



Canadian Consortium for the Investigation of Cannabinoids
Consortium Canadien pour l'Investigation des Cannabinoïdes

Annual Report | 2013

Cannabinoid research and education: Knowledge transfer in action

Message from the Executive Director

Dear colleagues,

2013 was another very interesting year for the CCIC! We saw the release of new regulations regarding the medical use of cannabis, the emergence of a new industry of licensed producers, increasing awareness of the endocannabinoid system in terms of functional imaging, mental health, gastrointestinal function and many other fascinating areas of discovery.

The CCIC is very proud of our support of research. We continue our support of graduate students from labs across Canada in their pursuit of research excellence in some very innovative and dynamic research projects. The CCIC Board of Directors agreed to increase the funding amount from \$10,000/y to \$15,000/year and we hope that with the right support this will continue to grow. The CCIC has also been involved in supporting regulatory submissions to Health Canada for clinical trials of cannabinoids.

Our educational programs continue to expand and improve. We have embarked on some interesting studies of educational needs of physicians and nurse practitioners; these results will inform educational program development and ensure that we meet the needs of the target audiences. Our collaboration with the International Cannabinoid Research Society (ICRS) continued with our CCIC-ICRS Clinical education day in Vancouver and we look forward to a similar approach when the ICRS comes to Halifax in 2015.

Our challenge in 2014 is to identify solid funding support for all our activities, and the emergence of a new industry of licensed producers offers interesting and important sponsorship opportunities. We remain dedicated to our academic independence and excellence, and we believe that in this new regulatory environment our balanced and independent approach serves all stakeholders while maintaining credibility.

I wish to close by thanking our executive team of Daniel Ziemianski and Linda Ferguson who keep the wheels of the CCIC turning, and to thank Marc Wayne for his four years of service as business consultant to the CCIC and we wish him luck in his new venture. I thank the Board of Directors for all their support and engagement, and the members who have served on the various subcommittees. I thank all of our sponsors for their invaluable help. Finally I thank you, the CCIC members, for your ongoing input and support, and we are always open to learning more about how to meet your needs and support you in your important work.

Respectfully,



Dr. Mark A. Ware
Executive Director, CCIC

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Funding Competition Sub-Committee

Matthew Hill
Linda Parker
Mark Ware

Mission statement

The purpose of the Canadian Consortium for the Investigation of Cannabinoids (CCIC) is to promote evidence-based research and education concerning the endocannabinoid system and therapeutic applications of endocannabinoid and cannabinoid agents.

Organization

The CCIC first came together in the spring of 2000 as a result of initial funding from the CIHR under the leadership of Dr. Mary Lynch. Since that time the CCIC has grown to include basic science and clinical researchers and other health care practitioners. The CCIC has been consulted for Senate committee reports and regulatory guidelines for medical marijuana, and CCIC members have conducted and published research on cannabinoids.

In June 2007 the CCIC became a federally incorporated non-profit organization to continue to further our understanding of cannabinoids. The need for educational initiatives has also become clear and the CCIC aims also to provide a credible source of information on cannabinoids for the public and health care practitioners.

Outreach

In 2013 the CCIC continued to engage the health care community through workshops, poster presentations, and presence at the following conferences:

- Primary Care Today, May 9-11, 2013, Toronto, ON, Canada
- 4th International Congress on Neuropathic Pain, International Association for the Study of Pain Special Interest Group Biannual Congress, May 23-26, 2013, Toronto, ON, Canada
- The 23rd Annual International Cannabinoid Research Society Symposium on the Cannabinoids, June 22-24, 2013, Vancouver, BC, Canada
- 7th Conference on Cannabis Medicines, International Association for Cannabinoid Medicines, September 27-28, 2013, Cologne, Germany

Educational Events

Accredited full-day Symposium

Cannabinoids in Clinical Practice: Exploring the Options with Evidence

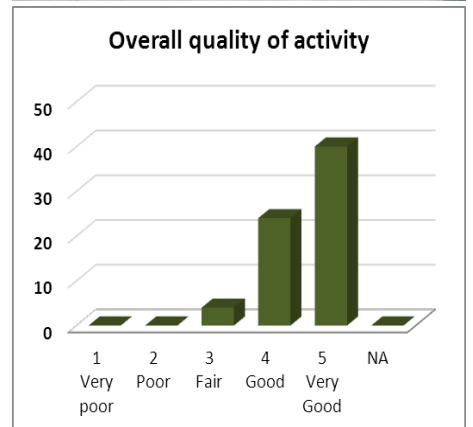
Clinical day at the International Cannabinoid Research Society 23rd Annual Symposium

