THE UNIVERSITY OF WESTERN ONTARIO

INTERDISCIPLINARY PAIN PROGRAM

ANNUAL REPORT

2010
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EXECUTIVE SUMMARY

Pain Program Annual Report 2010

This was a year of fruition for the U.W.O. Interdisciplinary Pain Program with publications arising from several major research projects. Our centre participated in the Canadian STOP-PAIN project which showed the severe impairment and economic burden of chronic pain patients on lengthy waitlists for entry into university-affiliated pain centres. The CIHR-funded New Emerging Team grant on cancer pain culminated in a series of publications including a formal feasibility study of sublingual methadone for breakthrough cancer pain—a promising treatment for a challenging pain problem. A series of articles on whiplash-associated disorders by our rehab colleagues speaks to the interdisciplinary nature of our pain program.

We are excited about the prospects for 2011. Building on our successes of the last two years, we have peer-reviewed funding for an investigation of functional MRI in fibromyalgia and a randomized, controlled trial of methadone in the management of neuropathic pain. Our multi-centre cohort study of the longterm outcome of management of neuropathic pain is entering its final year and we eagerly await data analysis.

Apart from research initiatives, the other major mandate of the U.W.O. Pain Program is in pain education. The undergrad Pain Medicine course at the Schulich School of Medicine continues to thrive and we continue to provide Neuropathic Pain and Fibromyalgia Workshops as CME activities. However, the most striking pain education development of 2010 was the acceptance of Pain Medicine as a subspecialty discipline by the Royal College of Physicians & Surgeons. This initiative was spearheaded by Dr. Pat Morley-Forster from the Department of Anesthesia & Perioperative Medicine and has now entered Phase II with the creation of a curriculum and specifications of entry paths. This will undoubtedly be a major advance in pain education in Canada.

Dwight Moulin, M.D., FRCP(C), Earl Russell Chair, U.W.O. Pain Program

Face Page

Clinic Nurse, Cathy Lowery, and Pain Fellow, Dr. Darryl Bin, perform a nerve block under ultrasound guidance.
- SCIENTIFIC ADVISORY BOARD MEMBERS -

**Dr. Geoff Bellingham** completed residency in anesthesia and perioperative medicine at the University of Western Ontario. This was followed by a fellowship Bellingham’s focus during the fellowship was on the use of ultrasound guidance for interventional pain management in addition to other established interventional pain management techniques using fluoroscopy. Currently, he holds pain clinics in which patients are managed using pharmacotherapy in addition to using other resources available such as psychotherapy and physiotherapy. Interventions using ultrasound are integrated into these clinics and separate interventional days using fluoroscopy are held within the St. Joseph’s Imaging Department.

**Heather Getty** earned her Ph.D. in Adult Clinical Psychology at the University of Windsor. Her training including her Predoctoral Residency at the London Health Sciences Centre has involved work in both traditional mental health treatment settings and in clinical health psychology programs for the treatment of chronic sleep and pain disorders. She was Postdoctoral Fellow in the Pain/Anxiety program at St. Joseph’s Health Care 2002-2005 where she researched psychosocial predictors of disability among individuals with chronic pain. She conducts treatment, research and education at the St. Joseph’s Health Care Pain Management Program.

**Gloria Gilbert** attained a Bachelor of Science degree in Physiotherapy from McGill University and a Masters of Science degree from the University of Western Ontario.

She is secretary and newsletter editor of the Canadian Academy of Pain Management (CAPM) ([www.canadianapm.com](http://www.canadianapm.com)) and is credentialed as a Fellow of both the AAPM and CAPM. Gloria has owned and operated The Downtown Clinic, Physiotherapy & Health Counselling in London since 1982.

Gloria’s professional area of interest is in the treatment and management of the patient with chronic (persistent) pain as well as in the multi-disciplinary management of patients with complex injuries. She is a Progressive Goal Attainment Program (PGAP) provider ([www.PDP_PGAP.com](http://www.PDP_PGAP.com)). She currently runs a full time clinical practice and works closely with long term disability carriers and the legal profession to provide a comprehensive and realistic long term rehabilitation plan for the persistent pain patient.

She remains a mentor to her physiotherapy colleagues providing workshops on several titles including ‘Integrating Pain Management Principles into Your Physiotherapy Practice.’ Gloria and her research staff are also investigating the
possible relationship between chronic post-traumatic neck pain and mild traumatic brain injury (mTBI) symptoms.

