

Cecilia Hageman, Ph.D., LL.B., LL.M.

EDUCATION

LL.M. (Criminal Law) Osgoode Hall, York University, Toronto, Ontario, 2007-2009

Certificate in Public Administration Ryerson University, Toronto 1994-1997

Bar Admission Course Law Society of Upper Canada, Ottawa, Ontario, 1990-1991

LL.B. Faculty of Law, University of Western Ontario, London, Ontario 1986-1989

Ph.D. (Plant Sciences) Faculty of Science, University of Western Ontario, London, Ontario 1981-1989

B.Sc. (Honours Genetics) Faculty of Science, University of Western Ontario, London, Ontario 1977-1981

EMPLOYMENT

University of Ontario Institute of Technology, Oshawa, Ontario

Position: **Assistant Professor**, Faculty of Science (June 2007 to May 2009; July 2013 - present); **Sessional/Adjunct** (2009- 2013); **Associate Graduate Faculty member** in MSc and PhD programs in Forensic Psychology.

Duties: Develop and teach undergraduate courses in forensic science, including forensic biology, population genetics, criminalistics and law. Develop research program and mentor and supervise student research. Provide service to the university through participation in thesis examinations and committee work.

Centre of Forensic Sciences, Ministry of Community Safety and Correctional Services, Toronto, Ontario, 1991-2007, 2009-2013

Position: **Assistant Section Head**, Biology Section

Duties:

- Leadership of screening technologist and reporting scientist teams
- Performance and attendance management of subordinate staff
- Recruitment and interviewing
- Technologist and reporting scientist training
- Client training
- Participation in the CFS quality system program, including:
 - Proficiency testing (in body fluid identification, DNA analysis and blood stain pattern analysis)
 - Internal audits (to ISO 17025 and FBI DNA Quality Standards)
 - Corrective actions

- Case file reviews
- Court testimony reviews
- Technical and administrative report reviews
- Protocol development and validation
- Forensic biology casework with an emphasis on complicated and high profile cases, letters of opinion and report preparation, providing expert witness testimony in criminal and coroners' courts.

Position: Forensic Scientist, Biology Section

Duties:

- Forensic casework
 - Examination of items for body fluids (blood, semen and saliva) and the preparation of samples for DNA analysis
 - Forensic DNA analysis of samples and the interpretation and comparison of forensic DNA profiles
 - Crime scene attendance, autopsy attendance, and the examination of photographs and items for the purpose of blood stain pattern analysis (BPA)
 - Documentation of results and the preparation of reports for submission to clients
 - Expert witness testimony in criminal and coroners' courts
- Participation in proficiency testing programs covering all areas of forensic expertise
- Client assistance and training
- Training new technologists and scientists

Wyndham Forensic Group, Guelph, Ontario

Position: Reporting Scientist (2014 to present)

Duties: Performing and overseeing forensic scientific testing and examinations; Providing scientific interpretation, expertise, opinion evidence and advice to courts, lawyers, investigators and members of the public; Participating in WFG quality assurance program; Planning, conducting and coordinating scientific research projects, including partnerships with UOIT Forensic Science Program students.

Barrigar & Oyen, Barristers and Solicitors, Ottawa, Ontario, September 1989 to August 1990.

Position: Articling student

Duties: Searching records in the Patent, Trademark, Copyright and Industrial Design Offices; legal drafting and serving and filing court documents

University of Western Ontario, London, Ontario, 1981 to 1989

Position: Graduate Student and Teaching Assistant

Duties: Laboratory demonstrations, marking reports and examinations, lecturing in undergraduate courses of biology, genetics and botany

EXPERT WITNESS EXPERIENCE

Over 130 appearances as an expert witness in criminal proceedings in the fields of body fluid identification, serology, forensic DNA analysis and bloodstain pattern analysis, including:

- Jury and non-jury trials in the Superior Court Justice (Ontario)
- Trials and preliminary inquiries in the Ontario Court of Justice
- Inquiries in Coroner's Court (Ontario)

PUBLICATIONS

C. Hageman, D. Prevett & W. Murray *DNA Handbook* Butterworths (1st edition, 2002; 2nd edition, 2008)

K. Johnston and C. Hageman "Blood and Bodily Substances", Chapter 10 in *Forensic Evidence in Canada* 2nd edition (G. Chayko, *et al.* editors) Canada Law Book, 1999