University of British Columbia, Ross Beaty Theatre, Earth Sciences Building, June 21, 2013

This program presented practical evidence-based education on cannabis as medicine. 182 participants benefited from presentations by internationally renowned endocannabinoid, cannabinoids and cannabis researchers and clinical experts in a program that bridges basic and clinical science in a unique case-based format.

As a result of attending this event, participants learned to:

1. Identify clinically relevant components of herbal cannabis and the endocannabinoid system
2. Discuss research into the use of cannabinoids for the treatment of a range of conditions and symptoms
3. List risks associated with the use of cannabis as medicine
4. Discuss practical clinical and patient perspectives on the clinical use of cannabis



Accredited half-day Symposium

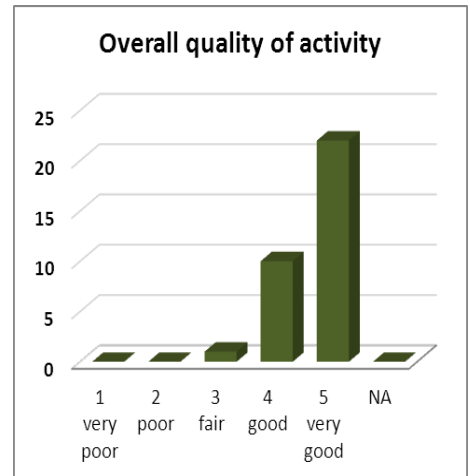
Cannabinoids in Medicine: A Primer for Health Care Professionals *February 22, 2013, Mayflower Renaissance Hotel, Washington DC*

This half-day accredited educational symposium presented an overview on cannabinoids, the types of cannabinoids currently available, and the endocannabinoid system followed by a clinically focused section on the pulmonary effects of smoked cannabis and on different conditions for which cannabinoids are therapeutically relevant. 63 participants benefited from a world renowned panel of speakers, including representation from the local department of health.

The objective was to present a balanced and expert overview on the clinical use of cannabinoids to an engaged audience of health care practitioners.

The symposium focused on the clinical and practical therapeutic potential of cannabinoids and the endocannabinoid system. At the end of the session, participants learned to:

1. Describe the components and functions of the endocannabinoid system
2. Understand the effects of cannabis smoking on the lung
3. Summarize the indications for existing cannabinoid therapeutic agents
4. Outline the issues in cannabinoid drug trials, including safety and efficacy issues
5. Explore and discuss attitudes towards cannabinoids in clinical use



Funding Competition

The fourth annual CCIC Funding Competition awarded \$15,000.00 divided among seven trainee members to support their cannabinoid research efforts. CCIC trainee members conducting basic science research on cannabinoids were eligible for this year's competition. We would like to thank all those who applied and acknowledge our 2013 recipients.

The Graduate Student Summer Research Support awards provided \$5,000.00 to encourage and support two graduate students during their summer term basic science cannabinoid research. The Trainee Conference Support awards provided \$1,000.00 to support five graduate students or post-doctoral researchers for their presentation of an abstract at a national or international conference.

Graduate Student Summer Research Support Award Recipients

Vecchiarelli, Haley

Masters Student with Dr. Matthew Hill, University of Calgary

Summer research on endocannabinoid regulation of stress induced inflammation

This work will provide understanding as to a possible mechanism by which disruption of the neuroendocrine-immune interface through pro-inflammatory hyperactivity at the level of the CNS may lead to pathogenesis of a variety of autoimmune or chronic disorders, which could provide avenues for therapeutic interventions.

Turcotte, Caroline

Masters Student with Dr. Nicholas Flamand, Université Laval

Summer Research on the regulation of leukocyte functions by endocannabinoids and their metabolites

Although cannabinoids and endocannabinoids have received more attention over the last decade, their profile of pro- and anti-inflammatory effects calls for additional research. The proposed work will certainly better define the mechanisms by which endocannabinoids modulate immune cells. In this regard, our long term objective is to develop novel therapies that will block the pro-inflammatory effects of endocannabinoids and enhance their anti-inflammatory effects to better treat pain and inflammation.

