#### **Curriculum Vitae**

# Michael Sinnott, B.S., M.S., P.Eng.

Advantage Forensics® Inc., Central Toronto Office: (416) 630-0700

2770 Dufferin St., Suite 115, Toronto, ON, M6B 3R7 • msinnott@aforensics.ca



#### PRACTICE AREAS

## Slips, Trips, and Falls

- Biomechanics
- Walkway & Flooring Assessments
- Ladder Falls & Failures
- Staircase Falls & Code Assessments
- Coefficient of Friction Testing
- Pool, Diving & Waterpark Injuries
- Workplace Injuries
- Recreational Incidents

## **Collision Reconstruction & Occupant Kinematics**

- Biomechanical Injury Assessment
- Motor Vehicle Collision Analysis
- EDR ('black box') Download & Interpretation
- Pedestrian, Cyclist & Skateboard Collisions
- Recreational Vehicle Collisions
- Seatbelt & Helmet Use Assessments

### ACADEMIC BACKGROUND

Master's Degree in Science (Mechanical Engineering), Michigan State University, 2006

- Master's Thesis: "In Vitro Biomechanical Analysis of Several Joint and Fracture Fixation Techniques"

Bachelors Degree in Science (Engineering Mechanics - Biomechanics), Michigan State University, 2004

- Thesis: "Effect of Axial Load in the Tibia on the Response of 90° Flexed Human Knee to Blunt Impacts with Stiff, Deformable Interface"

### **ADDITIONAL COURSES & TRAINING**

- Society of Automotive Engineers (SAE) World Congress, Detroit, Michigan, 2013
- Society of Automotive Engineers (SAE) World Congress, Detroit, Michigan, 2012
- 55th Annual Stapp Car Crash Conference, Dearborn, Michigan, 2011
- Society of Automotive Engineers (SAE) World Congress in Detroit, Michigan, 2010
- Crash Data Retrieval (CDR, "Black Box" Interrogation) Certification Course, Toronto, 2010
- 53rd Annual Stapp Car Crash Conference, Savannah, Georgia, 2009
- PC Crash 8.1 Training Seminar, Toronto, Ontario, 2009
- 52nd Annual Stapp Car Crash Conference, San Antonio, Texas, 2008
- Biomechanics of High Impact Injuries, National Transportation Safety Board, Ashburn, Virginia, 2007

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 Forensic Analysis of Medical Records in Injury Biomechanics & Accident Reconstruction, SAE Professional Development Program, Troy, Michigan, 2006

### **COURT QUALIFICATION HISTORY**

Qualified by Superior Court of Ontario as an expert in Injury Biomechanics & Collision Reconstruction

#### **EMPLOYMENT HISTORY**

#### Sinnott Consulting Services, Oahu, Hawaii

President, Jan 2015 to present Lead investigator on collision reconstruction, biomechanics, and personal injury cases

### Advantage Forensics Inc., Toronto

Consultant, July 2015 to present Senior investigator on collision reconstruction, biomechanics, and personal injury cases

## Impact Forensics, Toronto

Consultant, Sept 2015 to 2018 Senior investigator on biomechanics and personal injury cases

#### Explico Engineering, Auburn Hills, Michigan

Consultant, May 2015 to 2018 Senior investigator on collision reconstruction, biomechanics, and personal injury cases

#### Giffin Koerth Inc., Toronto

Practice Lead (Personal Injury Group), Associate, and Consultant, July 2006 to June 2015 Lead investigator on collision reconstruction, biomechanics, and personal injury cases

#### Michigan State University, East Lansing, Michigan

Research Assistant & Teaching Assistant, Sept 2003 to April 2006 Conducted orthopaedic biomechanics research, contributed to biomechanics studies

## **PROFESSIONAL SOCIETIES & ASSOCIATIONS**

Professional Engineers Ontario, P.Eng. Biomedical Engineering Society American Society of Biomechanics Society of Automotive Engineers

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#### **LECTURES & TEACHING ENGAGEMENTS**

- Invited Speaker, "Biomechanics and Personal Injury," Hawaii Joint Police Association Meeting, June 2015
- Invited Speaker, "Biomechanics and Insurance Claims: When, Why and How are People Injured", Ontario Insurance Adjusters Association Claims Conference, Toronto, ON, February 2014
- Invited Speaker, "Biomechanics in Non-MVA Claims: Legal and Scientific Viewpoints", Kitchener Waterloo
  Ontario Adjusters Association Dinner Meeting, Kitchener, ON, January, 2014
- Co-organizer & Speaker, "Advanced Investigations of Slip, Trips & Falls and Personal Injury Claims", Insurance Institute and various insurance seminars throughout Ontario at Aviva, Intact, Economical, Co-Operators, and others, 2012 through 2014
- Invited Participant, "Civil Litigation Skills Certificate Program: Working with Experts", The Advocates' Society, Toronto, 2011
- Invited Participant, "Civil Litigation Skills Certificate Program: Working with Experts", The Advocates' Society, Toronto. 2010
- Co-organizer and Speaker, "Whiplash: Myths and Misunderstandings", Ontario Bar Association, Toronto, 2010
- Invited Lecturer, University of Waterloo Kinesiology Department, 2nd Year Undergraduate Course in Advanced Biomechanics, July 2009
- Invited Lecturer, University of Waterloo Kinesiology Department, 2nd Year Undergraduate Course in Advanced Biomechanics, March 2009
- Workshop Speaker, "Utilizing Accident Reconstruction and Investigative Engineering Techniques to Litigate Personal Injury Claims", The Canadian Institute, Toronto, February 2007