C. Hageman & K. Johnston "Forensic DNA Profiling of the Y Chromosome" *Criminal Lawyers' Association Newsletter* (2002) v. 23(5): 44-45

PRESENTATIONS AT SCIENTIFIC CONFERENCES (Abstracted)

J. Laird, J. Almer, R. Frappier, A. Greenfield, C. Hageman and J. Newman "A Comprehensive Competency-Based Process for the Recruitment of Forensic Scientists"; J. Almer, R. Frappier, A. Greenfield, C. Hageman, J. Laird & J. Newman "Organizational Structure and Service Delivery: Matching Capacity to Demand for Forensic DNA Analysis" *American Academy of Forensic Sciences Annual Conference, San Antonio, TX, 2007*

M. Sloan & C. Hageman "DNA Profiles from Contact Lens Fluid; Bloodstain Patterns from a Possible Case of Curbing; a Case Study" *American Academy of Forensic Sciences, 2006 Annual Meeting, Seattle, WA, February 2006*

J. McGrory, M. Kaminski, T. Brutzki & C. Hageman "Case Study: A Blood Spatter Pattern Caused by a Vortex Action" *International Association of Bloodstain Pattern Analysts, 20th Annual Training Conference, Odessa, TX, October 2003*

G.A. Alderson, O.D'Souza, D. Polley & C. Hageman "Blood, Sweat & a Cobblestone" *Canadian Society of Forensic Science, 48th Annual Conference, Toronto, 2001*

C. Hageman “Blood Stain Pattern Interpretation at the Centre of Forensic Sciences: Casework examples and Quality Control” *Joint Conference of the International Association of Bloodstain Pattern Analysts and the Toronto Police Forensic Identification Service, Toronto, September 1998*

C. Hageman, I.M. Henderson, M.M. Sloan, E.E. Stasovski & K.A. Johnston “Identification of semen on anal and rectal swabs in sexual assault cases not involving an alleged act of anal intercourse” *Canadian Society of Forensic Science, 40th Annual Conference, Winnipeg, 1993*

TEACHING EXPERIENCE – FORENSIC COMMUNITY/ STUDENTS/ PUBLIC

At University of Ontario Institute of Technology

| <i>Course</i> | <i>Term</i> |
|--|---|
| FSCI 3020 (= 3120) Forensic Biology | Winter 2014 Winter 2012 Winter 2009 Winter 2008 |
| FSCI 3110 Population Genetics | Fall 2014 Fall 2013 |
| FSCI 4050 Law for Forensic Scientists | Winter 2015 Winter 2014 Winter 2013 Winter 2012 Winter 2011 Winter 2010 Winter 2009 |
| FSCI 3010 Criminalistics I | Fall 2014 Fall 2008 Fall 2007 |
| FSCI 3030 Criminalistics II | Winter 2009 Winter 2008 |
| BIOL 4040 Applied Molecular Biology | Fall 2007 |

Instructor:

Osgoode Hall/Continuing Legal Education Program, three part video lecture series on Forensic DNA analysis for legal practitioners, completed March 2015

Pre-conference Primer, 12th Canadian Symposium on DNA Forensic Evidence, CLE/Professional Development Program, Osgoode Hall Law School, York University, Toronto, April 27th, 2012

Advanced Bloodstain Pattern Analysis Course, Ontario Police College, Aylmer, Ontario, November 14th to 18th, 2005

Panelist/Workshop presenter:

Canadian Symposia on DNA Forensic Evidence, CLE/Professional Development Program, Osgoode Hall Law School, York University, Toronto

- 12th Symposium on DNA Forensic Evidence, April 28th, 2012
“What is the Science of DNA? Where Are We in 2012?” Panel with Justice E. Ewaschuk (Superior Court of Justice, Ontario) and Dr. John Wayne (McMaster University)
- 6th Symposium on DNA Forensic Evidence, December 4th, 2004
“DNA Interpretation” – Panel with Joel McGrory (CFS) and David Rose, Counsel
- 4th Symposium on DNA Forensic Evidence, March 22nd & 23rd, 2002
“Laboratory Protocol and Analytical Procedure” - Panel with Pamela J. Newall (CFS); Production and presentation of instructional video with Det. D. Wieland, Toronto Police Service and Paul Burstein, Counsel; Participation in mock court exercise with counsels Jerome Kennedy and Brian McGuire
- 2nd Symposium on DNA Forensic Evidence, October 2nd, 1999
“The Genetic Witness: The Human vs. Non-human” - Panel with Justice E. Ewaschuk (Superior Court of Justice, Ontario) and Dr. John Wayne (McMaster University)

