're able to do the entire RCMP course of fire virtually and the skills transfer

very nicely into the real world, not only when they have to qualify, but also when they re-qualify one year later," Krätzig says.

But in order to produce proficient shooters at Depot, instructors still agree that cadets need to experience recoil, magazine changes and the feeling of having a live firearm in their hands.

"When you're holding a real pistol, something that could actually kill somebody, it could affect how you're going to shoot it," says Cpl. Michael Hyde, an instructor with the STU. "If you have something in your hand that you know can't hurt anybody, you may be more at ease and more open to instruction."

EFFICIENT LEARNING

Using simulators is not just about keeping up with the latest technology. This type of training gives cadets the tools to do their training in less time, with fewer resources and with more feedback from their instructors.

The simulators also give cadets the opportunity to test out skills they usually wouldn't learn until they graduate from Depot and are out in the field.

"There are best practices to follow when you negotiate intersections while in emergency vehicle operation, so the only way we can get them to practise safely and in a controlled setting is in a simulated world," Hyde says. ■

Two cadets use the use-of-force judgment simulator that mimics a real-life critical incident.





WHAT'S THE IDEAL RELATIONSHIP BETWEEN POLICE AND ACADEMIA?

THE PANELISTS

- Prof. Michael E. Buerger, PhD, Criminal Justice Program, Bowling Green State University
- Supt. Bob Mills, Officer in Charge of Operations Strategy Branch in Saskatchewan, RCMP
- Jason Roach, PhD, Director of the Crime and Policing Group, University of Huddersfield, U.K.



PROF. MICHAEL E. BUERGER

Both the police and academic researchers are engaged in a search for truth, regardless of the differences in their work environments. Police officers and units work on a small scale, assessing single incidents or small groups of related crimes. Academic research usually assesses operational effectiveness on a broader scale, using statistical techniques to understand large numbers of inputs ("data"). Each understands the problem at hand from a different perspective, whether it's crime, police-community relations or some other issue.

Police officers and police units retain a rich and detailed knowledge of individual events and individual offenders. However, there are several problems that affect that knowledge: most of it isn't recorded in any formal fashion, and human memory tends to retain the most vivid cases to the exclusion of the mundane. Even those incidents that are preserved by formal reports omit much of the pertinent detail, and there's an inherent bias in the officer-author detail (the

old "Have you ever seen a police report that made the officer look bad?" question).

Researchers tend to work from databases, whether they compile their own or use secondary data collected by others, including police records. Such information tends to be more comprehensive and consistent over time, but lacks the detail that might permit more insightful analysis. As a result, their conclusions are often foreign to police officers' understanding of the problems.

Collaboration can produce richly detailed understandings of the problems that police face, the effectiveness of tactics and strategies, and the changing face of criminal activity. It also demands a high degree of trust, which is only established over time. That implies stability that is sometimes absent, both in police leadership and in academic posts, but if built at the grassroots level, it creates tremendous benefits.

In the past, police were mostly silent partners, assisting academic researchers

by mounting operations designed to prove a theory. The police version of this was described by one commander as "You come in, make a huge mess of things, then disappear for a year or two before coming back to tell us what we did wrong." More recently, police agencies have been equal partners, co-designing evaluation research to better apply scarce resources.

Collaborative research within academia itself also provides new opportunities, bringing the social sciences and the hard sciences together. Bowling Green State University's new collaboration with the Ohio Bureau of Criminal Investigation opens the possibility of fast-track validation of new scientific techniques for the crime lab. Retroactive analysis of closed investigative reports to identify weaknesses that can improve training and supervisory review has been mentioned as another possibility.

Finally, there are potential benefits in the future for combining academic treatment of the social contexts of policing (aging, mental illness, substance use desistance,



and a host of others) into more incisive and better integrated education-as-training. To do so requires the best contributions of police experience, tested and validated with scientific rigour.

SUPT. BOB MILLS

In 2006, I had the privilege of spending about 10 months working in a research lab with the University of Regina, Justice Studies Department.

I recall sitting in the lab conference room for my first meeting, looking at the hundreds of posters, articles, books, theses and dissertations lining the walls on virtually every aspect of police work, which the policing world was largely unaware of.

Researchers tended not to reach out to the police and the police tended not to open their doors to researchers. This incredibly valuable information was not reaching the people who most needed it. Furthermore, honours and graduate students were searching for relevant topics of research in the area of policing, turning out research on topics not current or in some cases not even relevant to modern policing. It was obvious that these were opportunities missed for both the policing world and the academic world.

Policing and academia do not always see eye to eye, and this often plays itself out in the media and other public venues. Police organizations can be very sensitive to commentary that academia see as constructive criticism. In the eyes of the police these may be interpreted as attacks by a group that doesn't understand the reality of the world the police must function in. Despite some significant advances made in the last few years, there still needs to be much better alignment of that relationship. So what does that ideal relationship look like?

First, the police must be at the table to provide assistance to researchers with respect to what the areas of topical research are. There's nothing more frustrating to a researcher than having no one show any interest in their work. From a policing perspective, research on topics not relevant to modern police work only serves to confirm the stereotype that academics are out of touch with the real world of policing.

Second, the police must be prepared for the sting of constructive criticisms. Academics live in a world of peer review and constant debate over new ideas. Historically,

the police have been resistant to that kind of dialogue, especially when it comes from outside institutions. Acceptance that the police can learn from the work of academics is critical to a productive relationship.

Third, and perhaps more fundamentally, the police must be prepared to financially support these academic endeavours. In reality there is little money in researching and publishing police-related material outside of government and police sources. Find a new way to sell cars and they will line up at the door for this potentially profitable knowledge. Reveal a new way to screen police applicants and you may affect the way police officers are recruited, but it is unlikely anyone will pay for this information.

Policing can benefit from the skills and knowledge that academics bring to the table. However, this will not happen without significant effort in the area of relationship building on both parts. Failing that we risk a future of eying each other with suspicion and animosity from opposite corners, while continuing to miss important opportunities to grow.

JASON ROACH

The ideal relationship between police and academia is one of equal partnership, working together to reduce crime and disorder. The more difficult question is how to achieve it and to this end I offer my five top tips for a good (hopefully 'ideal') police-academia relationship.

1. *The relationship must be one of mutual benefit.*

Any stable and lasting relationship must be built on sound foundations. Academics courting police help are advised to explain from the very beginning just how their research is likely to be of benefit to front-line officers.

Sadly, much criminological research is missed because it is badly packaged, promising little practical utility for police officers, or anyone else. Areas of potential mutual benefit must be explored at the beginning of the relationship to prevent any damaging misunderstandings and disappointments later.

2. *Find common ground and use a common language.*

I once read in a magazine that 'a secure rela-

tionship is based on good communication.' A good police-academic relationship needs to be one where both sides understand what's being asked of them. Without common language between them, the relationship will be akin to a "my wife doesn't understand me" scenario and will end in tears.

3. *Establish mutual trust.*

Some academics pay lip-service to confidentiality and sell their souls in a Faustian pact with the media without thought for the sensibilities of officers, crime victims and their families. This might get them a book deal to produce a lurid publication of the nature found in airport bookshops the world over, but their relationship with police is likely to end acrimoniously, with police reluctant to engage with the treacherous lot from the university.

4. *Remember academia and police are not mutually exclusive.*

Police officers are often best placed to identify need and carry out relevant research, particularly with appropriate support and encouragement from academics. The reporting of useful research does not have to be in academic journals. Publication in professional magazines is often a much better way of reaching 'people on the ground.'

5. *Where possible, academics should have police colleagues working on research projects alongside them.*

I have two ex-police colleagues who often work with me on research projects, including an ex-Detective Chief Superintendent. I am convinced that without their helpful experience and knowledge, much of my research would not be possible.

For example, I recently asked a detective colleague whether he had ever received training on cognitive bias. The fact that he answered me with an emphatic 'no' led me to develop a one day workshop for Senior Investigating Officers (SIO) focusing on the perils and pitfalls of cognitive bias in criminal investigations.

The fact I co-delivered it with an ex-detective gave it a degree of authenticity with some police colleagues, so helping to bridge any perceived gap between police and academia that might have been initially anticipated by attendees. ■



AUDITORY TESTING FOR POLICE

NEW APPROACH FINDS MORE OFFICERS FIT FOR DUTY

By Dr. Marc-André Beaulieu, national medical advisor, Dr. Jean-Pierre Legault, former director of Occupational Health Directorate, Occupational Health and Safety Branch, RCMP, and Véronique Vaillancourt, Dr. Chantal Laroche and Dr. Christian Giguère, Audiology and Speech-Language-Pathology, University of Ottawa

The main function of police officers is to protect the public. This requires the ability to perform multiple activities including using firearms, pursuing a criminal, making an arrest and being a reliable witness in court. Police officers must not suffer from any physical or mental conditions that could endanger the safety of the public in the performance of their duties.

There are many tasks in police work that require good hearing. Police officers need to be able to hear sounds and understand speech ranging from whispers to conversations, communicate with dispatch and other members by portable radio while emergency equipment is on, hear whistle signals that often serve as warnings to people involved in suspicious or criminal activity, and detect other suspicious sounds such as broken glass or the loading of a weapon.

They must be able to conduct a reliable interrogation of suspects including listening for various voice intonations. These tasks are often performed in adverse listening conditions such as the presence of background noises. They require a high level of communication ability to detect, recognize and localize speech and sounds.

The RCMP currently uses an auditory fitness-for-duty assessment based on pure tone detection thresholds, displayed in an audiogram, to classify the hearing status of its officers. During the hearing evaluation, police officers are asked to press a button, raise their hand or say “yes” when they hear a pure tone signal under headphones. The pitch and loudness of the tones are varied and the lowest intensity of the sound that the member can hear — the threshold — is recorded.

Hearing status is classified into five categories, namely H1 to H5. Some degree of hearing loss, defined as thresholds greater than 25 dB HL, is permitted under the H1 category. The minimum hearing profile required to perform the duties of a general duty constable is H2. Operational duties are still allowed for police officers at the

H3 level, but with additional limitations and restrictions. RCMP officers at the H4 level are no longer considered operational. Hearing loss at the H4 and H5 levels are considered a potential risk to the safety of the public, the officers and their co-workers.

Functional hearing includes the capacity to detect, recognize and localize sound, and to perceive speech. However, the predictive relationship between the audiogram and functional hearing abilities is limited. Furthermore, police officers with hearing thresholds at the H4 level are typically senior members of the force with extensive policing experience and organizational knowledge but these members can't take part in operational callouts.

POLICE OFFICERS WITH HEARING THRESHOLDS AT THE H4 LEVEL ARE TYPICALLY SENIOR MEMBERS OF THE FORCE WITH EXTENSIVE POLICING EXPERIENCE AND ORGANIZATIONAL KNOWLEDGE BUT THESE MEMBERS CAN'T TAKE PART IN OPERATIONAL CALLOUTS.

The Occupational Health and Safety Branch of the RCMP therefore wanted to use a more complete functional hearing assessment in evaluating fitness-for-duty in its members.

In 2007, the RCMP launched a pilot project in collaboration with the Audiology and Speech-Language Pathology program of the University of Ottawa.

The pilot project, funded by the RCMP, involved functional hearing testing of officers at the H4 level, both with and without hearing aids. The researchers wanted to determine whether the functional hearing tests of some H4-level officers might result in their reclassification to one of the following three categories: H3 equivalent with hearing aids, H3 equivalent without hearing aids, or H3 equivalent with or without hearing aids. H3 equivalent members may have limitations or restrictions yet still be able to perform operational activities.

FUNCTIONAL HEARING EVALUATION

During the first step, the police officers reviewed an information letter, filled out a hearing history questionnaire and visited their audiologist or hearing aid specialist to gather information and ensure the proper fit and functioning of their hearing aid, if applicable. If hearing aids were fitted or readjusted, at least a month of regular use was required before proceeding with the functional testing.

The second step involved the actual functional testing:

Otoscopy and tympanometry consist of the visual inspection and evaluation of eardrum movement or compliance.

Pure tone audiometry measures hearing sensitivity (thresholds) for pure tones presented through headphones. It's performed in quiet, in each ear separately.

Unaided and aided binaural “free field thresholds” measure hearing sensitivity and are assessed in a quiet environment, with and without hearing aids, using sound stimuli presented to both ears simultaneously by a loudspeaker. Although this measure isn't used to make judgments on fitness-for-duty, it can sometimes help demonstrate adequate or inadequate hearing aid function, at least at threshold levels. It doesn't provide information about listening at supra-threshold levels or at normal conversational levels.

Unaided and aided Hearing in Noise Test is a measure of speech recognition both in quiet and in various noise conditions. Sentences are presented from the front in four conditions: speech in quiet, noise presented from the front of the individual, noise presented from the right, and noise presented from the left. Officers are asked to repeat whatever is heard. A reception threshold for speech is determined in each condition, which represents the level at which the officers are able to repeat the sentences correctly 50 per cent of the time.



During the study, police officers listened to short blasts of sound from 12 randomly selected loudspeakers located behind and beside them.

Unaided and aided localization of a short duration signal measures one's ability to identify the location of a short duration sound of 0.25 seconds coming from different randomly selected locations among 12 loudspeakers located behind and to either side of the officer. The test is also performed with and without hearing aids.