**Dr. Patricia Morley-Forster** is an Associate Professor of Anesthesiology at the University of Western Ontario, was appointed as the inaugural Earl Russell Chair of Pain Research and Medical Director of the Comprehensive Pain Clinic at St. Joseph’s Health Care, London, in February 2002. Past research in the area of pain has been on the use of non-steroidal anti-inflammatory medication for postoperative pain relief. From 1990-2000, she was the Director of Obstetric Anesthesia at the University of Western Ontario before undertaking fellowship training in cancer pain management and chronic pain at the Wasser Clinic in Toronto. She is keenly interested in education in Pain Management and, in 2006, was given the Departmental Award for Best Clinical Teacher for Fellows. Current research and clinical interests are neuropathic pain, acute pain management in chronic pain patients and the effects of opioids on the endocrine system.

**Dr. Dwight Moulin** is a Professor in the Departments of Clinical Neurological Sciences and Oncology and the Earl Russell Chair of the Pain Program at the University of Western Ontario. He is also the Medical Director of Pain and Symptom Management at the London Regional Cancer Program in London, Ontario. His research interests include randomized controlled trials to determine the role of opioid analgesics in the management of chronic pain and observational studies to assess the impact of chronic pain in a variety of chronic neurological disorders. Current research projects include the role of intravenous lidocaine in the treatment of chronic pain and longterm outcome of the management of neuropathic pain. Dr. Moulin was the lead author of national consensus guidelines for the management of neuropathic pain in Canada.

**Dr. Warren Nielson** is an Adjunct Professor of Psychology at the University of Western Ontario. He is also the Clinical Director of the Rheumatology Day Programs at St. Joseph’s Health Care, London. His research interests are in psychological factors associated with chronic pain, particularly in relation to Rheumatoid Arthritis, Osteoarthritis and Fibromyalgia Syndrome. He is also a member of the Canadian Scleroderma Research Group and on the Editorial Board of the Journal of Pain. Current studies focus on factors that influence outcomes of multidisciplinary treatment programs and motivational factors in pain self-management. Dr. Nielson is a Fellow of the Canadian Psychological Association.
Dr. Frank Prato is a Professor in the Departments of Radiology and Nuclear Medicine and Medical Biophysics. His research interests are primarily in the area of imaging of brain function, both magnetic resonance imaging and nuclear medicine and how it is disturbed in cortical and vascular disease processes. He has also studied the mechanisms by which magnetic fields alter expression of opioid-induced analgesia. Animal and human studies have shown that combinations of magnetic fields can elicit analgesia equivalent to a modest dose of morphine. He plans to develop methods of imaging guided therapy for magnetic field treatment of pain.

Dr. Alex Thomas is the Bioelectromagnetics Scientist and CIHR Industry Chair in Bioelectromagnetics at the Lawson Research Institute, St. Joseph’s Health Care (London) and an Associate Professor in the Departments of Medical Biophysics and Diagnostic Imaging, Schulich School of Medicine and Dentistry (UWO) and President of Planetary Village (www.planetaryvillage.org). Dr. Thomas is a multidisciplinary researcher and professor with degrees in Medical Biophysics, Neuroscience, Psychology, Geotechniques and Geology. He has had an extensive career in industry and academia and has formed spin-off corporations and invented and patented methods, devices and technologies. Dr. Thomas’ interests are clearly in the development of new technologies related to diagnosis and therapy including pain and the discovery of new treatment and functional imaging modalities and understanding pain and placebo mechanisms. His group has recently pioneered the development of multi-modality hybrid imaging with simultaneous fMRI/EEG/EMG acquisition during the imaging of acute thermal pain during pulsed magnetic field pain treatment.
- MISSION -

To provide exemplary clinical care in prevention and treatment of debilitating pain states
To continually improve pain management through research and education

- VISION -

The Interdisciplinary Pain Program at the University of Western Ontario identifies the study of pain as a priority that bridges academic disciplines. Integrating the fields of acute and chronic pain will encourage the development of new paradigms for prevention and treatment of chronic pain. Individuals with persistent chronic pain will be provided with timely access to an academic, research-focused facility with linkages to the community to promote continuity of care.

- VALUES -

We understand that each individual’s experience of pain is unique, affecting their work, their life and relationships in a complex manner.

We believe in a broad interdisciplinary perspective on the understanding and treatment of pain.

We value evidence-based practice.

