

SFU's Award-Winning Forensic Entomologist One of Top 5 Innovators in the World

Gail Anderson has been analyzing forensic entomology cases since 1988, and has testified as an expert witness in court many times. With the collaboration of colleagues and graduate students, she is presently developing a database of forensic insects across Canada, so that forensic entomology can be used with confidence across Canada.

Her work has been featured in several television programs, including *Journeys – Grave Testimony* and *Forbidden Places – Silent Witness*, shown on Discovery Channel, *Planet Education*, and *The Nature of Things – Postmortem*.

A recipient of Canada's Top 40 under 40 Award in 1999, Dr. Anderson received a YWCA Women of Distinction Award for Science and Technology in 1999, and the Simon Fraser University Alumni Association Outstanding Alumni Award for Academic Achievement in 1995. She was recently listed in *TIME* magazine as one of the top 5 innovators in the world, this century, in the field of Criminal Justice.

Dr. Anderson was presented with the Derome Award in 2001, the most prestigious award the Canadian Society of Forensic Science bestows, for outstanding contributions to the field of forensic science.



Blow fly larvae (maggots) feeding on remains



Nonfeeding third instar larvae or maggots about to leave the food source to look for a safe dry place to pupate



Blow fly maggot mass on remains



Nonfeeding third instar larvae or maggots leaving the food source to look for a safe, dry place to pupate.

Katrina, terrorist acts such as 9/11, the London Bombings, and genocide investigations.

The CFR will attract international scholars, particularly those with personal experience in international human rights violations. This will result in collaborative research among universities, government agencies, and law enforcement to assist in the investigation of international crimes.

Forensic science is a very overused phrase today, but it's true value cannot be overstated. Victims leave victims behind. When someone is murdered, there is not only the loss of that person, there is unparalleled emotional trauma to family and friends.

Forensic science aids in the investigation and criminal prosecution at several stages, and can help ensure an accurate and rapid conclusion to a case, to prevent further deaths at the hands of that killer, and give a measure of closure to the victim's family and friends.

Successful prosecution is dependent on strong physical evidence, which can help exonerate the innocent and convict the guilty. By placing better and stronger forensic tools in the hands of the police, we help reduce crime, which results in a better quality of life and a reduction of fear in our society.

As well as a societal cost, homicide has a tremendous financial cost. Forensic science assists and supports the police in several areas.

- In the early stages of an investigation, especially one in which the body has been found weeks or months after death, there may be many potential suspects.
- Developing new tools to identify the victim, determining the time since death, and locating the origin of and identifying degraded DNA will serve to eliminate several potential suspects very rapidly.
- It will also focus scrutiny on the correct timeframe, which greatly speeds up the investigation, saving numerous expenses.
- It can also reduce the number of suspects that must be investigated, again saving time and money. Over 500 homicides occur in Canada each year, so the cumulative effect of this cost-saving would be considerable.

The CFR is an exciting and innovative facility that will help ensure Canada's place as a leader in forensic science, worldwide. ▲

Gail S. Anderson, PhD, Forensic Entomologist, Diplomate of the American Board of Forensic Entomology, is an Associate Professor in forensic entomology and Associate Director of the Criminology Program, in the School of Criminology at Simon Fraser University, a forensic consultant to the RCMP and City Police across Canada, and a regular instructor at Canadian Police College.

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Dr. Gail Anderson with Dr. Robert Gordon in the Lab

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