In the third step, the results of testing were translated into an occupational profile.

RESULTS

During the functional hearing pilot study, 103 H4 non-operational members of the RCMP were evaluated. Based on individual results, 50 members or 48.5 per cent remained H4, 13 members or 12.7 per cent were reclassified as H3 with or without hearing aids, 23 members or 22.3 per cent were reclassified as H3 with hearing aids and 17 members or 16.5 per cent were reclassified as H3 without hearing aids.

Therefore, a total of 53 out of 103 H4 non-operational members (or 51.5 per cent of members tested) were classified as being H3

equivalent and, therefore, are able to resume operational duties with some limitations.

Of the 50 officers who were classified at a H4 level, nine were retested after modifications to their hearing aids. Four or 44.4 per cent of these were then re-classified as an H3 equivalent.

Of interest in the pilot study is that hearing aids were found to improve speech recognition, particularly in quiet. They neither improved nor impeded left/right localization but in many cases the hearing aids increased the number of front/back errors in localization. Such results highlight the significant limitations of hearing aids in the detection of sounds in a three-dimensional environment where the need to be aware of what's happening in front and behind is critical for police officers. These findings underline the need for further hearing-aid research and development to allow better localization in all spatial dimensions.

It's also proposed that future refinement to the pilot study's Hearing in Noise test and the Localization of Short Duration

Signal test include research on the specific noises found in RCMP job functions.

This pilot study of functional auditory evaluations of RCMP members has been instrumental in demonstrating that more than half of the members initially considered non-operational at a H4 level actually have adequate levels of functional hearing abilities to safely perform their work in an operational milieu.

In many cases, reclassification based on results of the functional hearing evaluation will allow seasoned, experienced and valued RCMP members to continue fulfilling their careers in an active operational policing role, supporting the RCMP organizational mandate and, most importantly, contributing to the safety of the Canadian public.

A detailed review of the methods and results of this pilot study has been published in Canadian Acoustics, volume 37, number 3 (2009) and in the Journal of the American Academy of Audiology, volume 22, pages 313 to 331 (2011). ■



POLICING 2.0

POLICE-ACADEMIC PARTNERSHIPS IN A KNOWLEDGE-BASED ECONOMY

By Detective Constable Michael Arntfield, PhD, London Police Service

In September of 1968, the NBC network debuted the half-hour drama *Adam-12*, its unofficial spin-off of the iconic *Dragnet* series, but this time focusing on the “action-packed police prowls” that defined the uniformed operations of the Los Angeles Police Department (LAPD). Today, the series lives on in late-night syndication on various nostalgia broadcasters, but was never really taken seriously as a realistic and influential police procedural by virtue of its lightweight, often pandering content.

A New York University study conducted in 1975, however — the final year of the series — concluded that *Adam-12*, more than any riot, scandal or crime spree that had previously come to define the department, was instrumental in shaping the organizational sociology of the LAPD from the bottom-up.

The study involved the use of human research subjects, including LAPD officers, who until that time had benefited from little to no media representation of a celebratory nature, especially during the tumultuous 1960s. The study revealed that in light of such factors, serving members were so intent on mimicking officers Pete Malloy and Jim Reed from the series that they took to wearing their issued forage caps while on patrol and inside their patrol vehicles — an idiosyncrasy unique to the series.

This marked a violation of the department’s policies and procedures with respect to uniform use, yet officers frequently prioritized public popularity and comparisons to their cool and likeable television replicas ahead of any reprimand or disciplinary action.

Ultimately, this trend gained momentum and paved the way for official revisions to operational policies, with the LAPD doing away with the wearing of a headdress altogether, other than during ceremonial occasions.

Today, the New York University study finds renewed relevance in a time when both American and Canadian police services are mired by issues such as recruiting and retention crises, workplace harassment allegations, budget cuts and officer burnout.

It’s in this uncertain time of restructuring when a broader and more multi-disciplinary understanding of how police officers are socialized for various ranks and roles — how the prevailing culture of a workplace influences the efficiency, integrity and morale of its employees — that such studies suddenly seem very topical.

In fact, the broader context of the LAPD case study is exportable to any number of police services and a host of institutional scenarios, yet it remains entirely unheard of.

To date, original research in and scholarship on law enforcement — in Canada in particular — has been relegated to one of two streams: collaborative quantitative research or external qualitative and mixed methodology research. In other words, police services either acquiesce to participating in some sort of empirical and number-driven study that exploits law enforcement’s role as an unrivalled statistical machine, or they instead become the focus, or more likely the target, of some sort of theoretical treatise that relies largely on other secondary sources in lieu of official access. Today, in spite of the fact that law enforcement purports to be moving away from its historical paramilitaristic structure and looking instead to public medicine and the corporate sector as preferred management models, this trend persists.

The reality is, however, that both medicine and business are in large part defined by their possessing a practitioner component and an original peer-reviewed research component. Medicine in particular expects that practitioners in certain specialties will remain active in both spheres over the entirety of their careers; their daily work, observations and patient interactions informing their published research, and vice-versa.

Holding police officers to such expectations has historically proven unrealistic given the inherent limitations with respect to resources — human and financial alike. Today, as law enforcement has proven itself amenable and adaptable to Canadians’ changing relationship to work, there certainly seems to be a genuine interest

in developing a scholarly sphere in policing as it continues to modernize.

It seems as though police leaders, particularly at the national level, are now recognizing the value of law enforcement within the larger framework of a knowledge-based economy, where in times of economic constraint, immaterial goods and intellectual property prevail as the most valuable and renewable of public sector assets.

Thus, the question remains how to best execute the deployment of this expanded sphere. While most medium to large police services have at least some semblance of a corporate planning division, their data sets and points of departure — what scholars call research questions — are by comparison narrowly constrained when considering the larger context of policing as an academic discipline. By contrast, the type of research I’m referencing here involves something much different — something more holistic, systemic and ripe for innovation.

Certain critics, including police officers themselves, are sure to remain skeptical about the impartiality and credibility of law enforcement conducting its own internal research and then also acting on it. In pre-emptive response to those critics, I might point out that a system that bridges conventional academic research with operational duties — and does so according to the terms and conditions of police services — is already in place.

Groups that serve auxiliary law enforcement functions such as the National Institute of Standards and Technology (NIST) in the United States and the Darkstone Research Group, both of whom employ former police officers and established industry experts in collaborative research, testing and publishing, are but two current and increasingly influential examples in North America alone.

In the United Kingdom, accredited and academically rigorous police-related research being carried out with the assistance of qualified officers is even more directly tied to front-line operations, rather than the sanctuary of the ivory tower.

While the Canadian Centre for Justice



Statistics (CCJS) as a division of Statistics Canada remains the preferred secondary source on crime data amongst Canadian police scholars, in the United Kingdom, the Home Office as the umbrella department that administrates everything from Scotland Yard to the Criminal Records Bureau and National Fraud Authority, has come to rely on primary source data (original files, interviews, observations at source) to study everything from the incidence of anti-social behaviour endemic to football hooliganism, to identifying loopholes in existing legislation that might impact officer safety.

These studies don't just crunch numbers as has been the status quo in research by agencies such as the FBI, but rely on qualitative, anecdotal data that's more akin to anthropological or sociological field work than pedantic, statistical analysis.

PRIMARY SOURCE RESEARCH

To date, I've been conducting similar primary source research and, in the absence of another conduit, have been using the university system in which I am immersed to validate and publish my findings. Holding standing faculty appointments at both Western University and Wilfrid Laurier University, my current and former course offerings have been of my own design and have been contoured around my 13 years' police experience in the field.

Representative courses include the Police and the Media, the Serial Killer in the Media, Crimes of the Century, and Forensic Writing offered at Western; and Police and Society, Multiple Murder, Crime in Film, and Advanced Criminological Theory offered at Laurier.

My assignments for these courses include having students document their 'first contact' with a police officer and offer a critical analysis of everything from the use of language to the use of technology in the encounter. Using various keyword search algorithms, I've since begun populating a list of searchable terms that are subject to X-Y graphing, as demarcated by age of the respondents and the year of their contact with police.

The results, while still preliminary, indicate that the younger the respondent had a 'run in' or some sort of direct contact with a police officer, the greater the focus on the uniform and stature of the officer

as imparting a professional, as well as a subjectively 'good' or 'bad' encounter, regardless of the initial reason for the interaction.

Police contacts occurring beyond the pre-teen years tended to be gauged in terms of the officer's reliance on technology, with their credibility being inversely proportional to the use of devices that tend to be seen — again depending on age at time of contact — as retrograde by the standards of competing consumer technologies.

The age and gender of the officer, the geographic profile of the interaction (urban versus rural), and the media viewing habits of the respondents are among the other commonalities in the identified data sets. The final results will reflect five years of data reflecting persons born between 1986 and 1996 across a wide social and economic

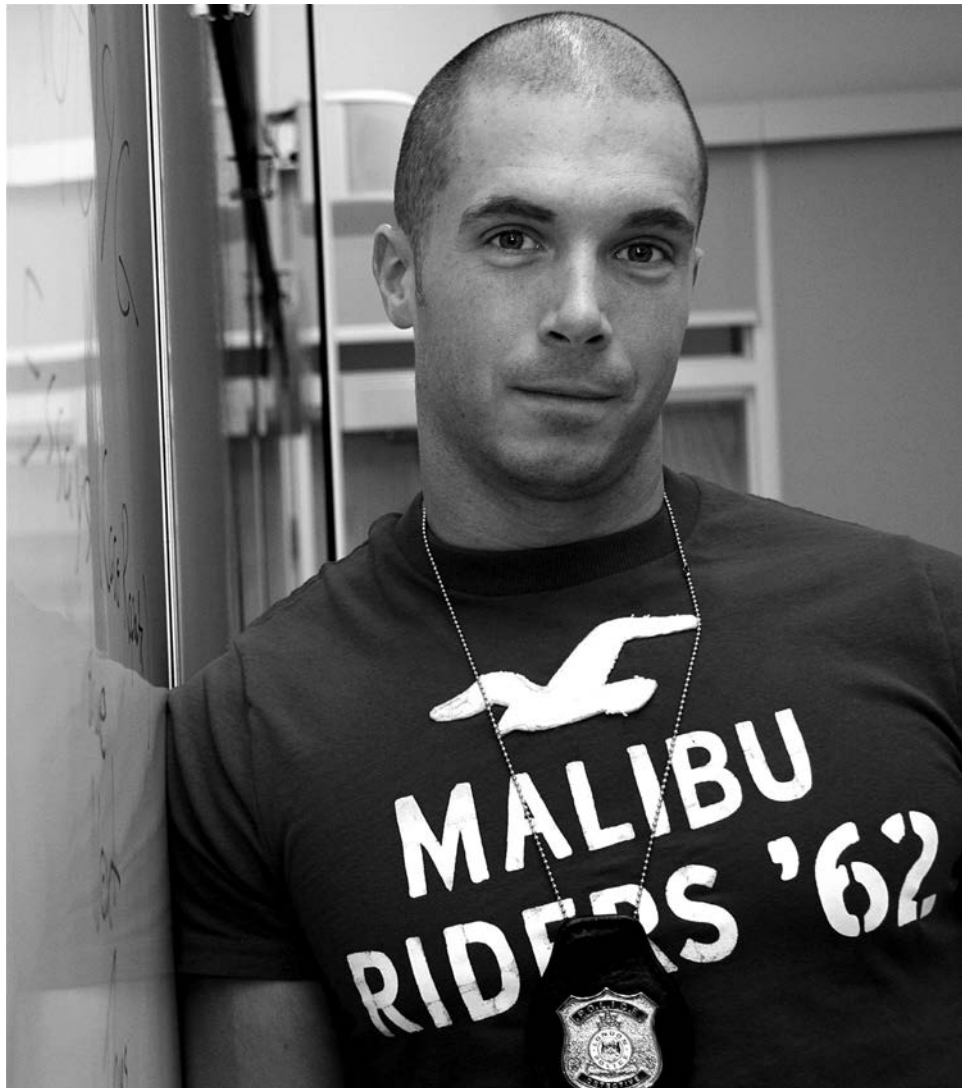
demographic. It will also be the first of its kind in assessing the psychology of police-civilian encounters, and the role of the media in establishing imagistic archetypes that may impact everything from assaults on officers to the decaling schemes of marked vehicles.

Similarly, in my better-known course on serial killers and historical homicides, I use students to review and offer recommendations on unsolved cold case files. These are real cases which, while having remained stagnant and inactive in the police world, can benefit from invigorated and renewed analysis in the academic world, with students applying new technologies and non-linear, Generation Y principles of deduction and lateral logic in assessing where to go next.

BEST PROSPECTS

To my mind, the Canadian Police College

As a criminology professor and active police officer, Det-Cst. Michael Arntfield knows the benefits that each field can bring to the other.





(CPC) in Ottawa, especially given its existing and proposed expansion to satellite locations across Canada and internationally, prevails as the best prospect in terms of answering the question of where this all leads. Its international profile and reputation, existing and accessible library of original scholarship, erudite faculty and staff, and demonstrated appetite for fostering a new era of police research and publishing for the knowledge-based economy have ensured that it's poised to emerge as the elusive missing link between academia and front-line operations, both in Canada and internationally.