We support the ongoing search for and dissemination of knowledge in pain management.
- AWARDS -

Manfred Harth

Distinguished Rheumatologist Award of the Canadian Rheumatology Association, 2009

Dwight Moulin

Excellence in Undergraduate Medical Education, Medical Oncology, University of Western Ontario, 2009 – 2010

Michael Sanatani

Laurentian University 50th Anniversary Distinguished Alumnus, 1993 graduation year, 2010

Keith Sequeira

University Students’ Council Teaching Honour Roll Award of Teaching Excellence, Faculty of Medicine, University of Western Ontario, 2009 – 2010

- RESEARCH FUNDING -

**Shalini Dhir**

“Success rate of infraclavicular blocks,” Physicians Services Incorporated (PSI) Foundation, $60,000, 2009-2010 (principle investigator)

“Success rate of infravicular blocks,” AMOSO grant, $32,000, 2009-2010 (principle investigator)

**Patricia Morley-Forster**


Constantinescu C, Imasogie N, Morley-Forster PK. Combination ultra low dose naloxone infusion and oral Tramacet for postoperative pain management in elderly patients undergoing joint replacement surgery: A prospective randomized, controlled trial. Earl Russell Pain Program Trainee Award, $10,000 (2009-2012 (co-investigator)


**Dwight Moulin**

Prato FS, Thomas AW, Moulin DE et al. Canadian Institutes of Health Research – Operating Grant, “Mechanisms by which low frequency magnetic fields interact with biological systems,” April 1, 2006 – April 1, 2011, $930,175 (co-applicant at Western).


Moulin DE. Canadian Institutes of Health Research – Patient-Oriented Research Program. “Methadone for Neuropathic Pain – Double-Blind, Randomized, Controlled Trial,” April 2010 – April 2013, $100,000 (co-applicant at Western)
**Frank Prato**
Prato FS (project leader), Koropatnick J (project co-leader), Thomas AW et al. Biomedical multimodality hybrid imaging, Canadian Foundation for Innovation (CFI) Leading Edge Fund and Ontario Research Fund (ORF), Project No. 11358, $30,000,000, 2007-2012

Legros A (PI), Thomas AW, Prato FS. Effects of a power line frequency magnetic field on human cognitive performances and brain activation which may be related to worker safety and performance and other health related concerns. Canadian Institutes of Health Research – Operating Grant: Industry Partnered, $117,006, 2008 – 2011

Prato FS (PI), Thomas AW, Moulin DE. Mechanisms by which low frequency magnetic fields interact with biological systems. Canadian Institutes of Health Research – Operating Grant, $930,175, 2006 – 2011

Stodilka RZ (PI), Prato FS, Thomas AW. Localizing brain activities with EEG and MRI. National Defence (Canada), $149,604, 2009 – 2011

**Keith Sequeira**


**Robert Teasell**

**Alex Thomas**

Canadian Institutes of Health Research Industry Partnered Chair in Bioelectromagnetics, $420,000, 2008 - 2011

- PUBLICATIONS -

**Peer-Reviewed Articles**


**Bellingham GA, Peng PW.** A low-cost ultrasound phantom of the


Dhir S. Infracervicular brachial plexus blocks. Continuing Education in Anesthesia, Critical Care and Pain 10(1): 29, 2010


McKay JC, Corbacio M, Tyml K, Prato FS, Thomas AW. Extremely low frequency pulsed electromagnetic field designed for antinociception does not affect microvascular responsiveness to the vasodilator acetylcholine. Bioelectromagnetics 31(1): 64-76, 2010

Owen DG, Clarke CF, Ganapathy S, Prato FS, St. Lawrence KS. Using perfusion MRI to measure the dynamic changes in neural activation associated with tonic muscular pain. Pain 148(3): 375-386, 2010 (Epub 2009 November 14)


- PUBLICATIONS -

Non-Peer Reviewed

Merskey H. Try to remember: Psychiatry’s clash over meaning, memory and mind. Paul McHugh.

Peng PW, Bellingham GA. Antidepressants and Anticonvulsants. In “Pain Medicine: A Multidisciplinary Approach,” (Tsui SL, Chen PP, Ng KFJ, Eds), Hong Kong University Press, Hong Kong, 2010

Abstracts

Dhir S, Francispragasam M, Bouzari A, Tureanu L, Ganapathy S. Local anesthetic dilution for peripheral nerve blocks: Comparative evaluation of saline with 5% dextrose. Reg Anesth Pain Med 87, 2010


Angle P et al. (PDPH collaborative: co-author Dhir S). How useful are clinical criteria for the PDPH diagnosis after epidurals? Abstract 801665, Canadian Anesthesia Society Annual Meeting, June 2010


Angle P, Kronberg J, Douglas J, George R, McKeen D, Preston R, Halpern S, Gawel M, Morley-Forster PK et al. (The Canadian...