Funding Competition continued

Trainee Conference Support Award Recipients

LaPrairie, Robert Brad

PhD Student of Dr. Eileen Denovan-Wright, Dalhousie University to present at ICRS 2013

In huntington's disease, the endocannabinoid and cytokine systems are dysregulated in the striatum

Lee, Tiffany

PhD Student of Dr. Boris B. Gorzalka, University of British Columbia to present at the 2013 Gordon Conference : Cannabinoid Function in the CNS

Adolescent cannabinoid exposure alters adult stress responsivity and amphetamine sensitization in male and female rats

McLaughlin, Ryan J.

Post-Doctoral Fellow of Dr. Gabriella Gobbi, McGill University to present at ICRS 2013

In vivo characterization of the effect of cannabidiol on dorsal raphe 5-HT neuronal activity

Rock, Erin

Post-Doctoral Fellow of Dr. Linda Parker, University of Guelph to present at ICRS 2013

Cannabidiolic acid and tetrahydrocannabinolic acid reduce conditioned gaping (nausea-induced behaviour) in rats and vomiting in suncus murinus

Toguri, Thomas

PhD Student of Dr. Christian Lehmann, Dalhousie University to present at the 2013 European Workshop on Canabinoid Research

CB2 Receptor Activation is Anti-Inflammatory in an Endotoxin-Induced Uveitis Model

Research

The CCIC is actively engaged in research in continuing medical education. In parallel with the ongoing Accredited Cannabinoid Education (ACE) initiatives we are working to identify, quantify and understand the attitudes, experiences and educational needs of health care professionals surrounding the use of cannabis for therapeutic purposes.

Cannabis in Medicine: A National Needs Assessment for Canadian Physicians

This initiative was developed to increase our understanding of the current and desired status of Canadian physicians' educational needs on cannabis in medicine and in turn support evidence based educational programming to address identified knowledge and practice gaps, increasing competence and patient care. To do this we conducted a large scale, national needs assessment of Canadian physicians to identify knowledge gaps surrounding medical cannabis and to inform educational program development.

The following are the key objectives of this needs assessment:

1. Identify knowledge gaps concerning medical use of cannabis
2. Understand physicians' experiences with cannabinoids and cannabis in clinical practice
3. Understand physicians attitudes towards cannabinoids and cannabis in clinical practice
4. Identify perceived barriers to implementing acquired or confirmed knowledge of medical cannabis in clinical practice
5. Identify barriers to the use of cannabis as a possible treatment option in clinical practice
6. Identify learners' preferred means of education

This initiative was a collaboration between: Dr. Mark Ware, BA MBBS MRCP MSc: Principal Investigator. Associate Professor in Family Medicine and Anesthesia at McGill University and Executive Director of the CCIC; Daniel Ziemianski, BSc, Alan Edwards Pain Management Unit, McGill University Health Center Research Institute and Education Coordinator at the CCIC; Rielle Capler, MHA, Doctoral student, Interdisciplinary Studies Graduate Program, UBC. Anaïs Lacasse, PhD, Département des sciences de la santé, Université du Québec en Abitibi-Témiscamingue, Québec, Canada; Francesca Luconi, PhD, Assistant Dean, Continuing Health Professional Education, Faculty of Medicine, McGill University; Rory Tekanoff, MSc, Director, Community Programs, Urban Care Health Group (Ontario).

Cannabis in Medicine: A National Needs Assessment for Canadian Nurse Practitioners

The new regulations allow nurse practitioners (NPs) and physicians to authorize patients' legal access to cannabis for therapeutic purposes. The understanding of the current and desired status of Canadian NPs' educational needs on cannabis in medicine also remains to be quantified. This initiative addressed this and in turn aims to support evidence-based educational programming to address identified knowledge and practice gaps, increasing competence and patient care.

We conducted a large scale, national needs assessment of Canadian NPs to identify knowledge gaps surrounding medical cannabis and to inform educational program development.