### **JOURNAL PAPERS & PUBLICATIONS**

- Sinnott, M, "A Biomechanist's Role", Claims Canada (2010)
- Parkinson RJ, Sinnott MT, "The Role of the Injury Biomechanist", Canadian Insurance Adjustors Association National Claims Manual (2009)
- Ting D, Cabassu JB, Guillou RP, Ting D, Sinnott MT, Meyer EG, Haut RC, Déjardin LM, "In Vitro Evaluation of the Effect of Fracture Configuration on the Mechanical Properties of Standard & Novel Interlocking Nail Systems in Bending", Vet Surgery, 38: 881-87 (2009)
- Déjardin LM, Guillou RP, Ting D, Sinnott MT, Meyer EG, Haut RC, "Effect of bending direction on the mechanical behaviour of interlocking nail systems", Vet Comp Orthopaedic Traumatology, 4: 264-9 (2009)
- Young, JY, Sinnott, MT, "Determination of Snowmobile Deceleration Rates for Ejected Occupant Scenarios",
   Proceedings of the 19th Canadian Multidisciplinary Road Safety Conference (2009)
- Guillou RP, Frank JD, Sinnott MT, Meyer EG, Haut RC, Déjardin LM, "Mechanical Evaluation of Medial Plating for Pantarsal Arthrodesis", American Journal of Veterinary Research, 69, 11: 1406-1412 (2008)
- Guillou RP, Frank JD, Sinnott MT, Meyer EG, Haut RC, Déjardin LM, "In Vitro Mechanical Evaluation of Medial Plating for Pantarsal Arthrodesis in Dogs" Journal of American Veterinary Medical Association. 233, 9: 1419, abstract (2008)
- Lansdowne JL, Sinnott MT, Ting D, Haut RC, Déjardin LM, "In Vitro Mechanical Comparison of Screwed, Bolted & Novel Interlocking Nail Systems to Buttress Plate Fixation in Torsion & Mediolateral Bending", Veterinary Surgery, 36, 4: 368-77 (2007)
- Goett SD, Sinnott MT, Ting D, et al., "Mechanical Comparison of an Interlocking Nail Locked with Conventional Bolts to Extended Bolts Connected with a Type-IA External Skeletal Fixator in a Tibial Fracture Model", Veterinary Surgery, 36: 279-86 (2007)

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- Déjardin LM, Sinnott MT, Lansdowne JL, Sidebotham, CG, Haut RC, "Mechanical Evaluation of a Novel terlocking Nail Design In Vitro", Trans. Annual Orthopaedic Design & Technology Meeting (2006)
- Lansdowne JL, Sinnott MT, Ting D, Haut RC, Déjardin LM, "Design & In Vitro Evaluation of the Structural Properties of a Novel & Current Interlocking Nail Systems" Annual American College of Veterinary Science Meeting (2006)
- DéJardin LM, Lansdowne JL, Sinnott MT, Sidebotham C, Haut RC, "In Vitro Mechanical Evaluation of Torsional Loading in Simulated Canine Tibiae for a Novel Hourglass-Shaped Interlocking Nail with a Self-Tapping Tapered Locking Design", American Journal of Veterinary Research, 67, 4:678-685 (2006)
- LaMar L, Deroy AR, Sinnot MT, Haut R, Squire M, Wertheimer S, "Mechanical Comparison of the Youngswick, Sagittal V & Modified Weil Osteotomies for Hallux Rigidus in a Sawbone Model,", Journal of Foot & Ankle Surgery, 45,2:70-75 (2006)
- DéJardin LM, Lansdowne JL, Sinnott MT, Haut RC, "In Vitro Evaluation of a Novel Interlocking Nail Design in Torsion", Annual Orthopaedic Research Society Meeting (2006)
- Curcio K, Sinnott MT, Haut RC, DéJardin LM, "A Biomechanical Comparison of the LC-DCP & Hybrid Constructs for Pancarpal Arthrodesis in Dogs", Annual American College of Veterinary Science Meeting (2005)
- Meyer EG, Sinnott MT, Jayaraman G, Haut RC, "The Effect of an Axial Load in the Tibia on the Response of a 90° Flexed Human Knee to Blunt Impacts with a Stiff, Deformable Interface", STAPP Car Crash Journal, 48:53-70 (2004)

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