Fields, Bodrum, Turkey, October 10-14, 2010


Legros A, Miller J, Modolo J, Corbacio M, Robertson J, Goulet D, Lambrozo J, Plante M, Souques M, Prato FS, Thomas AW. Functional brain activation during finger tapping is modulated after a 60 Hz, 3000 µT magnetic field exposure. EMF Bordeaux Event (EBEA/URSI/COST), Bordeaux, France, May 2010

Modolo J, Prato FS, Thomas AW, Legros AG. Does a 10-minute, 1800 µT, 60 Hz magnetic field exposure modulate collective oscillations of a cortical network model? EMF Bordeaux Event (EBEA/URSI/COST), Bordeaux, France, May 2010


Modolo J, Legros A, Prato FS, Thomas AW. Effect of a 1000 µT, 60 Hz magnetic field on spike timing in cortical neurons: A modeling study. 32nd Annual Meeting of Bioelectromagnetics Society, Seoul, South Korea, June 14 – 18, 2010

Legros A, Miller JE, Modolo J, Corbacio M, Robertson A, Goulet D, Lambrozo J, Plante M, Souques M, Prato FS, Thomas AW. Is finger tapping induced brain activation modulated by an exposure to a 60 Hz, 3000 µT magnetic field? 32nd Annual Meeting of Bioelectromagnetics Society, Seoul, South Korea, June 14 – 18, 2010

Robertson JA, Theberge J, Miller J, Weller J, Drost DJ, Prato FS, Thomas AW. Magnetic field exposure can alter neuroprocessing in humans. 32nd Annual Meeting of Bioelectromagnetics Society, Seoul, South Korea, June 14 – 18, 2010

Research Day 2010, London ON, March 2010


Macaluso S, Modolo J, Miller J, Thomas AW, Legros A, Miller T, Ross DC. Neurorehabilitation challenges following tibial to peroneal nerve transfer. AANEM, Quebec City, PQ, October 11 – 14, 2010 (accepted for poster presentation)

-NATIONAL AND INTERNATIONAL PRESENTATIONS AND WORKSHOPS-


Bellingham GA. Workshop Demonstrator, Ultrasound for Pain Medicine Workshop – Ultrasound for Chronic Pain, January 29, 2010

Bellingham GA. Interventional approaches to chronic spinal pain. Physical Medicine and Rehabilitation Resident Lecture. Schulich School of Medicine & Dentistry, London, ON, March 29, 2010

Bellingham GA. Ultrasound and musculoskeletal pain syndromes of the upper limb. HULC Rehab Rounds, March 29, 2010

Getty H. Relationships between activity packing and adjustment among individuals with persisting pain. Poster at Annual Meeting of Canadian Pain Society, Calgary AB, May 2010

Bellingham GA. Chronic pain blocks—Stellate ganglion and suprascapular nerve blocks. Regional Anesthesia Rounds, Department of Anesthesia & Perioperative Medicine. Schulich School of Medicine & Dentistry, London, ON, June 2010
**Bellingham GA.** Workshop Demonstrator, Canadian Anesthesiology Society – Ultrasound for Chronic Pain, June 26, 2010

**Bellingham GA.** Workshop Demonstrator, International Association for the Study of Pain – Ultrasound for Chronic Pain, August 27, 2010

**Bellingham GA.** Workshop Demonstrator, Ultrasound for Pain Medicine Workshop – Ultrasound for Chronic Pain, November 20, 2010

**Getty H.** Non-pharmacological approaches to the treatment of fibromyalgia. Workshop on Fibromyalgia, Interdisciplinary Pain Management Program, St. Joseph’s Health Care, London ON, December 4, 2010

**Imasogie N.** The effects of combined-use naloxone infusion and oral Tramacet on postoperative analgesia in elderly patients undergoing joint replacement surgery: A randomized, controlled study. Mechanisms of Anesthesia Conference, Toronto ON, 2010

**Merskey H.** Sixty years on pain: 1959-2010. London Medical Historical Society, London ON, April 22, 2010

**Merskey H.** Evaluating chronic pain. Canadian Society of Medical Evaluators, Toronto ON, June 23, 2010

**Merskey H.** A moot on chronic pain. 13th World Congress of the International Association for the Study of Pain, Montreal PQ, August 30, 2010