Participant and presenter on panel “Against All Odds – Dealing with DNA Evidence” at the legal educational conference “Forensic Science and the Criminal Law”, Law Society of Upper Canada, Toronto, February 22nd, 2014

Participant and presenter at Manitoba Criminal Defence Lawyers Association Training Conference, “Handling a Forensic DNA Case: A Primer” Winnipeg, Manitoba, September 18, 2014

National Expert Witness Academy, The Advocates’ Society, Toronto – April 2011

- *“Avoiding Misunderstandings and Staying Within Your Area of Expertise”*
Panel with Kent Thomson (Counsel) and Dale Orlando (Counsel)

Canadian Society of Forensic Science, Annual Conferences

- *“Expert Witness Workshop”* Panel with Teri Martin and Daryl Mayers (CFS) 57th Annual Conference, Workshops, Toronto, November 29th to December 2nd, 2010
- *“Understanding the Numbers in Forensic DNA Reports and Testimony”*
Panel with Gareth Jones, R. Dziak, M. Richard, L. Hulse-Smith and Dr. J.

Millman (CFS). 57th Annual Conference, Workshops, Toronto, November 29th to December 2nd, 2010

- *“The Expert’s Toolbox – Names to Know”* Annual Conference Workshops, Halifax, 2008
- *“A Layman’s Guide to the Law of Criminal Procedure”* 42nd Annual Conference, Toronto, September 1995

Promega Corporation/Centre of Forensic Sciences Joint Conference – 6th Annual Workshop on DNA Technology, Toronto, Ontario, September 25th, 2009

- *“Expectations of the Expert”* Panel with K. Shea (Crown Attorney) and V. Rondinelli (Osgoode Hall)

Crime Scene Search Warrant Conference, Toronto Police Service Homicide Squad and the Centre of Forensic Sciences, Toronto, May 6th, 1998

Lecturer/Speaker:

2013 UOIT Graduate Student Research Conference, Keynote Speaker “Getting Ready for the Forensic Biology Laboratory of the Future” UOIT April 30, 2013.

“24/7” series, Toronto Police Service, Toronto,

- *The Break & Enter Program* June 1st, 2006
- *The National DNA Databank and Beyond* November 25th, 2005

12th Annual International Conference on Sex Crimes Investigations, Toronto Police Service Sex Crimes Unit, Toronto, October 6th, 2005

Presentation: *Trace DNA and the Context of Forensic DNA Analysis*

Ontario Crown Attorneys Association – Annual Crown Schools

A number of teaching presentations on forensic DNA evidence and bloodstain pattern interpretation, the latest of which was presented in London, Ontario in 2005

Peel Law Association, Brampton, November 25th, 1999

Presentation: *DNA Basics – Science and the Law*

Numerous client, student and public interest lectures, including:

- Ontario Police College, Aylmer
 - Identification and Homicide Officer training program
 - Major Case Management (MCM) training program
- Osgoode Hall, York University, Intensive Criminal Law Program
- University of Ontario Institute of Technology and the University of Toronto – Forensic Science Programs

- Medical-Legal Society, Toronto
- ChildFind Ontario
- Canadian Identification Society
- Innis College and Continuing Education programs of the Univ. of Toronto
- Silver & Associates, Toronto
- Canadian Centre for Verbatim Studies, Toronto

CONTINUING EDUCATION (Forensic and Management skills)

Forensic Biology and DNA analysis: (In-house training programs provided by the Biology Section, Centre of Forensic Sciences)

- STRMIX Training Workshop, provided by the ESR (Institute of Environmental Science and Research Ltd, NZ) May 7th to 9th, 2014
- Identifiler®Plus, May 2011
- Plexor™ HY Quantitation, December 2009
- Capillary electrophoresis and automation, January to April, 2006
- Y-STR analysis, January to September, 2005
- Population Statistics and Forensic DNA Analysis, July 23rd to 26th, 2001
- Forensic DNA analysis (DQA1, Polymarker™, Short Tandem Repeats), January 1995 to November 1997
- Body fluid identification and typing, July 1991 to 1992

Auditor Training:

- ISO 17025 Workshop “ISO Without Tears” Presented by FQA (Forensic Quality Services) at CFS, March 5th – 7th, 2012
- Federal Bureau of Investigation On-Line Training Program - Quality Assurance Standards for Forensic DNA Testing Laboratories (2009), September 2009

Bloodstain Pattern Analysis (BPA):

- North West Bloodstain Pattern Association, RCMP Division K, Edmonton, Alberta
 - Math, Physics & Computers in Advanced Bloodstain Pattern Analysis, October 27th to 31st, 2003
- Metro-Dade Police Department Training Bureau, Miami, Florida
 - BPA Workshop (40 hr. course), May 9th to 13th, 1994
 - Advanced BPA Workshop, May 24th - 28th, 2004

Management and Administration Skills:

- Ministry of Public Safety/Community Safety & Correctional Services)
 - Leadership 2000 Program, 2001-2003

- Centre for Leadership, Cabinet Office (MBS - Shared Services Bureau)
 - Courses in various aspects of management, including conflict resolution, risk assessment, project management and team leadership, 2000 to present.
- Centre of Forensic Sciences, Toronto
 - N.F.S.T.C. Management Training Program, Summer 1999

Attendance at Scientific, Forensic and Continuing Legal Education conferences:

- Canadian Society of Forensic Science:
 - 57th Annual Conference, Toronto, 2010
 - 48th Annual Conference, Toronto, 2001
 - 43rd Annual Conference, Hamilton, September 1996
 - 42nd Annual Conference, Toronto, September 1995

- American Academy of Forensic Sciences:
 - 2015 Annual Meeting, Orlando, FL, February 2015
 - 2006 Annual Meeting, Seattle, WA, February 2006
Workshops attended: The S. Louisiana Serial Killer Case – New Approaches with Older Trusted Techniques; How Frye & Daubert Have Changed the Presentation of Criminalistics and Questioned Documents in Court
 - 2002 Annual Meeting, Atlanta, GA, February 2002
Workshops attended: Forensic Mitochondrial DNA Analysis; Y Chromosome Analysis
 - 1998 Annual Meeting, San Francisco, CA, February 1998
Workshops attended: The Science of Forensic STR Analysis and Data Interpretation; Expert Evidence

- Federal Bureau of Investigation’s Scientific Working Group on DNA Analysis Methods (SWGAM)
 - Guest, January 2011 SWGDAM Meeting, Fredericksburg, VA

- International Association of Bloodstain Pattern Analysts (IABPA):
 - 20th Annual Training Conference, Odessa, TX, October 2003
 - 19th Annual Training Conference, Harrisburg, PA, October 2002
 - 17th Annual Training Conference, Tucson, AZ, October 2000
 - Joint Conference with the Toronto Police Forensic Identification Service, Toronto, September 1998

- Canadian Symposia on DNA Forensic Evidence, CLE/Professional Development Program, Osgoode Hall Law School, York University, Toronto, including:
 - 11th Annual Symposium, March 27th, 2010
 - 10th Annual Symposium, September 27th, 2008
 - Most other symposia, beginning in approximately 1998

- Toronto Police Service, Toronto, Ontario
 - Forensic Identification Training Conference, February 26th – March 2nd, 2007
 - International Conference on Sex Crimes Investigations, October 3-7, 2005
- Osgoode Hall/CLE National Forum on Expert Evidence in Criminal Proceedings: Strategies for Avoiding Wrongful Convictions and Acquittals
 - 3rd Forum, May 9th, 2009
 - 2nd Forum, November 3rd, 2007
 - 1st Forum, December 3rd, 2005
- Promega Symposia on Human Identification
 - 17th International Symposium on Human Identification, Nashville, TENN, October 2006 *Workshops attended: Advanced Topics in Statistics*
 - Joint Workshops with Centre of Forensic Sciences since 2004; most recently the 10th Annual Joint Workshop in December 2013.

PROFESSIONAL MEMBERSHIPS.

Canadian Society of Forensic Science:

- Member
- Secretary: CSFS Board of Directors

Associate Member, Law Society of Upper Canada

Member, International Association of Bloodstain Pattern Analysts

MEDIA

Participation in three television productions involving Centre of Forensic Sciences cases

- CMJ Productions “Forensic Evidence” series
- Kensington Communications “72 Hours” series
- Discovery Channel, Exploration Productions “Forensic Factor” series