The following were the proposed objectives of this initiative:

1. Describe NPs' knowledge gaps concerning medical uses of cannabis
2. Describe NPs' experiences with cannabinoids and cannabis in clinical practice
3. Describe NPs' attitudes towards cannabinoids and cannabis in clinical practice
4. Rank barriers to the use of cannabis as a possible treatment option in clinical practice
5. Rank NPs' preferred means of education about cannabis

This initiative was a collaboration between: Dr. Mark Ware, BA MBBS MRCP MSc: Principal Investigator. Associate Professor in Family Medicine and Anesthesia at McGill University and Executive Director of the Canadian Consortium for the Investigation of Cannabinoids (CCIC); Lynda G. Balneaves, RN, PhD, Associate Professor, UBC School of Nursing; Sylvie Toupin, R.N., B.Sc., Study Nurse, MUHC - Research Institute, Alan Edwards Pain Management Unit; Fairleth McCuaig, BSc., RN, MSN, NP(Family), ARNP(WA., USA), FNP-BC(USA), CPHI, Lecturer, UBC School of Nursing; Daniel Ziemianski, BSc. Research Assistant, Alan Edwards Pain Management Unit, McGill University Health Center Research Institute and Education Coordinator at the CCIC.

Checklist for the Medical Assessment of the Patient Asking about Medical Cannabis: Alpha Testing

The overall objective of this project is to empower health professionals with a practical tool to use when considering medical cannabis as a treatment option. The objectives of this protocol are to develop and pilot test this tool by:

1. Compiling a comprehensive list of items for consideration regarding medical cannabis use
2. Developing a tool to assist health professionals when considering medical cannabis use
3. Evaluating the construct validity and content validity of the tool

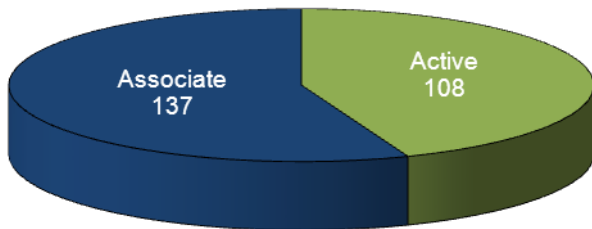
This checklist is intended to be a guide to the evaluation of a patient for medical cannabis by a health professional. It is not intended for use as a screening questionnaire. It is intended to provide a basis for a thorough assessment of the patient, their health status, risk factors, contraindications and expectations, to guide specific examination strategies, and to establish goals for medical cannabis use and monitoring.

This initiative was a collaboration between: Dr. Mark Ware, BA MBBS MRCP MSc: Principal Investigator. Associate Professor in Family Medicine and Anesthesia at McGill University and Executive Director of the CCIC; Daniel Ziemianski, BSc. Research Assistant, Alan Edwards Pain Management Unit, McGill University Health Center Research Institute and Education Coordinator at the CCIC.

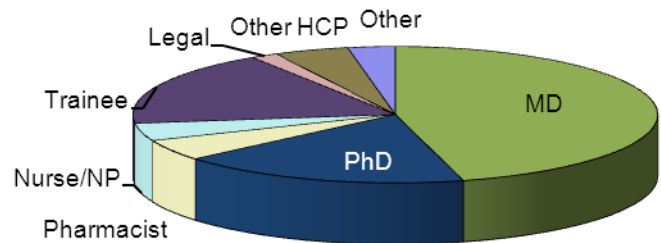
Membership

The CCIC welcomed 17 new Active and 27 new Associate members in 2013, bringing our total number of members to 247. Some characteristics of our members are shown below:

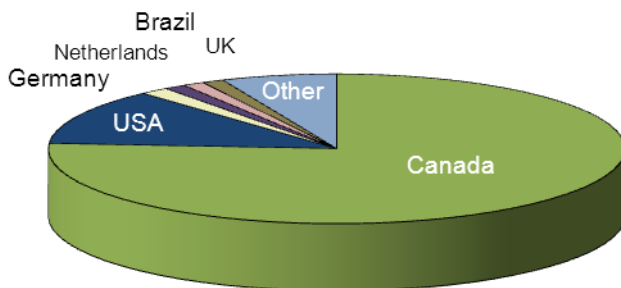
Consortium Membership



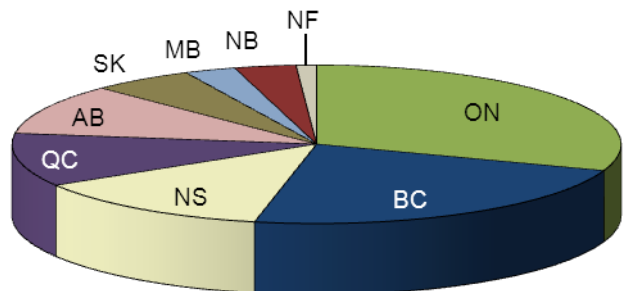
Member Professions



Member Countries

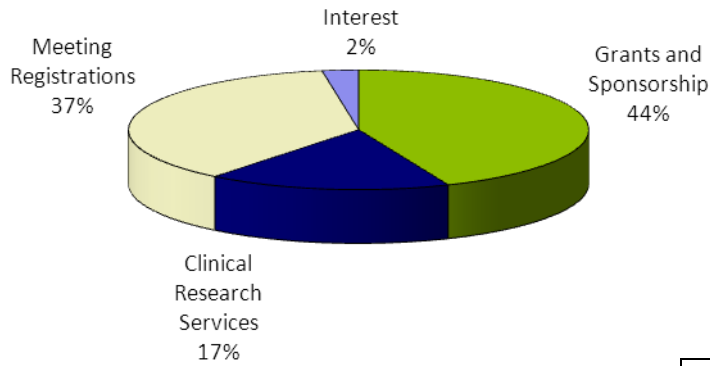


Canadian Member Provinces



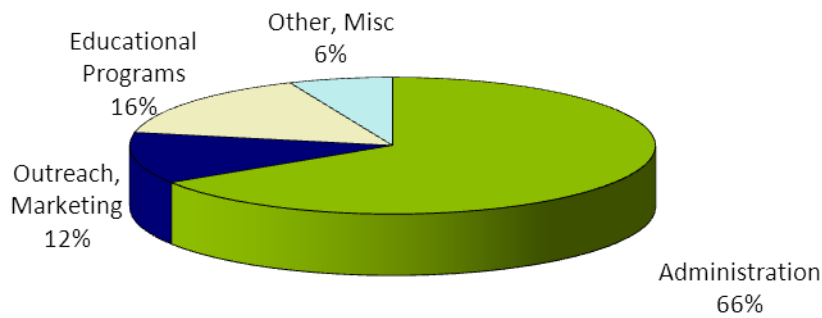
Financial Statements

2013 Revenue



Revenue		
Grants and Sponsorship	\$47,426.00	44%
Clinical Research Services	\$18,525.00	17%
Meeting Registrations	\$39,926.00	37%
Interest	\$2,767.00	3%
	\$108,644	

2013 Expenses



Expenditures		
Administration	\$172,773	66%
Outreach, Marketing	\$31,970	12%
Educational Programs	\$40,753	16%
Other, Misc	\$16,792	6%
	\$262,288	

CCIC Executive Team

Dr. Mark Ware
Executive Director

Marc Wayne
Director of Business Development

Linda Ferguson
Research Coordinator

Daniel Ziemianski
Education Coordinator

Tanya Blasbalg
US Education Liaison



From left to right, Linda Ferguson, Mark Ware, Daniel Ziemianski and Mark Wayne.

Partners and Collaborators

Throughout 2013, the CCIC worked with numerous organizations. They include the University of California San Francisco Office of Continuing Medical Education, the University of British Columbia Faculty of Medicine Continuing Professional Development, the Research Institute of the McGill University Health Centre, the Society of Cannabis Clinicians, the International Cannabinoid Research Society, the Quebec Pain Research Network, Carters Professional Corporation, Samson Belair Deloitte & Touche Inc. We thank them all for their contributions to our ongoing success.

Acknowledgements

The CCIC would like to thank, with special recognition, the following organizations for their support or collaboration in 2013:



L'Institut de recherche
du Centre universitaire de santé McGill
The Research Institute
of the McGill University Health Centre



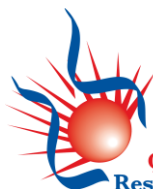
University of California
San Francisco

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UBC CPD



CONTINUING PROFESSIONAL DEVELOPMENT
FACULTY OF MEDICINE



Réseau québécois
de recherche sur la douleur
Quebec Pain
Research Network

Acknowledgements continued

The CCIC would also like to thank the following organizations for their initiative specific support in 2013:





Canadian Consortium for the Investigation of Cannabinoids
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