**Morley-Forster PK.** Pharmacologic management: Opioid and non-opioid prescribing. Family Practice Resident Half-Day Seminar in Chronic Pain. January 2010

**Morley-Forster PK.** Treatment of chronic pain problems in the emergency department. Meds IV Annual Lecture, Pain and Its Management, April 2010

**Morley-Forster PK.** Pain and its interface with the biopsychosocial realm. 7th Annual Medicine Update for Psychiatry Medicine Update for Psychiatry, April 2010


**Morley-Forster PK.** To produce a consensus statement on the optimal methods of interprofessional assessment. Workshop Chair. Moving the Pain Education Agenda Forward: Innovative Models, Toronto ON, August 2010

**Morley-Forster PK.** Methadone for chronic pain. Fourth Annual Interventional Pain Management Conference, McMaster University
Health Sciences, Hamilton ON, September 2010


Moulin DE. Antidepressants and anticonvulsants in pain management. Canadian Pain Society Refresher Course, Montreal PQ, February 20, 2010

Moulin DE. Neurobiology of pain and pain perception. Medicine Update for Psychiatry, University of Western Ontario, London ON, April 10, 2010

Moulin DE. Opioid weaning. Drug Therapy Day – Dept. of Medicine, University of Western Ontario, London ON, April 14, 2010


Moulin DE. Managing the patient with chronic pain. American College of Physicians Annual Meeting, Toronto ON, April 24, 2010


Moulin DE. TCA and anticonvulsants for neuropathic pain—Levels of evidence. 4th Annual Interventional Pain Management Conference, McMaster University, Hamilton ON, September 25, 2010


Moulin DE. Voltage-gated channels in generation of pain: Targets for therapy. 7th Neuromuscular Conference, London ON, November 13, 2010


Nielsen WR. Can we identify those people unlikely to recover from acute whiplash injury? A report on the development and initial validation of a new clinical screening tool. 13th World Congress on Pain, Montreal PQ, August 2010
Nielson WR. Adherence to treatment: Practical skills for rheumatology health professionals. Professional Update Day for Health Professionals, St. Joseph’s Health Care, London ON, June 2010

Nielson WR. Psychology of RA in women. Women’s Issues in RA National Advisory Board Meeting, UCB Canada, Montreal PQ, October 2010

Nielson WR. What do we know about sleep?: Sleep in health and illness. Workshop Meeting of Canadian Scleroderma Society, Winnipeg MN, October 2010

Nielson WR. Pathophysiology of fibromyalgia syndrome. Workshop for Family Physicians, Kitchener-Waterloo ON, October 2010

Prato FS. Low amplitude electromagnetic stimulation of the central nervous system. International School of Bioelectromagnetics, E. Marjorana Foundation and Centre for Scientific Culture, Erice, Sicily, November 22 – 28, 2010

Prato FS, Thomas AW. What safety studies do we need in MRI? 6th International Workshop on Biological Effects of Electromagnetic Fields, Bodrum, Turkey, October 14, 2010

Prato FS. Mice can detect very low frequency magnetic fields: The threshold amplitudes of these nano Tesla are frequency dependent. 28th Progress in Electromagnetics Research Symposium (PIERS) 2010, Cambridge, USA, July 5 – 8, 2010

Prato FS. Extremely low frequency magnetic fields – Induced analgesia session. 32nd Bioelectromagnetics Annual Meeting, Seoul, South Korea, June 17, 2010

Prato FS, Thomas AW. Lund University and Lawson Health Research Institute. A 22-year history. Lund, Sweden, June 2, 2010

Prato FS. Effects of extremely low frequency magnetic fields measured during exposure: From mice to humans. Lund University, Lund, Sweden, June 1, 2010

Prato FS. Effects of extremely low frequency magnetic fields on nociception and pain in snails, mice and humans: Behaviour and mechanisms. Lund University, Lund, Sweden, June 1, 2010

Nittby H, Prato FS, Thomas AW. Simultaneous registrations of fMRI and EEG with the multi-source interference task (MSIT). Lund, Sweden, June 1, 2010

Prato FS, Thomas AW. What safety studies do we need in magnetic resonance imaging? Session on MRI Safety. EMF Bordeaux Event, France, May 28, 2010

finger tapping is modulated after a 60 z, 3000 µT magnetic field exposure. Electric and Magnetic Stimulation of CNS Session – EMF Bordeaux Event (EBEA/URSI/COST), Bordeaux, France, May 27, 2010

Rollman GB. Pain communicaton in the internet age. Interdisciplinary Pain Rounds, University of Western Ontario Interdisciplinary Pain Program, London ON, May 2010