This may or may not, in the long term, further enable the cross-listing of courses and the development of integrated curricula, whereby CPC courses are redeemable for university credit amongst serving officers, and vice-versa amongst aspiring or prospective officers completing undergraduate or graduate work.

The CPC, as stewarding Canadian policing into this new realm will have the additional benefit of introducing specialized areas of policing to emerging scholars. This would include those who might not have otherwise considered a career in law enforcement, but who — within such a system — would be able to conceptualize how an outlet for their knowledge and skills could be used for the benefit of law enforcement, and society by extension.

Aside from bolstering applications amongst a diversified and qualified pool of candidates, and in addition to the obvious financial benefits of cross-listing course offerings, such an initiative would truly distinguish Canadian policing on the world stage, attracting world-class scholars in return.

When faced with this logic, critics might instead be forced to admit that it almost seems too easy — and they would be right. We would, therefore, be remiss not to pursue such a strategy in earnest.

*Det-Cst. Michael Arntfield, PhD, is a professor of criminology and media studies at both Western University and Wilfrid Laurier University. He remains a serving officer with the London Police Service and is the author of the forthcoming books *Introduction to Forensic Writing* (Carswell) and *Blue Murder: Cop Killings, Collective Memory & the American Media* (Vanderbilt). He can be contacted via his website at www.michaelarntfield.ca. ■*

DESIGNING COURSES TO MEET POLICE TRAINING NEEDS

By Eric Chouinard, RCMP communications strategist, Canadian Police College

Police officers are relied upon for the safety and security of the communities they serve. Ensuring that officers are equipped to meet the challenges of a changing policing environment is one of the primary objectives of the Canadian Police College (CPC).

For more than 35 years, the CPC has been offering advanced and specialized police sciences and police leadership training courses to national and international law enforcement professionals in Ottawa, Ontario and Chilliwack, B.C. as well as at various off-site locations across Canada and around the world.

With more than 70 courses offered, the CPC works with law enforcement partners such as the Canadian Police Knowledge Network, the Canadian Association of Chiefs of Police, the International Association of Chiefs of Police and a large cross section of subject matter experts in virtually all police science disciplines to offer courses that meet the operational requirements of law enforcement professionals.

COURSE DESIGN

The Curriculum Design Unit is responsible for designing and developing new CPC courses and maintaining the existing training curriculum available to participants.

"Participants who attend the college benefit from courses that are the result of extensive research and consultations," says Filomena Silva, manager of the unit.

The development of a new CPC course, which can take anywhere from six months to a year or more, follows a basic course design methodology that can be modified to best suit the complexity and subject matter of each course under development.

In addition to creating new courses, all existing CPC courses are periodically reviewed to ensure the material offered is up-to-date and meets current operational standards.

Over the past year, the CPC has launched three new courses: Scribe Course, Drafting Information to Obtain (Search Warrants) and Human Trafficking Investigator's Course (HTIC) in addition to working on more than

25 courses that are currently in different stages of development for in-class and online delivery.

The entire course development process for the HTIC took about one year and provides an example of the course design process.

FROM INCEPTION TO COMPLETION

The CPC inherited the HTIC course project from the RCMP's Human Trafficking Co-ordination Centre, which was instrumental in providing background material and course content to create a new course for the CPC.

"As we progressed through the needs assessment phase, focus group meetings were held with subject matter experts from across Canada to determine the best content for the course," says Hélène Roberge, instructional designer.

The next stage involved creating the course design document (CDD), a blueprint that provides training standards for the course. Included in the CDD are the course description, the learning objectives, the targeted audience and the length of the course.

Once the CDD was completed, the CPC launched the pilot course. During a pilot course, the course delivery is audited to ensure the material is relevant and valuable to the targeted audience. Subject matter experts, instructional designers and law enforcement professionals all provide feedback on the pilot.

In collaboration with the instructional designer and the course instructor, the participant feedback from the pilot course is then analyzed. The feedback generated from the pilot course may result in modifications to the course for all future deliveries.

The final step involves obtaining approval on the final CDD by the director of police sciences training. Once completed, the HTIC was added to the CPC's training catalogue.

"It's rewarding for our team to shepherd a course through its design phases from initial inception to completion and to know that the course will be providing law enforcement professionals with the tools and expertise to effectively do their jobs," says Silva. ■

A CHILLING TRUTH

MANITOBA PROFESSOR STUDIES HUMAN RESPONSES TO WORKING IN EXTREME COLD

Dr. Gordon Giesbrecht is a professor of thermophysiology at the University of Manitoba in Winnipeg. He's spent the last 26 years researching the effect of cold water on the human body and has even submerged himself in freezing water 40 times. Gazette writer Mallory Procnunier spoke with Giesbrecht, who is affectionately known as Professor Popsicle, about why he's on the hot pursuit of cold research.

CAN YOU TELL ME A BIT ABOUT YOUR RESEARCH?

A common thread over the years has been physiological responses to cooling and the methods for re-warming hypothermic patients. So far, we've been able to change many medical practices, including the advice to actively warm patients pre-hospital. Up until the mid-1980s, many jurisdictions didn't do that because they thought it could be dangerous and harmful to patients. But we've basically shown that, as long as you don't put people in a tub of warm water or a shower, pretty much any other source of heat that is applied to the torso is pretty safe.

WHY HAVE YOU CONDUCTED SO MANY OF THE EXPERIMENTS ON YOURSELF?

First, I needed subjects, and also, from an ethical perspective, I felt it was important to experience what I was asking my subjects to experience. Having gone through it myself, it really helped me understand the results better. I don't get too many people questioning my results anymore but early on I did because we were doing things that nobody else had ever done.

HOW CAN YOUR COLD WATER RESEARCH HELP THE LAW ENFORCEMENT COMMUNITY?

The cold water research is so important for the law enforcement folks who work near or patrol the water. Looking at rescue and extraction techniques, I emphasize the two key factors of "gentle" and "horizontal." When you want to get someone out of the water, you want to be gentle with them

and keep them horizontal because if you don't, you might put them into ventricular fibrillation and kill your victim. It's important to understand the physiology of why this is important. Then in a difficult rescue situation, where it might be difficult to be gentle, you do the best you can until you reach a safe stable area. Then we talk about how to deal with the patient after they've made it into the boat and how to triage them.

WHAT CAN THIS RESEARCH DO FOR POLICE OFFICERS WHO ARE SERVING IN COLD REGIONS?

Ninety per cent of the principals are the same in cold air as in cold water. It's just that in cold air, it takes longer for someone to get cold. In cold air, frostbite is an issue that you also have to bring into the equation. If you're in the water, nothing is going to get frostbitten. All of the information we give out is related to one of four different groups of people: potential victims, first responders, educators or policy makers. With the RCMP for instance, all of the information is about what the effects of cold are and what to think about when you're going out into the cold to rescue a potential victim. When an RCMP officer is out doing his or her job in a northern

climate, if they don't follow some of the principles we talk about, they might even become a secondary victim themselves.

WHAT'S NEXT ON YOUR HORIZON IN TERMS OF RESEARCH?

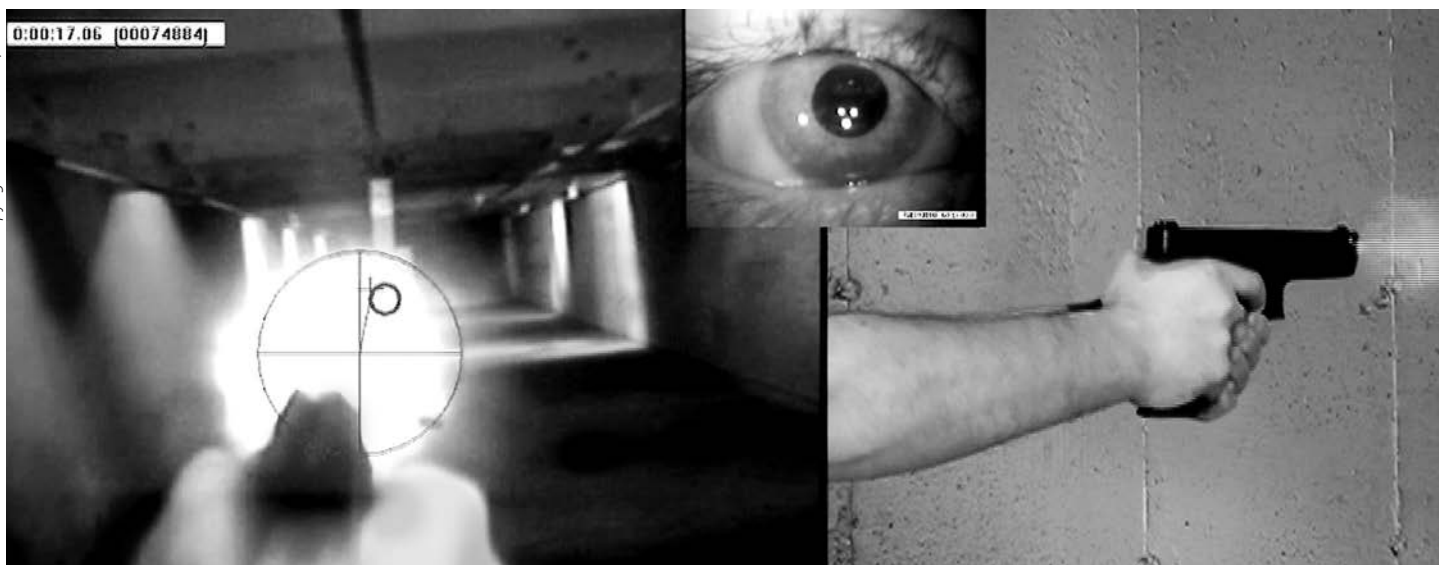
In the last five or six years we have also been involved in vehicle submersion research and, just like we've cooled more people to hypothermia than anyone else in the world in the last 30 or 40 years, we've also sunk more vehicles with people in them than anyone else, ever. We've really been able to define in a better way how cars actually sink and, more importantly, what people should do if they're stuck in a car that is sinking.

WHAT'S THE GOAL OF ALL THIS RESEARCH?

The goal of our lab is "vitas salvantis," which is Latin for saving lives. We know for sure that the cold water research is saving lives because that's been out there long enough that it's seeping into the understanding of general members of the public and certainly a lot of first responders and law enforcement members. When I first got into this in the mid-80s, it was kind of a wild, ridiculous dream that the work that we do might actually save lives. It's very gratifying now that we know that it's actually happening. ■

Dr. Gordon Giesbrecht, a professor of thermophysiology at the University of Manitoba in Winnipeg, has spent the last 26 years researching the effect of cold water on the human body.





A frame of quiet eye data recorded during the rapid firing of shots using a Glock 40. The quiet eye (small circle) is located on the target even as there is interference from the muzzle flash. The larger circle indicates the eye tracker is functioning normally, as is evident in the photo of the shooter's eye.

QUIET EYE CHARACTERISTICS THAT CAN SAVE AN OFFICER'S LIFE

By Dr. Joan N. Vickers, Professor, Faculty of Kinesiology, University of Calgary

For the past 25 years, my research has concentrated on using eye tracking as a way of looking into the mind of elite and non-elite motor performers. What is it that they see that contributes to their success or failure?

The elite athletes I test are those who have earned the highest statistics in their sport, determined independently, while the non-elite athletes are most often on the same team, so although equal in physical ability, they haven't been able to attain the same degree of excellence.

By concentrating on elite performance in well-known sporting tasks, I've been able to access the minds of individuals who have trained at least 10,000 hours and reached the highest levels of achievement.

In a typical study, elite and near-elite athletes perform well-known tasks in their sport — golf putts, basketball free throws, soccer or ice hockey goaltending — under conditions that are similar to those found in competition. Their eye movements are recorded by a mobile eye tracker, which is integrated with a motion analysis system that records their movements at the same time.

QUIET EYE

Over many studies, one eye movement has emerged as a characteristic of elite performance. The quiet eye (QE) (Vickers, 1996, 2007) is defined as the final fixation or tracking gaze on a specific location or object in the task space workspace. The onset of the quiet eye occurs prior to the final critical movement in the task and the offset occurs when the gaze deviates off the object or location by more than three degrees of visual angle for a minimum of 100 milliseconds, therefore the quiet eye can carry through and beyond the final movement.

The quiet eye of elite performers is significantly longer than near-elite or lower-skilled performers. This means they have found a way to fixate or track critical objects or locations in the environment for longer durations regardless of the conditions they encounter. The quiet eye onset of elite performers is also earlier, meaning they see what's most important before others. This gives their brain and motor system longer to organize the skill, and results not only in better performance but also better decision-making.

Studies also show that a long-duration quiet eye helps combat the effects of anxiety, leading to better performance when under

pressure (Vickers & Williams, 2007; Vine et al, 2011). Furthermore, a growing number of studies show that quiet eye training improves fixation control, focus of attention and performance in lab and real-world settings (Vickers, 2007; Causer et al, 2011).

Elite performers, whether athletes or officers, see what's critical earlier than others and focus on the information longer. This is often a surprise to many in sport and law enforcement as they assume that quick, high-quality movements are always the result of quick neural processes. This is not the case. Instead, skilled action is the result of an early, long-duration quiet eye on critical task information.

