

Profile – Dr. Maria Giannotti, DC, MSc(c)



Dr. Maria Giannotti, DC, MSc(c)
York University

Dr. Maria Giannotti attained her Bachelor of Science degree from the University of Tennessee in 2002, where she played soccer on an NCAA division I athletic scholarship. As an elite athlete, Maria was exposed to the benefits of chiropractic treatment for various injuries and improved performance.

Maria was accepted to the undergraduate program at CMCC and had the intention of pursuing graduate study in sports chiropractic sciences. Upon graduating from CMCC in 2006, Maria was accepted to the College of Chiropractic Sports Sciences (Canada), residency program. As part of the residency program, Maria had much clinical experience working with youth soccer players which helped shape her current research objectives in epidemiology.

Concurrently, Maria started her Masters of Science degree at York University in the Faculty of Health, School of Kinesiology and Health Science, under the supervision of epidemiologist, Dr. H. Tamim. As a Masters student, Maria has first authored three studies: i) Acute injuries in youth soccer; ii) Epidemiology of acute injuries in Canadian youth soccer players; and iii) Epidemiology of acute head injuries in youth soccer. Maria has presented this work at several national and international peer reviewed conferences, including the World Congress on Sports Injury Prevention in Tromso, Norway. Likewise, Maria has submitted this work for publication which is currently under review. In her research experience, Maria has had the opportunity to collaborate with other disciplines including emergency physicians, nurses and policy analysts. As a part of the MSc program, Maria has completed a university teaching practicum that has prepared her with the pedagogical skills to teach in higher education. As such, Maria has taught undergraduate students in both human anatomy and biostatistics at York University.

Dr. Giannotti looks forward to future study in the area of clinical and sports injury epidemiology, working towards bridging the gap between the science and practice of chiropractic.

Profile – Dr. André Bussièrès, DC, PhD(student)



Dr. André Bussièrès, DC, PhD(student)
University of Ottawa

Dr. André Bussièrès graduated from CMCC in 1991 after completing a BSc in Nursing at Montreal University. He completed a fellowship in Clinical Sciences and was in full time practice before becoming full time professor at

UQTR in 2002. He was program director of the chiropractic department after 2005, and just completed his MSc in Kinesiology.

Dr. Bussièrès is undertaking a PhD in the Population Health program at Ottawa University under Dr. Jeremy Grimshaw, MBChB, PhD, FRCGP. Dr. Grimshaw holds a Tier 1 Canada Research Chair in Health Knowledge Transfer and Uptake and is a Full Professor in the Department of Medicine, University of Ottawa. He is the Coordinating Editor of the Cochrane Effective Practice and Organisation of Care group, and has considerable experience in the design, conduct and analysis of rigorous evaluations of dissemination and implementation strategies. He is also the Director of the Canadian Cochrane Network and Center.

Dr. Bussièrès will be on a two year leave of absence from UQTR. His research project will involve finding effective ways of bringing some of the recent Neck Pain Task Force (NPTF) findings to practitioners and professional organisations. This will first require gaining a clear understanding of potential barriers to adopting the proposed recommendations of the NPTF using a multilevel qualitative study. The second part of the study will involve applying psychological theories to evidence-based clinical practice in order to identify factors predictive of clinician and professional leaders' behaviour. These initial efforts will lead to development of a theory-based intervention to promote knowledge uptake for patients with neck pain disorders. A randomised controlled trial with pre- and post-intervention data collection by postal questionnaire is planned before conducting a large scale RCT.

Profile – Dr. Steven Passmore, DC, PhD(c)



Dr. Steven Passmore, DC, PhD(c)
McMaster University

Dr. Steven Passmore graduated from New York Chiropractic College (NYCC) in March of 2006 and is currently a Fellow of NYCC. Through his Fellowship, he serves in both a clinical and educational capacity supervising NYCC students within the Buffalo Veterans Affairs Medical Center (VAMC). The VAMC is a hospital that provides medical, surgical, mental health and long-term care services through a full range of inpatient and outpatient programs including a chiropractic clinic. The chiropractic clinic was designed and implemented by Dr. Andrew

Dunn in 2004, who Passmore first trained with as a student in the Fall of 2005. The Fellowship program at NYCC facilitates the training of clinician educators and researchers by allowing them to have clinical or teaching responsibilities while also pursuing an advanced academic degree at an outside university.

Under the supervision of Dr. Timothy Lee, Passmore is currently a PhD candidate in the Kinesiology program at *McMaster University* for which, due to his commitment to chiropractic research, the Foundation for Chiropractic Education and Research (FCER) has awarded him a Fellowship annually. The FCER funds on average 6 Fellows per year worldwide. Dr. Passmore was also recently awarded an Ontario Graduate Scholarship (\$15,000) by the provincial government's Ministry of Training, Colleges and Universities.

Originally from Dunnville, Ontario, Passmore earned an Honours Bachelor of Kinesiology at McMaster University in 2001. He chose the Kinesiology program because it offered a diverse curriculum that he felt would prepare him well for his future chiropractic education. During his final year there, he conducted an undergraduate thesis project on interpersonal movement coordination and presented his work at the North American Society for the Psychology of Sport and Physical Activity (NASPSPA) annual meeting. Passmore was then awarded a full graduate assistantship to attend the University of Nevada, Las Vegas, where he completed his M.S. in Kinesiology in 2002. Immediately following the completion of his M.S., Passmore enrolled at NYCC to obtain his chiropractic training. His area of specialization for both his M.S. and Ph.D. degrees is human motor control and learning.