Rollman GB & Rollman SA. Knowledge transfer regarding pain in the web 2.0 era: Communication among stakeholders. 13th World Congress on Pain, Montreal PQ, August 2010


Sanatani M. Assessment and control of cancer pain syndromes. Internal Medicine Noon Rounds, October 13, 2010

Sanatani M. Highlights from MASCC 2010 multinational association of supportive care in cancer - 2010 Meeting. Oncology Grand Rounds, September 28, 2010

Sequeira K. Spasticity management, injection techniques, review of literature in the stroke population. National Stroke Conference, Quebec City PQ, 2010


Conference, Niagara Fall ON, October 28-30, 2010


- UNDERGRADUATE EDUCATION PROGRAM -

The pain program continues to be very active in pain education at the undergraduate level. This includes a Year 4 selective on Pain and Its Management which was attended by approximately 100 students. This is a 12-hour multi-disciplinary course provided by neurologists, anesthesiologists, a psychiatrist, a psychologist, a palliative care specialist and a pharmacist. The evaluations for this Year 4 course have consistently been excellent. Small group one hour seminars on management of cancer pain are also provided to all the Clinical Clerks rotating through Oncology. Many medical students attend various pain clinics throughout the city.

- POSTGRADUATE / FELLOW EDUCATION PROGRAM -

Anesthesiology residents have a one-month mandatory rotation in the SJHC Interdisciplinary Pain Clinic. Neurology and physiatry residents also attend this clinic on a selective basis.

There is a pressing need to standardize pain assessment and management training at the Fellowship level and Dr. Pat Morley-Forster has spearheaded an application to the Royal College to recognize Pain Medicine as a subspecialty of Anesthesiology. This has been accepted by the Royal College as Phase I of this application. Phase II is now under way and requires the creation of a curriculum and specification of entry paths. The creation of Pain Medicine as a subspecialty discipline of the Royal College will be a major advance in pain education in Canada.

- CONTINUING MEDICAL EDUCATION PROGRAM -

We continue to provide half-day workshops on the assessment and management of neuropathic pain in the fall of each year. In 2010, we also provided a workshop on fibromyalgia. Each of these workshops were attended by approximately twenty community physicians from a variety of disciplines. The evaluations from these workshops were excellent.

Interdisciplinary Pain Rounds and Conferences continue to be very popular at U.W.O. A list of seminar topics and lectures follows on the next page.
### - INTERDISCIPLINARY PAIN ROUNDS AND CONFERENCES 2010 -

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>Jan 27</td>
<td>Epidural Steroids for Chronic Pain: An Evidence-Based Approach to Management.</td>
<td>Dr. Geoff Bellingham, Assistant Professor, Dept. Anesthesiology &amp; Perioperative Medicine, University of Western Ontario, London, Ontario</td>
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<td>Feb 24</td>
<td>Radiofrequency Interventions – A Tool of Increasing Value in Pain Management.</td>
<td>Dr. Ramin Safakish, Staff Anesthesiologist, Chatham-Kent Health Alliance, Chatham, Ontario</td>
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<td>Mar 24</td>
<td>Electrical Stimulation for Chronic Pain – From Cortex to Peripheral Nerve.</td>
<td>Dr. Andrew Parrent, Associate Professor, Division of Neurosurgery, Dept. of Clinical Neurological Sciences, University Hospital, London, Ontario</td>
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<td>Apr 28</td>
<td>Chronic Pain – A Contextual Approach.</td>
<td>Dr. Michael MacDonald, Assistant Professor, Dept. Psychiatry, University of Western Ontario, London, Ontario</td>
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<td>May 26</td>
<td>Pain Communication in the Internet Age.</td>
<td>Dr. Gary Rollman, Professor Emeritus, Dept. Psychology, University of Western Ontario, London, Ontario</td>
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<td>Sept 30</td>
<td>Canadian National Opioid Use Guidelines for Pain – Consensus and Controversies.</td>
<td>Dr. Roman Jovey, Medical Director CPM Centres for Pain Management, Physician Director ACDC Credit Valley Hospital, Mississauga, Ontario</td>
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<tr>
<td>Dec 1</td>
<td>Chronic Pelvic Pain – An Approach to Diagnosis and Treatment.</td>
<td>Dr. Patricia Morley-Forster, Associate Professor, Depts. Anesthesiology &amp; Perioperative Medicine, Director Interdisciplinary Pain Program, St. Joseph’s Health Care, London, Ontario</td>
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