THE POLICE STUDY

Recently I applied my quiet eye findings to law enforcement, teaming up with Bill Lewinski of the Force Science Institute in Minnesota to record the gaze of elite officers and rookies (Vickers & Lewinski, 2012). The elite group was composed of emergency response team members with a reputation for performing under extreme forms of pressure. The rookies were from the same force and had completed firearms training but had little experience on the streets.

In a live scenario, they had to respond



to an “assailant” who suddenly turned and shot at them from a distance of seven metres. On five of seven trials, the assailant drew a gun and on two trials randomly selected a cell phone.

The elite officers were more accurate than the rookies (elites 74.60 per cent; rookies 53.80 per cent) and also made fewer decision errors: 18.50 per cent of elites compared to 61.50 per cent of the rookies fired at the assailant when he had the cell phone in his hand. The time taken for the two groups to draw, aim and fire showed no significant differences, so the technical skills of the rookies did not explain their differences in performance.

Instead, when we analyzed the quiet eye and saccades (rapid eye movements) of the two groups, we found differences that explained why the rookies performed as they did. The quiet eye was the final fixation on the assailant prior to the trigger pull. Saccades are rapid ballistic eye movements that move the eyes from one location to another in times that can exceed 900 degrees per second.

During the quiet eye, the brain has time to process the visual information that the gaze dwells on, but during saccades information is suppressed.

We found that the rookies, at the very moment when they should have kept their quiet eye on the assailant, made a fast saccade back to the sights on their own gun on 84 per cent of trials. This caused them to lose sight of the assailant and they pulled the trigger on many trials when their gaze was off the target completely.

And for the few rookies who were able to maintain a quiet eye on the assailant, this was significantly shorter, averaging 262 milliseconds compared to 318 milliseconds for the elite officers.

The different quiet eye and saccade results of the rookie officers suggests that the type of gaze control they developed in training may have caused them to perform poorly in our study. Currently, most firearms training programs teach officers to focus on the front and back sights of their gun and place the target in a “sight picture” that is blurred (Hendrick et al, 2008; Morrison & Vila, 1998).

This sighting strategy works well in training, where rookies must achieve high accuracy scores before they can graduate, but once on the street and faced with a rapid

firearms encounter, instead of maintaining a long duration fixation on the assailant, they make a rapid saccade back to the sights on their gun, which is the gaze behaviour they refined in training. This may also explain why rookies shoot poorly on the job where accuracy scores range between 10 and 60 per cent (Morrison & Vila, 1998, Oudejans et al, 2008).

A second question raised by our results is why the elite officers were able to maintain a long-duration quiet eye on the assailant when the rookies could not. Were they born with this ability? Was it acquired as a result of their extensive training or is there another plausible explanation?

A possible answer lies in the eye-movement studies done with Olympic level shooters in pistol, rifle and shotgun. Studies by Ripoll et al (1985), Vickers & Williams (2007) and Causer et al (2010, 2011) all show that elite shooters establish a single quiet eye fixation on the target and never let their gaze deviate from that one location as they align the sights of their gun. This results in a longer quiet eye duration, improved focus of attention and better decision-

making. In contrast, lower-skilled shooters develop a type of gaze control that, under pressure, takes their focus of attention off the target and redirects it to the mechanics of shooting.

What’s most intriguing about all these results is that somewhere in the process of becoming an elite athlete or an elite officer, those at the highest level change how they sight their gun from what they were probably taught in training.

Instead of establishing a sight picture with their gaze down on the sights and the target blurred, elite performers run a line of gaze through their sites and maintain a long duration quiet eye focus on the target, whether stationary or moving. This change in attention strategy allows elite athletes and officers to maintain complete visual control over all the events they encounter.

The visual system is the most powerful of all our sensory systems and adapts subconsciously to challenging events. It’s only when an athlete or officer is tested with an eye tracker under realistic conditions that the true nature of their quiet eye control is revealed. ■

References

- Causer, J., Bennett, S. J., Holmes, P., Janelle, C., & Williams, A. M. (2010). Quiet eye duration and gun motion in elite shotgun shooting. *Medicine and Science in Sports and Exercise*, 42, 1599–1608.
- Causer, J., Holmes, P. S., Smith, N. C., & Williams, A. M. (2011). Anxiety, movement kinematics, and visual attention in elite-level performers. *Emotion*, 11(3), 595–602.
- Causer J., Holmes P.S., Williams A.M. (2011). Quiet eye training in a visuo-motor task. *Medicine Science Sports Exercise*, June, 43, 6, 1042–1049.
- Morrison, G., & Vila, B. (1998). Police handgun qualification: Practical measure or aimless activity? *Policing: An International Journal of Police Strategies and Management*, 21, 510–533.
- Oudejans, R. R. D. (2008). Reality-based practice under pressure improves handgun shooting performance of police officers. *Ergonomics*, 51, 261–273.
- Ripoll, H., Papin, J. P., Guezennec, J. Y., Verdy, J. P., & Philip, M. (1985). Analysis of visual scanning patterns of pistol shooters. *Journal of Sports Sciences*, 3, 93–101.
- Vickers, J. N. (1996). Visual control when aiming at a far target. *Journal of Experimental Psychology: Human Perception and Performance*, 2, 22, 342–354.
- Vickers, J. N. (2007). Perception, cognition and decision training: The quiet eye in action. Champaign, IL. Human Kinetics Publishers.
- Vickers, J. N., & Lewinski, W. (2012). Performing under pressure: Gaze, decision making and shooting performance of elite and rookie police officers. *Human Movement Science*, 31, 101–117.
- Vine, S. J., & Wilson, M. R. (2011). The influence of quiet eye training and pressure on attention and visuo-motor control. *Acta Psychologica*, 136(3), 340–346.





Graduates from the Cincinnati Police Department's Chief's Scholars Program pose with Assistant Police Chief James L. Whalen and Dr. Robin Engel of the University of Cincinnati's Criminal Justice Program.

STRENGTH IN UNITY

CINCINNATI POLICE TEAM UP WITH ACADEMICS

By Lieutenant Colonel James L. Whalen, Assistant Police Chief, Office of Operations commander, Cincinnati Police Department

The Cincinnati Police Department (CPD) took a chance seven years ago. It recognized the need to work smarter and believed that a focused, intelligence-driven approach was the best direction to lead the department. But it didn't have the expertise within the agency to proceed and had no more than a passing, friendly relationship with our local universities. And the department faced the same obstacles every agency faces: limited budgets, limited personnel and few information-technology resources.

SOLUTION CLOSE AT HAND

The University of Cincinnati (UC) is the home of one of the top-rated criminal justice schools in the nation. It's also a five-minute drive from police headquarters. The CPD invited the university's input and participation in assessing and reorganizing its crime-analysis functions. With their support and advice, the department developed an analytic capacity that went from pin-maps to a robust tactical and strategic approach that guides most

operational deployment decisions. The relationship has grown to the point that university academics have input in many facets of the management of the CPD.

This union of police and academia was not an easy accomplishment. The police side of the equation had to admit its own shortcomings, accept external assistance and overcome inherent trust issues. The academic side of the equation, led by Dr. Robin Engel, director of the Institute of Crime Science at the university, had to be diplomatic in its



approach and patient as we worked through these issues. It also had to stay with us when theory conflicted with reality, and make adjustments as necessary.

As Cincinnati police and academics continued to work together and come to a full understanding of the capacities each possessed, the benefits of this relationship became apparent. The police administration gained valuable insight into theory, best practices and techniques that were tailored to its specific needs. It didn't take long for the rank and file to recognize the value of focused policing, as the university helped identify the most valuable targets and organize complex analytic data for prosecutors and grand juries.

CPD police officers were perfectly capable of conducting such investigations, but now found themselves greatly aided by their academic partners. The combination of these resources produced criminal cases that convinced hard-core criminals (duly represented by defense counsel) to simply plead guilty and go to prison. Along the way, many of these criminals reached out to negotiate, offering valuable crime and suspect information to mitigate their sentences that allowed investigators to successfully close cold cases.

There are significant benefits to the university in this relationship. Academics require extensive data to conduct studies and publish results. As trust developed between the university and the CPD, data was made available to academics for various pro-mission uses. And based on the advice of their academic partners, the department now collects data in a more effective fashion.

Graduate students also gain valuable experience as they work on real-time law enforcement projects, often at the police station instead of the classroom. The net result for the university is an increase in stature, as jurisdictions around the world see the success attained by working together.

Along with best-practice guidance and enhanced operational efficiency, partnerships with respected academic institutions also offer police agencies external validity. Police officials can spend significant time explaining and justifying the value of their strategies and successes achieved only to have the discussion fall on the deaf ears of a critical public, media or political leaders.

The support offered by academics is often better positioned through the use of

data and other sources respected by those outside the police department. Academic partners can say essentially the same thing police officials say, but it's better received and often applauded by these same critics of police.

With every discussion of publicly funded initiatives comes the necessary consideration of cost. There are no free lunches, but the CPD's experience with the University of Cincinnati has revealed that the opportunities presented and the value gained far exceed the cost.

Based on the success of its initial foray into improving the crime-analysis capacity, the CPD eventually entered into a consultation contract with UC that provides assistance at the fingertips of police staff. The department has benefited financially from grant applications prepared by UC academics, as well as grants obtained directly by UC spent on relevant department interests and initiatives.

The CPD has received noteworthy awards based on the applications prepared by our academic partners and articles have been published describing the work and successes attained.

Furthermore, CPD's information technology efficiency has increased because

the department knows better what to ask for when seeking hardware and software solutions, and CPD staff has been trained in database creation and analytic skills that can now be handled in-house.

One significant accomplishment is the creation of the Chief's Scholars Program, in which highly qualified CPD staff members are selected to attend the UC Masters of Criminal Justice program to develop the future leaders of the department. The university waives tuition and fees, and officers selected to attend do so while on-duty.

Law enforcement has for too long ignored the potential of working closely with the academic community. Likewise, the academic community has too long existed in a vacuum, unconcerned that the practical benefits of their work went unfulfilled.

Police departments should be thrilled that an entirely self-funded entity exists to study what we do and make it better. Academia should be equally eager to enhance their mission by working with practitioners and making significant improvements to society. There is strength in the unity and partnerships that can be achieved when these two worthy institutions meet in the middle. ■

REGINA GETS TEST AND EVALUATION CENTRE

Regina is on track to become a world leader in police research with the addition of a new testing facility.

Defence Research and Development Canada (DRDC)'s Emergency Responder Test and Evaluation Establishment (ERTEE) now has a home in Saskatchewan's capital city, near both the Regina Police Service and the RCMP's Depot training academy.

It will house the testing and evaluation component of DRDC's Canadian Safety and Security Program (CSSP) — a program that strengthens Canada's serious incident response capabilities through science and technology solutions and advice.

The ERTEE supports the testing and evaluation of emerging technologies that could either be beneficial or harmful for emergency responders. Researchers are finding new uses for technologies that can help police, firefighters and paramedics do

their job, but they're also figuring out how some seemingly harmless gadgets can be used in a malicious way.

"There are green laser pointers that you can buy, which can cause eye damage to police officers," says Steve Palmer of DRDC. "We're in the process of establishing a project to look at those from the dangerous technology aspect right now."

Regina was chosen because of the large number of science and technology researchers who were already working there.

"Many key stakeholders were already there and are part of this dynamic, living laboratory so we can support simulated or real operational testing of equipment with our partners out there," Palmer says.

— Mallory Procnier



THE SCIENCE BEHIND FOOT PATROL

PHILADELPHIA POLICE EMBRACE ACADEMIC PARTNERSHIP

By Prof. Jerry H. Ratcliffe, Department of Criminal Justice, Temple University and
Deputy Commissioner Nola M. Joyce, chief administrative officer, Philadelphia Police Department

It doesn't matter whether someone has 30 days or 30 years in the job, everyone has an opinion on what type of policing works, or doesn't, to reduce crime. These opinions are often strongly felt and supported by the individual's personal experiences. There is very little science available to support one position over another, so we're left with a battle of opinions as to the way forward.

The medical field was once in the same position. In 1840, a lecturer at the prestigious Royal College of Physicians in London, United Kingdom, stated that "blood-letting is a remedy which, when judiciously employed, is hardly possible to estimate too highly." At one point or other it was believed that blood-letting would cure everything from acne to cholera, and from smallpox to cancer. Of course, the medical field has advanced a great deal since then.

In the intervening years, the medical field has embraced the scientific method of inquiry and the value of experiments, and the result has been advances in human longevity to levels never before imagined.

A key tool in this endeavour has been the experiment. Experiments are the foundation for modern science. Science is essentially about the use of data and logic. It's also about evidence. Not the kind that guarantees a conviction, but the kind that generates a body of knowledge. The sort of knowledge that trumps uninformed opinions. The sort of knowledge that leads to statements that begin with "I know" rather than "I think."

DO FOOT PATROLS WORK?

Unfortunately, there have been very few real experiments in the history of policing. Scholars of policing may know about the Kansas City Preventative Patrol Experiment, which found that varying levels of random car patrols didn't noticeably reduce crime.

They may also learn about the Newark Foot Patrol Experiment conducted during the 1980s. In that experiment, replacing the patrolling of large beats with foot patrol instead of car patrol didn't reduce crime either, although the public perception of police improved. But beyond these two, most scholars

can't name another policing experiment, and few police officers are aware of the two mentioned. In 2012, we still know very little about what really works in policing.