In place of elective coursework the NYCC curriculum allowed Passmore to earn credit through the design, implementation and execution of experimentally driven research, under the supervision of Dr. Jeanmarie Burke. For

these efforts, Passmore received the Clarence N. Flick Memorial Research Award at his NYCC Commencement. The results of this line of work have been presented at basic science conferences across North America, and published in *Adapted Physical Activity Quarterly*.

In Ontario Dr. Passmore has been in part time practice at the Hamilton Back Clinic and completed the McMaster University Contemporary Medical Acupuncture program. In 2007, Dr. Passmore was the lead instructor of an undergraduate course at Wilfred Laurier University in Motor Control and Learning. Dr. Passmore, has guest lectured to undergraduate courses and graduate seminars at five different universities including University at Buffalo, Brock, Wilfred Laurier, McMaster, and the University of Nevada, Las Vegas.

Dr. Passmore has been fortunate to have a diverse array of research experience and has published, submitted, or is currently involved in preparing articles across the spectrum of levels of publication including case study, epidemiological, and experimentally driven basic science. Currently he serves as an investigator on a United States; Department of Veterans Affairs funded Merit Review study which is a randomized controlled trial examining spinal manipulation and low back pain in an aging population under principal investigator Dr. Paul Dougherty. Passmore refined and implemented a performance-based outcome measure that he specifically designed for this study.

The epidemiology research with Dr. Andrew Dunn has focused on the integration of chiropractic into the Veterans Health Administration. The studies describe the chiropractic clinic, which is a referral based specialty that serves a largely middle aged male population. The research delves into co morbidity characteristics specific to a military veteran population such as injuries related to time in service, and post traumatic stress disorder (PTSD).

Although trained as a basic scientist, Dr. Passmore draws inspiration from case reports which allow the clinician to highlight unique populations that represent a potential patient base for SMT. Passmore hopes this line of work will lead to prospective experimental, and control-

led studies that identify populations and establish algorithms of care for patients traditionally otherwise left unmanaged but may respond to SMT.

The direction of Dr. Passmore's current experimental line of research is focused on development of methods to quantify the impact of clinical intervention. For example: How is an appropriate endpoint and subsequent discharge from clinical care determined? How can a clinician justify that a patient may have attained a plateau in improvement? Outcome measures seem to be the answer but many that are currently employed include questionnaires that are subjective in nature. Utilizing his background in motor control Dr. Passmore seeks to determine performance based outcome measures to be collected at baseline, re-evaluation, and then upon a later follow-up to objectively determine outcome and sustainability of intervention. In addition these motor control performance-based outcome measures may increase our understanding of the neurological mechanisms associated with SMT and disorders that respond to chiropractic management.

Dr. Passmore has published papers in such peer-reviewed journals as the *Journal of Sport Sciences*, *Adapted Physical Activity Quarterly*, *Military Medicine*, and the *Journal of Motor Behavior* and has served as a peer reviewer for the *Journal of the Canadian Chiropractic Association*.

In addition to his peer-reviewed work, Dr. Passmore enjoys examining the role of chiropractic in popular culture, and has authored multiple articles on the portrayal of chiropractic on television.

Dr. Passmore's long term vision for future of the field of chiropractic includes the development of university-based DC/PhD programs. Programs such as this would attract highly qualified students and break down the financial barriers which may limit individuals from attaining the integrated clinical and research training that can add to our understanding of the profession.

It is through high quality research that a mutual understanding, and respect among clinicians from different disciplines is formed and maintained as we work together in order to best serve the healthcare needs of the patient.

Profile – Dr. Diana De Carvalho, DC, PhD (student)



Dr. Diana De Carvalho, DC, PhD (student)
University of Waterloo

Dr. De Carvalho completed an Honours BSc in Human Kinetics at the University of Guelph before graduating from the Canadian Memorial Chiropractic College in 2002. Presently, she just completed the second year of the MSc program in Biomechanics at the University of Waterloo. She is studying under the supervision of Dr. Jack P. Callaghan who currently holds the Canada Research Chair in Spine Biomechanics and Injury Prevention and is a Project leader in the AUT021 Network of Centres of Excellence. Dr. Jack P. Callaghan's research program focuses on establishing the relationship between cumulative loading and the resulting injuries to the lumbar spine.

Dr. De Carvalho's research goal is to examine low back pain injury mechanisms associated with sitting and the spine biomechanics in response to prolonged driving. Specifically, she is interested in gender differences in spine posture and passive tissue response to prolonged automobile sitting conditions. This past year her projects have been supported by AUT021. This fall she will be continuing her research investigating low back injury mechanisms as a PhD student at the University of Waterloo.

In addition to her studies, Dr. De Carvalho practices part time at the University of Guelph's Health and Performance Centre. She is an active participant in the student observation program which provides volunteer opportunities for fourth year Human Kinetics and Biomedical Science students.

Dr. De Carvalho has won the CIHR Doctoral Research Award for her study,

“Effectiveness of a lumbar support in maintaining the lumbar lordosis in sitting: A radiographic comparison of initial and long-term effects on lumbar spine and pelvic posture during simulated prolonged driving.”

The award of \$66,000 will fund her PhD studies at the University of Waterloo.