In the summer of 2008, the Philadelphia Police Department (PPD) dispatched officers straight out of the academy to walk beats in violent crime neighbourhoods. Contrary to expectation, violent crime in some of these areas appeared to decline; however, the 2008 operation was not set up as an experiment and so it wasn't easy to tell. In order to get a real, robust and reliable answer to whether foot patrols were reducing crime, Professor Jerry Ratcliffe of Temple University suggested to the PPD that it might consider collaborating with an academic team.

This opportunity arrived the following year, when two large police academy classes were scheduled to graduate just in time for the annual summer uptick in violence. The PPD was about to invest significantly into foot patrols and some in the police department questioned the wisdom of spending this resource in such a manner. One way to do as the Police Commissioner directed, and frankly, also be responsive to criticism, was to ask for an independent study, which the PPD did.

USEFUL BY DESIGN

The Philadelphia Foot Patrol Experiment was designed like a medical experiment. One hundred and twenty violent crime areas ("hot spots") of the city were identified by the research team and the PPD using geographical information systems. Each area was deliberately designed to be small and walkable so that in the three months of their posting, the officers would really get to know the people, the offenders and the problems.

The average length of streets in each foot patrol area was less than a mile and a half (2.4 kilometres), and encompassed about 15 intersections. The foot patrols were all centered on a "hot" corner. Crime in many urban centers, including Philadelphia, is concentrated on the street corners where people hang out, or where corner stores bring people together. Among the 22,000 Philadelphia

intersections, the top five per cent of corners were the location of 39 per cent of robberies, 42 per cent of aggravated assaults, and 33 per cent of homicides.

The 120 selected patrol areas were matched with their nearest equivalent crime corner (in terms of crime volume, not location). Half of these patrol areas were then selected for active foot patrols.

This randomized controlled trial is similar to a medical experiment where the trialed drug is only given to half the available patients with the other half being a control group. This prevents those people involved in the study from inadvertently steering the treatment to the people or areas where they think it will be more successful.

The violent crime areas had the same amount of crime and were roughly the same size. The only difference between them was whether or not they had a foot patrol.

Four officers were assigned to each foot patrol area, and they worked in pairs, five days a week. Two officers walked the streets from 10 a.m. to 6 p.m., and the other pair from 6 p.m. to 2 a.m. All patrol officers were provided with an initial criminal intelligence brief on their foot patrol area by the criminal intelligence unit, as well as whatever information they gleaned from their initial orientation. Some officers were community-oriented, speaking to community members and visiting child care centers and juvenile hangouts, while others were more crime oriented, stopping vehicles and conducting field interviews of pedestrians.

A WORTHWHILE EXPERIMENT

After three months, the results were in. Drug-related incident detections increased 15 per cent, pedestrian stops increased 64 per cent, vehicle stops increased seven per cent, and arrests increased 13 per cent. Most importantly, violence in the foot patrol areas decreased 23 per cent compared to the control areas, and the experiment was able to convert this to a real and meaningful number. Because of the foot patrol work, 53 fewer people were robbed, assaulted or murdered.

This type of crime-science experiment is



PPD field training officer Jason Shensky and two Philadelphia foot patrol officers in the 22nd District talk to Prof. Jerry Ratcliffe, right.

often perceived to be beyond the capacity of police to conduct. It does take courage to follow the conditions of an experiment. Others, more than once, questioned the wisdom of knowingly sending patrols to one high crime area and not another. The unfortunate truth is that, with only limited resources available, the Philadelphia Police Department couldn't provide foot patrols to all the violent areas in the city. Once they accepted that reality, the experimental approach was seen as a means to answer a very important question: What's the best way to use new police officers to address violent crime?

The relationship between researchers and police is not easy and requires willingness on the parts of both to be flexible with the needs of the other.

Academics need certain conditions for

the work to be a true experiment, including an adherence to randomization and for the conditions to not change midway through the experiment. Police commanders are under pressure from the media, politicians and sometimes from within their own force to be flexible and move resources to wherever the latest drama is occurring. But with a history of collaboration and trust, and a willingness to see what it's like from the other side, it's possible for academics and police to work together to generate real knowledge that can advance the science of policing.

For both law enforcement officers and academics, this type of work can be a frustrating experience, but given time, even the most strident ivory tower occupant can come to appreciate the value of working collaboratively with the police to advance our scientific knowledge. Equally, police officers can come to appreciate the knowledge that good

crime science can bring, moving our business from opinion to facts. We've continued working together and learning from each other.

As crime prevention expert Gloria Laycock once said, "the discussion of crime remains doggedly based on intuition, anecdote, received wisdom and untutored opinion." Experiments such as the Philadelphia Foot Patrol Experiment can change the tone of the discussion, and police officers can go home in the knowledge that they have done a good day's work changing lives. ■

**FOR MORE INFORMATION
ON THE PHILADELPHIA
FOOT PATROL EXPERIMENT,
VISIT: [WWW.TEMPLE.EDU/
CJ/FOOTPATROLPROJECT/](http://WWW.TEMPLE.EDU/CJ/FOOTPATROLPROJECT/)**



THE STRESS-DISEASE CONNECTION

RESEARCH FINDS POLICE OFFICERS AT HIGHER RISK FOR HEART DISEASE

By John Violanti, Social & Preventive Medicine, School of Public Health and Health Professions, University of NY at Buffalo.

Buffalo Police Department



The BCOPS study findings demonstrated that police work by itself can put officers at risk for adverse health outcomes.

The daily psychological stresses that police officers experience in their work put them at significantly higher risk for a host of long-term physical and mental health effects.

That's the overall finding of a major scientific study of the Buffalo Police Department called Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) conducted over a five-year period. BCOPS is one of the first police population-based studies to test the connection between psychological and physical health outcomes. The research was funded by the National Institute for Occupational Safety and Health, Centers for Disease Control, United States.

The study was prompted by the assumption that the danger, high demands and exposure to human misery and death that police officers experience on the job contribute to an increased risk of cardiovascular disease and other chronic health outcomes.

The BCOPS study findings demonstrated that police work by itself can put officers at risk for adverse health outcomes. It's well accepted in the medical

community that chronic stress can lead to not only depression but is often associated with heart disease and other health outcomes such as diabetes. Based on past and present research, it appears that police officers suffer from both psychological and physical problems more than the general population.

POLICE-RESEARCH COLLABORATION

The BCOPS study was a collaborative venture between the police department, police union (PBA) and the University at Buffalo, NY, and is evidence that police departments and researchers can work together successfully. The high calibre and co-operation of Buffalo police officers likely contributed a great deal to this success.

As a former police officer, I'm acutely aware of the stress and trauma that officers face on a daily basis. This police background, coupled with academic training, helped to ensure areas of inquiry and validation of results.

Officers were contacted by letter or phone and asked if they would like to participate in the study. If so, they were

invited to the University at Buffalo clinic for medical exams.

STRESS CONNECTIONS

Shift work is considered a major stressor by police officers. An earlier part of BCOPS study found that shift work was a contributing factor to an increase in "metabolic syndrome" — a cluster of physical factors that include abdominal obesity (waist size of more than 44 inches), high blood pressure, high triglycerides, low "good" cholesterol and high blood sugar levels (glucose intolerance). Having the metabolic syndrome increases the risk for developing heart disease and type 2 diabetes.

The most recent BCOPS study, consisting of 464 police officers, found a number of interesting results:

- More than 25 per cent of the officers had metabolic syndrome versus 18 per cent of the general employed population in the United States.
- Female and male officers experiencing



the highest level of self-reported stress were four and six times more likely to have poor sleep quality, respectively.

- Organizational factors appear to stress police officers to a high degree. Organizational stress and lack of agency support was associated with the metabolic syndrome in police officers.
- Some research suggests that stress and cancer are associated. Overall, an elevated risk of cancer was found for two types: Hodgkin's lymphoma and brain cancer. The risk of brain cancer, although only slightly elevated relative to the general population, was significantly increased with 30 years or more of police service. Previous BCOPS studies have also shown a high risk of colon cancer in police officers.
- There has been a common belief that retired officers commit suicide more often than do working officers. Our findings indicated that suicide rates were more than eight times higher in working officers than they were in officers who had retired or left the police force. This finding challenges the common assumption that separated or retired officers are at increased risk for suicide. This doesn't in any way negate the need for suicide prevention efforts for retired officers; retirement seminars provided by departments are essential in this regard.

WHAT DOES THIS MEAN FOR POLICE OFFICERS?

Bringing about change in police work can be difficult. As researcher Dorothy Guyot commented, changing the police culture is like "bending granite." Though perhaps a bit extreme, change is difficult for most organizations and cultures.

Usually, health disparities are defined by socioeconomic and ethnic factors, but here we have a health disparity caused by an occupation. Police officers as employed persons generally have adequate health insurance programs, but often the police culture acts as an antagonist toward seeking treatment for both mental and physical problems. Having been part of the police culture, I recall that officers don't look favourably on those who have problems. A

comment I heard often was that "we don't have problems, we solve them."

Officers who do reveal that they suffer from stress or posttraumatic stress disorder (PTSD) or a health problem may lose financial status, professional reputation or both. There is often a fear that one will lose an opportunity for promotion or be taken off patrol and put on desk duty without a firearm. These are real fears.

HOW TO ADDRESS THE STRESS

There are two possible ways to deal with this problem: organizational policy change and education, especially at the recruit police academy training level.

Policy changes are difficult. Generally there are negotiations between police unions and administrations in forming policy. But there have been several suggestions on this issue.

First, allow some time for officers to participate in exercise, for example a small gym on premises or a subscription provided to a commercial gym. Likely one hour a day of "working out" can save lives, especially in the area of heart disease.

Second, mandate physical exams every one or two years without reprisal or disciplinary action against officers for anomalies. Many lives will be saved with early medical detection.

As far as education, my belief is that training has the greatest impact at the police recruit academy level.

Understanding the signs of stress and PTSD and how to get them treated is essential. Police recruits need to receive training about stress. If I tell recruits that the first time they see a dead body or an abused child that it's perfectly normal to have feelings of stress, they will be better able to deal with exposures of this type.

Additionally, in-service, middle and upper management personnel in departments need to be trained to accept officers who ask for help and make sure that officers are not afraid to ask for that help.

As far as mental health, the police cultural fear of "being on record" for seeing a mental health professional looms large. No one wants to be labelled crazy, but I would rather have a partner on patrol who is mentally well than one who is scourged with stress and PTSD. In my view, police peer support programs work well. In the

first instance, officers would rather talk confidentially with another police officer before going for further consultation.

The "Badge of Life" program has suggested that officers go for a "mental health check" every year, whether they are troubled or not. There would be no official reports of this and it would remain confidential. This can help alleviate small problems before they become large ones. This is similar to going to the doctor or dentist annually for a checkup. Peer support would work well in conjunction with this idea.

As far as suicide, the research has suggested that police officers kill themselves more often than they are killed by others. The United States lost an estimated 143 officers in 2011 to suicide, and thus far this year (August), we have lost 71 officers to suicide in the U.S. This is tragic and preventable. In fact, suicide is the most preventable of the ten top causes of death in the U.S. Education in suicide and mental well-being is an essential prevention tool to help alleviate the fear of going for help and reducing the stigma associated with suicide.

FUTURE RESEARCH

The first BCOPS study was based on extensive and rigorous medical testing and integrates a broad range of psychological, physiological and measures of stress. In renewed co-operation with the Buffalo Police Department, BCOPS is presently bringing back all of the officers involved in this first study for follow-up exams. This will allow researchers to look more closely at the effects of stress on officers over time.

Our medical and psychological inquiries demonstrate that there's more than one dimension of danger in police work. While the element of danger looms large for police officers on the street, the danger of psychological and physical disruption pervades within. Stress is a major contributor to poor health. Many poor outcomes including heart disease and suicide may result from this 'built-in' peril. Perhaps it's wise for officers to take heed; take care of yourself as well as your work.

John Violanti is a retired NY State Trooper and now a research professor at the department of Social & Preventive Medicine, School of Public Health and Health Professions, University of NY at Buffalo, NY. ■



RESEARCH BREAKS NEW GROUND IN ARCTIC FORENSICS

By David Gilbert and Amanda Leslie, Organizational Communications, RCMP Yukon

Sgt. Jim Giczi of RCMP Forensic Identification Services in Whitehorse, Yukon, would never describe his latest research project as a fairy tale, but it did start with three pigs and a wolf.

In 2009, Giczi, who is also known for having developed an extensive database of vehicle tire tread patterns, was attending a forensics course when a statement in a presentation by Dr. Gail Anderson, a forensic entomologist at Simon Fraser University, caught his attention. She said there was no baseline information regarding insect activity on bodies for any place north of Prince George, B.C.

The revelation that investigators were missing an important tool for accurately determining timelines in homicide or poaching cases sparked a research project and a partnership with the academic community that has grown beyond all expectations.

When he returned to Whitehorse, Giczi started making phone calls and soon had a diverse and enthusiastic group of partners including the RCMP, Yukon College, the University of Ontario Institute of Technology (UOIT), Simon Fraser University and the Northern

Research Institute — coming together to launch the North's first forensic entomology and decomposition study.

In the summer of 2010, the group brought Katherine Bygarsky — a Master of Science student in UOIT's Applied Bioscience program — to the territory to carry out the study, which would populate a "carrion insect" database that provides information on the activity of insects on corpses.

Although similar studies had been done in other regions, those findings did not relate well to the northern environment with its extremes of sunlight, temperature and terrain. For the study, the partners acquired three pigs from a local farmer, specially raised without the use of antibiotics, and a wolf carcass from Yukon Conservation Services.

Over two months, Bygarsky studied the decomposition rates of the pig carcasses, as well as the insects, which colonize the cadavers. Additional collections were also made of the soil beneath the bodies for analysis of decomposition proteins. Bygarsky's research was submitted to the *Journal of Forensic Sciences* for peer review

and publication.

Since then, both the research and the partnership have expanded. In 2011, a new round of studies investigating the detection and decomposition of bodies in shallow graves got underway. A new and larger research site has been acquired, and Yukon Conservation contributed the carcasses of four bears, which have all been buried at different depths, but in similar graves.

As part of the research, the growth of plants at the sites, ground settling and animal activity are being monitored and recorded. Detection and measurement techniques are also being explored and the grave sites are being scanned with both hand-held and aerial forward-looking infrared (FLIR) scanners and ground-penetrating radar.

The research continues to accumulate both data and attention. Experts from other fields are discovering interesting applications of the study: the Government of Yukon's archaeologists became very interested in the work, investing in a new ground-penetrating radar unit capable of producing 3-D imagery of the sites, and the Yukon Geological Society has also come on board.

The City of Whitehorse, another partner, has expanded the physical research area from three acres to nearly 40, and plans are now underway to conduct additional studies to investigate the effects of north-slope versus south-slope locations, clothed versus unclothed and to collect further data on animal activity and decomposition rates in different soils and terrains.

The involvement of Yukon College and the Northern Institute of Social Justice is also leading to the development of a research and instructional path at the college called North of Sixty Arctic Forensics, which will give justice program students an opportunity to participate in aspects of the research.

The unique partnership that has grown between police, government, academics and teachers, wildlife officers, geologists and archaeologists will make a significant contribution to the body of forensic knowledge and to investigators in many different fields. ■

Katie Bygarsky and Dr. Hélène LeBlanc studied the decomposition rates of pig carcasses on terrain in the North.



Sgt. Jim Giczi

just THE FACTS

KNIFE CRIME

From the streets to the stadiums, knife crime is a worldwide problem and many countries are struggling to get a handle on it. With weapons readily available, considerable damage can be done in a short time. And as the following statistics show, knife violence leaves a big mark on the fabric of society.

Knives are the most common weapon used in the commission of violent crimes in Canada and are three times more likely to be used than guns.

Half of all people accused of knife violence in Canada are between the ages of 12 and 24.

Nearly 14,000 people in the United Kingdom were taken to the hospital for injuries caused by knives and other sharp objects in 2007. Since then, *The Guardian* found that between 2010 and 2011, knife crime in London increased by almost 10 per cent, which they suggested may be linked to a cut in youth services.

The Chelsea Football Club started a program in London, called Football in the Community, for youth who live in deprived areas. Its recent campaign, Not a Good Look, features youth dressed up as clowns and is meant to encourage the idea that carrying a knife is not a good look.

An analysis of crime figures in Edinburgh, Scotland, showed that nearly half of the victims of knife crime incidents knew the offenders and that alcohol and drug misuse were contributing factors in the offence. The peak time for offences was on Friday and Saturday nights.

Glasgow, Scotland, was once the murder capital of Western Europe. On the weekends, youth gangs would wage battles on busy thoroughfares with knives, screwdrivers and even swords and machetes. By the end of 2011, they had lost that title and violent crime amongst gang members had halved and among other groups was down 25 per cent.

Violent crimes involving swords and knives, committed mostly by boys aged 14 to 17, are rising at a remarkable rate, according to Dubai Juvenile Court Judge Omar Karmastagy.

In a report on preventing violent knife crime in European youth, the World Health Organization (WHO) found that 40 per cent of homicides in the European region were due to knives and sharp implements.

month-long prison sentences in addition to the punishments meted out to the children.

A soccer riot in Port Said, Egypt, left 79 dead in the wake of opposing fans storming the pitch. Witnesses reported accounts of knife wounds and Port Said fans were alleged to have been carrying knives into the throng.

As of 2011, the use of knives in homicide offences in Australia increased, while their use in relation to robberies, sexual assaults and kidnapping or abduction decreased.

In March, New Zealand announced a new initiative to promote the safe storage, display and sale of knives in retail stores. Called SAFE, the campaign is part of a package of initiatives to reduce the risk of knife crime.

Inmates in prison use readily available materials like toothbrushes, ball point pens, metal can lids, metal cutlery, syringes and wooden spikes to create improvised weapons known as 'shivs,' 'shanks' or 'shibs.' According to Police Link, shank attacks tend to be fast and furious incidents with multiple stabs or slashes inflicted.

In the U.S., depression, suicidal ideation, feelings of hopelessness for the future and decreased satisfaction with life have been associated with weapon-carrying among young people.

In 2010, Victoria, Australia's Premier, John Brumby, committed \$673 million over five years to the Victoria Police to fill their ranks, with the goal of tackling alcohol-fuelled violence, knife crime and the growing knife culture.

According to figures released in February, Scotland's tougher stance on knife crime, which includes putting more offenders behind bars and for longer than the rest of the U.K, is paying off. Crimes involving offensive weapons fell by almost 40 per cent over five years.



The WHO's estimates show that for every young person who dies, 20 more are admitted to hospital.

Proposed legislation in Israel would hold parents criminally responsible for minor children caught armed with a knife in public places. The parents would face hefty fines or



THE OPAPA HUMAN TRAFFICKING CASE

By Frederick Desroches, PhD, Department of Sociology and Legal Studies, St. Jerome's University, University of Waterloo, Ontario and Insp. Steve Martin, officer in charge, Hamilton-Niagara Regional Detachment, RCMP

Human smuggling and human trafficking have become major law enforcement challenges throughout the world.

Human smuggling typically involves potential migrants willingly paying fees to smugglers in order to gain entry to another country through illegal means.

Human trafficking also involves the transportation of illegal immigrants across borders but is done for the purpose of prostitution, brokered marriages, forced labour or other slavery-like practices. Human trafficking is viewed by the United Nations as an accompaniment to the problem of transnational organized crime.

In practice, it's often difficult to tell where smuggling ends and trafficking begins but most laws draw the line when fraud or coercion are used to force migrants into any type of bondage or indentured labour.

The most common form of human trafficking is the transportation of women in the sex trade industry. Trafficking victims are typically young women from poor countries who are deceived into believing they are going to work in well-paying

jobs in another country (Bruinsma and Meershoek, 1999; Nijboer & Vocks, 2000; Zhang, 2007).

A less common form of human trafficking involves migrants who are forced into bonded labour after their arrival. These workers are a diverse lot ranging from those eager to improve their lives to others desperate to escape civil unrest. They are typically promised educational or employment opportunities in destination countries but find themselves exploited through forced labour, slavery or servitude for no pay or much less than they were promised (Shelley 2005; Zhang, 2007).

The exploitation of both kinds of victims is facilitated by the fact that the migrants do not speak the local language, they are in the country illegally and have had their documents seized by the traffickers, and they are socially isolated. In addition, they are continuously supervised and intimidated with threats against family members back home.

Consequently, most do not know how to get out of the clutches of the traffickers and are too fearful to report

their situation to the police (Bruinsma and Bernasco, 2004). Criminal groups find that trafficking requires little capital investment but it can pay handsome dividends over an extended period of time.

HUMAN TRAFFICKING IN ONTARIO

Project OPAPA was an RCMP-led, 10-month investigation into a forced labour/human trafficking case in Hamilton, Ontario. In October 2010, members of the RCMP's Immigration and Passport Section laid human trafficking and fraud charges against 14 people from Hungary. Throughout the investigation, the RCMP worked closely with the Canada Border Services Agency, Citizenship and Immigration Canada, and the Hamilton Police Services.

The defendants consisted of an extended Roma family from the town of Papa in Hungary. The two principals were brothers (Ferenc and Gyula Domotor) who arrived in Canada with other family members in 1998 and claimed refugee status.

Both brothers had been indicted in Hungary months earlier for extortion by severe threats but immigration officials in Canada were unaware of the charges.

In 2001, Canada imposed a visa requirement on Hungarian nationals to stem the tide of Hungarian refugee claimants. The visa requirement was removed in 2008, allowing the Domotor brothers to recruit victims for exploitation and family members to participate in their criminal organization.

The brothers provided "letters of invitation" to brothers, sisters, cousins and their spouses in Hungary to travel to Canada for vacation purposes. Upon arrival, these visitors made false refugee claims followed by fraudulent applications for welfare assistance. Many had outstanding arrest warrants in Hungary for offences involving extortion and/or fraud. The two principals organized and directed their extended family in Canada and Hungary and engaged in human trafficking, welfare fraud, theft from the mails, threats and immigration offences.

From April 2008 to October 2010, this criminal organization recruited poor

The traffickers kept tight surveillance over their victims, who worked long hours without pay at a construction site and were forced to live in this overcrowded basement.





and unemployed Hungarian men to come to Canada with the promise of good-paying jobs. The brothers operated a drywall and stucco business and would submit low bids for work with various contractors. Victims were taken to construction sites each day and forced to work long hours without pay.

The investigation began when a worker complained to the police about his treatment at the hands of the traffickers. With the assistance of Hungarian translators, RCMP investigators approached men who were being exploited in this forced labour/human trafficking ring and released them from the control of their captors.

Based on victim statements, evidence gained through surveillance, photographs of living conditions and worksites, and documents obtained through search warrants and production orders, the police arrested and charged 14 members of this extended family.

A total of 23 male victims were identified and each provided the police with a statement outlining his detainment and exploitation. The workers described how they had been recruited in Hungary, provided with an airline ticket into Canada, and coached on how to claim refugee status and apply for social assistance. The traffickers took their passports, confiscated their welfare payments, held them under tight surveillance and controlled who they met and where they lived and worked.

The victims were forced to work off their "debts" and were told that family members in Hungary would be harmed if they didn't co-operate. The victims spoke no English, lived in overcrowded basements in the traffickers' rented homes and were poorly fed.

The first two of the accused to appear before the courts on human trafficking charges were released on bail. However, police soon learned that the victims and their families in Hungary were subjected to bribes and threats in an attempt to have the complaints withdrawn.

The Crown Attorney then added charges of participating in a criminal organization (Sec. 467.11(1) C.C.C.) in order to make use of the reverse onus provisions regarding bail. The two accused who had been released from detention were re-arrested and all 14 of the accused were detained in pre-trial custody.

Each of the accused eventually pled guilty to a variety of charges including fraud,

theft, obstruction of justice, immigration offences, participating in a criminal organization and conspiracy to commit human trafficking. Sentences ranged from nine months to nine years in prison and most were subject to deportation orders after serving their time.

CONCLUSION

The OPAPA case is the first successful criminal prosecution of a forced labour/human trafficking case in Canada by the RCMP. It represents a relatively rare instance in which criminal organization legislation was used to gain convictions of an organized criminal group. The courts have set the evidentiary rule very high for the use of these laws and several high-profile prosecutions of members of the Hells Angels have been unsuccessful.

An analysis of the research literature indicates that the criminal organization in the OPAPA case operated in a manner similar to most human trafficking groups. It consisted of a relatively small number of people who knew (and were related to) one another, who recruited financially needy victims from their country of origin, arranged for their movement to the host country, and exploited them for profit after their arrival.

The victims were forced to work to pay off debts and were deterred from seeking help because of language barriers, their illegal status, social isolation, threats, and constant monitoring by the traffickers.

Following the convictions, investigators, supervisors, Crown Attorneys and representatives from other agencies met for a debriefing to assess the strengths and weaknesses of the case. Although the investigation and prosecution were highly successful, two problems were identified.

Investigators were full of praise for the non-governmental volunteer organizations that provided housing and other assistance to the victims. The RCMP, however, acknowledged their inability to provide adequate victim assistance in the OPAPA case and recognized the need for improved victim services in cases of human trafficking.

It was also acknowledged that this trafficking ring could have been shut down sooner. An initial complaint to the police eight months earlier by four victims was not acted upon when the workers withdrew their charges after being lured

back by the traffickers with a promise of better treatment.

All agencies involved in the OPAPA investigation recommended that police services in Canada need to be made aware that this type of problem exists and encouraged to thoroughly investigate all information and complaints that come forward. ■

References

- Bruinsma, G., & Bernasco, W. 2004. 'Criminal Groups and Transnational Illegal Markets,' *Crime, Law & Social Change*, 41:79-94.
- Bruinsma, G., & Meershoek, G. 1999. 'Organized Crime and Trafficking in Women from Eastern Europe in the Netherlands,' in P. Williams (ed.), *Illegal Immigration and Commercial Sex, the New Slave Trade*, 105-118. London: Frank Cass.
- Nijboer, J.A., & Vocks, J. 2000. *The Promised Land, a Study of Trafficking in Women from Central and Eastern Europe to the Netherlands, Criminal Law and Criminal Justice*. Vol. 8, 379-388.
- Shelley, L. 2011. 'International Trafficking: An Important Component of Transnational Crime,' in Okubo, S., & Shelley, L. (ed.), *Human Security, Transnational Crime and Human Trafficking: Asian and Western Perspectives*, 135-151. New York: Routledge.
- Shelley, L. 2005. 'Russian and Chinese Trafficking: A Comparative Perspective,' in Stoecker, S., & Shelley, L. (ed.), *Human Traffic and Transnational Crime: Eurasian and American Perspectives*, 63-77, New York: Rowman & Littlefield.
- United Nations 2000. Protocol to prevent, suppress and punish trafficking in persons, especially women and children, supplementing the United Nations convention against transnational organized crime. www.unodc.org/pdf/crime/final_instruments/383e.pdf.
- Zhang, S. X. 2007. *Smuggling and Trafficking in Human Beings: All Roads Lead to America*. London: Praeger.





FORENSIC RESPONSE TO FIRST AIR CRASH

TRAGEDY HELPED BY MILITARY PRESENCE UP NORTH

By Cpl. Jack Neri, Forensic Identification Services, Lethbridge, Alta, RCMP

On Aug. 20, 2011, First Air flight 6560 prepared to leave Yellowknife, N.W.T., en route to Resolute Bay, Nunavut, a small isolated Inuit community situated 1,600 kilometres to the northeast in the Canadian Arctic. There were 11 passengers and four crew members on board.

The cargo area contained about two tons of food for Resolute Bay and its surrounding communities since marine delivery in the region is interrupted each winter due to ice build-up. To accommodate the extra cargo, First Air uses a modified Boeing 737 aircraft, which is configured to carry both passengers, sitting at the rear of the plane, and cargo stored at the front directly behind the cockpit.

Under light drizzle and mist, and while preparing to land, the plane suddenly collided with the side of a mountain about three kilometres east of the runway.

Following the impact, the aircraft bounced up and over the sloped hill and then slid downhill on the rocky ground. The plane broke into several distinctive parts: the tail, the wings and the middle fuselage, and the cockpit and front fuselage. Metal debris was strewn over an area about 300 metres long and 70 metres wide.

All of the passengers were ejected from the plane. Some were found lying on the

ground while others were still secured to their seats by seatbelts. Eight passengers and all four crew members were killed. Three passengers miraculously survived the crash despite serious injuries.

Coincidentally, the Canadian Forces (CF) was conducting a major annual sovereignty operation and security exercise, called Nanook 11, in Canada's Northwest Passage at the same time.

About 1,100 military personnel were participating in the exercise, including more than 300 who were working in the Resolute Bay vicinity. As part of the exercise, several Search and Rescue (SAR) planes, helicopters, a naval frigate, Canadian and U.S. Coast Guard personnel, and members of the Transportation Safety Board (TSB) were on site.

Ironically, part of the exercise was to involve a simulated major air disaster and maritime rescue. At about 12:50 p.m., report of the crash reached the military, who immediately suspended the exercise and moved into rescue mode.

CF members and local airport firefighters responded to the crash site. Three military helicopters assisted in bringing over responders including 15 medical staff. Three survivors were soon located and taken back to the CF base for medical treatment before

being flown to Iqaluit on a Globemaster C-17 plane.

Rescuers searching the site located 12 deceased persons whose bodies were covered with blankets until police could process the scene.

Several armed members of the Nunavut Rangers, a volunteer unit of the CF using trained Inuit locals, were assigned 24-hour site security duties. This was done due to the presence of predators including polar bears that were likely to be drawn to the victims' bodies and the large amount of fresh food from the cargo compartment now strewn over the crash site.

The Incident Command Model was used to manage the response. The RCMP led the investigation to determine criminality. Due to the size and seriousness of the incident, additional police officers were immediately dispatched to assist the local two-member RCMP detachment and the sole forensic identification member stationed in Nunavut's capital, Iqaluit.

A team of three RCMP forensic identification specialists from Alberta and Ottawa and a collision reconstructionist and a collision support analyst from Alberta were also sent to Nunavut.

Due to the high number of casualties and the expected challenges of making positive identifications due to the seriousness of injuries, Disaster Victim Identification (DVI) protocols were used.

The main purpose of DVI operations is to conclusively identify victims under internationally approved guidelines. Visual identification by comparing a photograph, such as a driver's licence photo, with the deceased, is often unreliable. Identification is preferably performed using fingerprints, a dental chart or DNA analysis to eliminate any possible mistakes.

An event of this magnitude usually requires several days to process, so a temporary camp, including two large mobile tents, was set up by the military next to the crash site.

One tent was reserved exclusively for the use responders and equipped with a

The DVI team inspects a personal belonging found by the searchers.



Cpl. Jack Neri, RCMP



portable diesel heater to provide shelter from the severe weather conditions during meal breaks. Work was even suspended one day due to high winds and the risk of flying metal debris.

The second tent was reserved to store non-electronic equipment, the collected belongings and the exhibits, and was used by the local coroner and forensic members to examine the victims.

Access to the crash site from the airport was limited due to the rugged terrain. As a result, CF helicopters as well as all-terrain vehicles (ATVs) were used to allow for quick and easy transportation of military, police and TSB personnel each morning and at the end of the day.

As with any incidents with casualties, the first step is to properly record the scene. This was performed with ground and aerial photography and videography. The traffic collision members digitally recorded all scene measurements resulting in 750 evidentiary and topographical measurements by the end of the sixth day.

Once the photography and video portions were completed, all the deceased passengers and crew members were issued a unique identification number. Their respective locations at the crash site were precisely recorded by the traffic collision team using high-tech differential GPS-based surveying equipment.

This equipment provided much better and faster results compared to standard hand-held consumer-level GPS models.

Each victim was transported back to the second tent for closer examination. Here, forensic identification experts completed the preliminary examination of the injuries and compiled the physical descriptors and clothing description of the victims.

Fingerprints were also obtained using the black fingerprint powder, white adhesive label and clear acetate sheet method, which produces much better friction ridge detail than the standard black inking of the fingers on white paper.

All 12 victims were subsequently transported back to the CF base at the airport where a military dentist examined each individual, took dental x-rays and recorded their respective dental charts.

Once completed, the bodies were transported to Ottawa where full autopsies were performed and all were positively identified.



Military personnel form a search line at the crash site to locate the passengers' and crew's belongings.

After the external examination of the victims was completed, the DVI team's next step was to search the site, take additional GPS measurements of the aircraft debris and the terrain before labelling and collecting all of the passengers' and crew's belongings.

Due to the large area of the crash site, a line search technique was performed using military personnel. A base line with a thick rope was stretched across the length of the entire debris field. A team of 24 military divers from the Canadian Forces and United States Navy, who were guests on the CF frigate for the Nanook exercise, assisted the DVI team in performing the ground search.

Each searcher was positioned at arm's length from one another and under the order of their unit commander slowly walked forward all in line until an object of interest was spotted.

When a new article was found, the searcher would raise his or her hand in the air to indicate the finding. The unit commander would verbally halt the group and allow the DVI team members to approach and confirm the object was personal property.

Once confirmed, the location was marked with differential GPS and the item was then labelled, photographed and collected. This approach allowed for a full and complete screening of the crash site in half a day and resulted in the collection of 225 personal items.

All recovered belongings were later turned over to a private company hired by the airline, which then cleaned (many articles were jet-fuel contaminated), photographed

and catalogued each article before making arrangements to have them returned to the victims' families.

It was learned after our deployment that the airline crew's identification cards collected at the crash site and later turned in to the private company had an embedded electronic chip containing biometric data including fingerprints of the employee. Airline ID cards should therefore always be retained by police in incidents that may require the use of fingerprints for identification purposes.

The flight data recorder and cockpit voice recorder of the Boeing 737 plane were located by CF personnel during the initial response. Both boxes were transported by the military back to Ottawa for examination by engineers at TSB's laboratory. All aircraft debris at the site was subsequently removed by First Air in the months following the incident.

As with most major deployments, a list of post-mission recommendations and suggestions were compiled by the DVI team and passed on to RCMP HQ for the next major disaster. Included was the recommended deployment of forensic collision reconstructionists with differential GPS survey equipment for future crash incidents as it was found to provide invaluable data for the forensic team as well as TSB investigators.

In January 2012, TSB issued a media release with a preliminary report about the crash. Investigators classified the incident as a "controlled flight into terrain" accident, but the exact cause is still unknown. ■

Cpl. Jack Neri, RCMP



THROUGH A DIFFERENT LENS

DOCUMENTARY CHALLENGES PERCEPTION OF SEX TRADE WORKERS

*It's been a decade since serial killer Robert Pickton was arrested, but many sex trade workers are still hesitant to put their trust in police. Gazette writer Sigrid Forberg speaks with Rosie Dransfeld about her documentary, *Who Cares?*, which presents both the lives of Edmonton sex trade workers and the work of members of Project KARE, the RCMP and Edmonton Police Service's joint task force to investigate missing women in Alberta.*

YOU'VE SAID YOU'VE ALWAYS BEEN TORN BETWEEN THE DESIRE TO AMUSE AND THE DESIRE TO ANNOY. WHICH ARE YOU TRYING TO DO WITH THIS FILM?

I think both. Life is not black and white. But because it makes it so much easier, we try to categorize everything in these black and white boxes. But this is just not the reality. I think every human being has many sides, especially for these women. The circumstances they live in are very hopeless and a lot of times what I sense is that, in a way, with continuing this lifestyle and the drugs, they are committing a slow suicide. But I think it's also important to have

the humour, you still have to be able to see beauty in life and you still fall in love with things and you still find things funny. This is how people are, this is what makes life what it is.

WHAT DID YOU FIND IN THE PROCESS?

If I look at the women on the streets in Edmonton, the ones I've found, a lot of them are helpless victims. Not that they are always good people, but they are victims. And most of them are mentally ill or sick in other ways. The women are judged, not just by men but by women too and I think women are sometimes even harsher in their judgment of the prostitutes. But this whole business wouldn't exist if there wasn't a demand for it.

WHAT WAS YOUR IMPRESSION WHEN YOU WERE RIDING ALONG WITH THE KARE OFFICERS?

I was really impressed with the level of care they show for the women. They have created relationships there on the streets. And the women now have, which is unthinkable maybe in other parts of the

country, RCMP officers and city police officers they can actually talk to and trust and feel that they're on their side. And I think that's a huge advantage. Being on these tours, I had no idea how many women are out there and when the officers approached them, their usual line was, 'We would like to get your DNA so that in the tragic event of a homicide, we would be able to identify your human remains.' This is a line I heard for eight hours again and again and all over again.

WHAT DID YOU THINK OF THAT?

I think I've never been so angry in my whole life. I didn't even know how to deal with my anger. I came home, I grabbed my dog and we went on a walk and I yelled at the trees. That's not the RCMP's fault but it's the approach in Canada and how we treat these women — as nuisances and burdens and all that. The agencies trying to help them all are hopelessly underfunded and they're working hard and trying to do a good job there but nobody is really there to protect them. One thing the film had to do was to make the viewers feel sympathetic and in a way fall in love with these women and care for them. And on the other hand, to understand what is going on in the streets and how dangerous it is and who actually is the victim in all of this.

WHAT WOULD YOU HOPE LAW ENFORCEMENT WOULD TAKE AWAY AFTER VIEWING THE FILM?

I think this film should be shown to all the police forces in Canada and beyond so that officers can see that these are people and that they are the real victims. We are often too quick with our judgments of them. There are reasons they're on the streets. I can't believe that anybody growing up would say, "I wish to become a street prostitute." It's not a profession of choice. And I hope that police officers, from this film, take away an understanding of the circumstances that these women live in and what makes it so difficult for them to just get out of this life. And so after they see this film, that the next time they see a woman on the street, they feel empathy and compassion. ■

Rosie Dransfeld's documentary, *Who Cares?* presents both the lives of Edmonton sex trade workers and the work of members of Project KARE.





#TWEETINGTROUBLE

ONLINE PROGRAM USES TWITTER TO TRACK INCIDENTS

By Mallory Procnier

Two Netherlands-based research institutes and a start-up company have joined forces to use Twitter to find useful information for emergency services during an incident.

Through their program, Twitcident Event Monitor, they're able to filter tweets through a web-based application that uses algorithms to find discussions about accidents, riots and other public safety issues.

"We want to be the first ones to find out about an incident and alarm the safety officers to see what's going on," Stronkman says.

During a large-scale national event, such as the Queen's Day celebration in the Netherlands, Stronkman sits together with police information officers at a computer screen and monitors tweets that the program finds.

If enough tweets pop up about a particular incident, they're able to send emergency services to the scene within minutes.

"We really focus on the first five minutes of an incident in which we try to improve the real-time intelligence of the police forces," Stronkman says. "Basically, we provide them with timely, actionable information."

A CLOSE EYE

The program works by finding all the tweets that relate to a particular area, whether it's a city, bar or park. It then categorizes these messages as different emergency scenarios, filters out the noise and displays the amount of relevant messages it has received about each scenario in an easy-to-read table.

"If you collect 60,000 to 100,000 tweets in one day, the program will only show the 1,000 tweets that are relevant to the situation instead of all of them that are being collected," Stronkman says.

In this format, it's easy to notice an increase of 20 tweets in five minutes about a fire in a particular area, which signifies to police that it's time to act.

The event monitor also takes slang and abbreviations into account. During the

twiCident

helping emergency services

twiCident Dashboard Time - Locations - Themes - Filter - Search

All 1,870,641	Incident		Behavior		Emergency			Threat			Sentiment			Extra
	Violence	Robbery	Law enfor...	Strange	Accident	Fire	Medical	Fuss	Public tra...	Weather	Fear	Anger	Sadness	Adhoc
New York City 285,394		13			15				56	3	25			
The Bronx 345,143	46	3	8	2	1	5	1	14	2					10
Brooklyn 142,027		23		37	98		23		77		16			
Manhattan 634,721	7		3					12			30	3		
Queens 313,349		23		3	1	5		59	1	12				17
Staten Island 150,007	4	1	6			1		3					25	1

Although Twitcident is not monitoring New York City, this screen capture shows how the program uses keywords to classify Twitter content to alert police of potential incidents.

summer carnival in the city of Rotterdam, slang experts were brought in to help plug in all the words that visitors from ethnic groups typically use during an incident.

A-FLUTTER FOR TWITCIDENT

Stronkman says emergency services personnel in the Netherlands are enthusiastic about the program, since it requires minimal training and it is easy to embed within their organization. It also adds value to current social media monitoring efforts.

Two years ago, there was a shooting at the summer carnival. Police knew there might be some concern this year about it happening again, and sure enough, a minor incident caused rumours to spread over Twitter.

The program quickly picked up on these rumours about a shooting and notified the police, who were able to disprove it in its very early stages by using their own official Twitter account.

The Twicident Event Monitor has also been able to alert police of Twitter users who utter threats towards dignitaries and members of the public.

"There were a few cases where we would find messages that indicated an increased risk, and the police forces actually went to visit the suspects," Stronkman says.

HOT TOPIC

In the Netherlands, public safety is a top priority. But as Stronkman was completing his Masters' thesis on the topic of social media filtering, he began to notice that there wasn't a lot of innovation in that realm for public safety. This led him to create Twitcident.

"I wondered how we could find relevant content from social media for emergency services in order to enhance public safety," Stronkman says.

The success of Twitcident has also sparked other questions for Stronkman. He sees social media as being helpful for tracking missing persons, reaching the broader public and even having police and public engage to create a safer neighborhood together.

Stronkman has his sights on having Twitcident amalgamated into Netherlands' future Real Time Intelligence Centre, which will bring together all police forces in the country to share intelligence.

But right now, he's simply focused on fine-tuning the product that he hopes will enhance law enforcement capabilities in the Netherlands.

"For us, it means making the life of the emergency services a bit easier," Stronkman says. "I hope our technology can make a real difference for them." ■

Richard Stronkman



LATEST RESEARCH IN LAW ENFORCEMENT

The following are excerpts from recent research related to justice and law enforcement and reflect the views and opinions of the authors and not necessarily those of the organizations for which they work. To access the full reports, please visit the website links at the bottom of each summary.

A CURRENT ANATOMY OF POLICING, PROTESTERS AND PUBLIC OPINION IN AN AGE OF OUTRAGE

By Eli Sopow, Ph.D.

The level of civil disobedience and public protest across the globe is on the rise. This paper suggests why these situations occur and how police can better approach them.

There are several profiles of demonstrators. Riots, public protests with or without passive civil disobedience and public protests that start peacefully and become violent are all events unto themselves and require different tactics by police.

In a riot scenario, which can happen at a sporting event or among intoxicated youth, widespread crowd contagion and violence can spread very quickly.

However, during an organized, public protest with social, political or environmental motives, widespread violence isn't likely to occur.

Peaceful demonstrations can also sometimes turn violent when a small handful of protesters have a goal of destroying public property and attacking police.

However, this paper argues that no more than five per cent of large, public protests that begin peacefully will be infiltrated by individuals who seek out violence. So when police approach these groups, they should target the small minority of offenders instead of the other 95 per cent who do not have an anti-police sentiment or want violence to occur.

The author suggests that police employ a "soft hat" presence at these types of protests, whereby they wear their regular, general duty uniforms and patrol the area and make sure protesters know they are ready to take action if necessary.

He also outlines three profiles of protesters that police must remember when

working among demonstrators: passive protesters, who engage in mild actions and voice their opinions through the Internet, petitions and letters; active protesters, who engage in the same activities as passive protesters but who will also attend a peaceful protest; and volatile protesters, a small minority of demonstrators who want to engage in violence and/or get arrested.

Volatile protesters, although extremely violent, don't have the power to transfer their behaviour to everyone else. In fact, the author's research shows that passive and active protesters will often try to escape the violence or encourage the violent protesters to stop before their actions destroy the goal of their protest.

Police, therefore, should analyze the environment and decide which tactic to use based on the type of protest that is occurring and the type of protesters that are present.

TO ACCESS THE FULL
REPORT, PLEASE VISIT:
WWW.POLICECOUNCIL.CA

POLICE LEADERSHIP CHALLENGES IN A CHANGING WORLD

By Anthony W. Batts, Sean Michael Smoot and Ellen Scrivner

This paper outlines the benefits and challenges that the new generation of police recruits brings to the profession and how leaders of police organizations must learn to adapt to the characteristics of these young officers.

Two changes are highlighted as the catalysts for change in policing organizations: a new generation of police officers and an expanded use of new technologies.

The "contemporary employees" are described as being conscientious, unselfish and independent thinkers who are more tolerant of people's differences. They want to make the world a better place and strive for collaboration and hands-on work in

the workplace. They're also supportive of an ethnically diverse workforce and responsive to concerns of diverse communities — attributes that are very desirable for police officers.

However, despite these benefits, contemporary employees can also bring lifestyle changes to the workplace. They want to balance work and family life, have no trouble questioning authority, want ongoing performance feedback and want to see how their work is impacting the organization. This is a stark contrast to employees who have long accepted the paramilitary model of police organizations that prioritized work over employee satisfaction.

Contemporary employees are also said to need help carrying tasks through to the end, which makes them strong candidates for mentoring and training. Because of this, police leaders are encouraged to take a new approach to retain this younger generation by allowing them to flourish and giving them ample training opportunities.

The second driver of change for leaders in police organizations to take into consideration is the rise of technology. Contemporary employees are comfortable in the tech world and can be an asset to help integrate technology into daily operations. Examples include holding virtual meetings using social media like Facebook and Twitter.

New technology is also impacting the types of crimes these organizations are focusing on. Internet crime, child pornography and flash mobs are all relatively new crimes that have surfaced through the use of technology. On the flipside, technological advances can also help fight this type of crime. Cellular and GPS technology can track and recover stolen cars and surveillance cameras can identify suspects much more easily.

It can be challenging for many generations of police officers to co-exist in one environment, but this paper encourages police leaders to tap into the knowledge that contemporary employees bring to the workplace. If these employees see that their ideas are not valued, they may leave the organization, taking with them the best of the next generation of leadership.



Peaceful demonstrations can sometimes turn violent when a small handful of protesters have a goal of destroying public property and attacking police.

**TO ACCESS THE FULL
REPORT, PLEASE VISIT:
WWW.NIJ.GOV**

YOUTH (IN)JUSTICE: ORAL LANGUAGE COMPETENCE IN EARLY LIFE AND RISK FOR ENGAGEMENT IN ANTISOCIAL BEHAVIOUR IN ADOLESCENCE

By Pamela Snow and Martine Powell

This paper suggests that the reason why many youth become offenders is due to an undetected oral language competence disorder.

Oral language competence is the ability to use and understand spoken language in a range of situations and social exchanges to carry out daily activities. It comprises a set of auditory and verbal skills that are usually learned steadily over time.

As children grow older, they learn language skills they can apply in social contexts. By the time a child starts school, they should be able to tell stories and communicate with their peers through narratives — accounts that follow a logical, coherent order and take into consideration the listener's prior knowledge.

They should also have developed social cognition, or the ability to process a face-

to-face situation with another person by considering what the person is saying, the speaker's tone of voice and facial expressions and social constraints of the situation.

If children don't have these abilities, they will most likely display disruptive and unco-operative tendencies in the classroom because work will be harder for them. The authors say that boys with unidentified language difficulties who display these tendencies will be identified as having behaviour problems rather than be seen as at-risk for language impairment.

These language impairments cumulate to anti-social activity in boys by age 19. The authors identify a study where, in 19-year-old boys, there was a direct effect of childhood language impairment on late adolescent delinquency.

The authors suggest that early intervention is crucial for those who suffer from language deficits and present four key implications of their research.

First, they conclude that behaviour difficulties, which are classified as mental health problems, have a strong correlation with oral language deficits. They suggest that teacher-student engagement is key and that educators should think of their work in the broader public health context.

Second, they state that youth interventions and counselling approaches like cognitive behaviour therapy are verbally mediated and require high language processing skills — something that these youth already have troubles with. They infer that counsellors should think of

ways to decrease the verbal element of these approaches, such as simplifying their language use and using visual props.

Third, all the evidence gathered suggests that young offenders will probably have a difficult time making a police statement because they won't be able to provide a complete, coherent or well-organized account of their actions. It's suggested that police should conduct their interviews knowing that young offenders' language skills may be compromised. Police should be trained to find a way to simply ask questions during an interview and keep the complexity of their language to a minimum. They should also screen young people for language deficits that will compromise their performance in an interview so they don't miss out on their basic right to justice.

Finally, they touch on restorative justice conferencing (RJC) that has been recommended for youth offenders. This approach brings together the victim, the perpetrator and a trained convenor to talk about the impact of the crime on the victim. But they say that this is a risky method for young offenders with language impairments. ■

**TO ACCESS THE FULL
REPORT, PLEASE VISIT:
WWW.AIC.GOV.AU**



REPORTING FROM THE FRONTLINES

EMBEDDED JOURNALISTS GET FIRST-PERSON PERSPECTIVE

By Sigrid Forberg

It's a fine balance military reporters have been trying to strike for years — to differentiate between being embedded and being in bed with their subjects.

And recently, some provincial RCMP headquarters have been giving reporters the opportunity to learn that lesson first-hand.

REWARDING RISKS

Last August, Barb Pacholik, the crime reporter for the *Regina Leader-Post*, got a mysterious call from RCMP headquarters asking her to come down for a meeting.

Insp. Mercer Armstrong, the officer in charge of federal support services for the province, had come up with the idea to embed a reporter in one of their investigations. After getting approval, he took it to the communications employees who identified Pacholik as a good candidate.

Pacholik has been a crime reporter for more than 20 years and was well-known within the force as being a fair and balanced reporter. She'd been on ride-alongs before, but she was hesitant at first to get so deeply involved in an investigation.

"I approached it fairly cautiously," says Pacholik. "I don't think on either side we knew what we were going to come out of it with. There was a lot of trust on my part and

a lot of trust on their part, too."

But Armstrong says it was a risk well worth taking for both sides. Pacholik was embedded in Project Faril, which resulted in several arrests and the seizure of \$17.5 million worth of cocaine and ecstasy.

S/Sgt. Bruce Spencer, the team commander for Project Faril, was also assigned to liaise with Pacholik and help her gain whatever access or information she needed. Of course there were limits to what she could report, but she had full access to the team.

"She was basically a fly on the wall... one that could ask questions," says Spencer. "But it was just a matter of building up trust with her. The members at first were a little suspicious but after the first couple of days, they were more and more comfortable with her."

It was a calculated risk that paid off well for the federal investigation team in Regina. The articles appeared in a six-part series and both Pacholik and the RCMP have received great feedback on the final product.

OPPORTUNITY FOR THE OUTSTANDING

And other provinces are taking note. Sgt. Duncan Pound in British Columbia (B.C.)

was asked by the head of communications and the head of federal investigations for the province to make it happen in B.C.

But for the RCMP in B.C. there's a bit more risk. In the RCMP's largest contract province, they are responsible for both provincial policing as well as many of the municipalities. And in addition, they have a large federal presence.

They've also recently faced a lot of media criticism for some highly publicized incidents of member misbehaviour. There's a lot on the line for the RCMP in this project.

"You appreciate that there's the possibility that if the investigation doesn't work out for whatever reason that we could face criticism," says Pound. "But we have a lot of confidence in our investigative teams and we want to expose reporters and Canadians to that."

The reporter has already been selected through an objective process. Pound says they considered applications for various provincial news outlets based on their circulation, their proposal and how receptive they were to the necessary restrictions.

A background check was a must. And the reporter and the news outlet's editors had to agree to not print anything that could put the file's success in jeopardy. Pound says they hope to use this experience as a pilot to see whether it's feasible to offer up more of these opportunities to other outlets in the future.

"It's an opportunity to show the Canadian public what the 99 per cent are doing day-to-day," says Pound. "We have faith that the majority of our employees are great people and they're doing great work. Why not give them the chance to make the headlines?"

And Pacholik tends to agree. "People think of a Mountie and they think of red serge and Stetsons," says Pacholik. "But they don't really know much about what those plainclothes members do. We spend a lot of money on policing in this country and I think it was an opportunity to show people what they're paying for." ■

Project Faril resulted in several arrests and the seizure of \$17.5 million worth of cocaine and ecstasy. Reporter Barb Pacholik chronicled the investigation from the start for the *Regina Leader-Post*.



RCMP